HOME OF CLAMPING



2023/2024

ZERO-POINT-SYSTEMS

WE GENERATE EXCITEMENT.

Since the foundation of the company in 1890 until today the goal has remained the same: the highest quality in products and services. Nevertheless, the circumstances, tasks and challenges have changed, of course. By focussing on our core areas of expertise, we have long set new standards for innovative clamping technology - driven by our own development, the greatest possible flexibility and passion for individual solutions.

All this is only possible with committed and contented employees. Respectful interaction with others, personal development and measures for the wellbeing of each individual are therefore values that matter to us.



Company Management:
Wolfgang Balle, Johannes Maier (CEO), Jürgen Förster

OUR COMPANY HISTORY

1890 Company founded as a lock manufacturer by Andreas Maier.

1920 Product range extended to include spanners.

1928 Production line assembly of FELLBACH LOCKS.

1951 Introduces clamping elements and diversifies into workpiece and tool clamping technology.

1965 Toggle clamps extend the AMF product range, AMF catalogues are now printed in ten languages.

1975 Further specialisation into hydraulic clamping technology.

1982 Clamping and fixture systems round off AMF's clamping expertise.

1996 AMF team organisation in all sectors of the business, Quality management with certification to ISO 9001.

2001 AMF Service Guarantee for all products.

2004 Introduction of the ZPS zero-point clamping system.

2007 The magnetic clamping technology extends the AMF product range.

2009 Development and marketing of AMF Vacuum clamping technology.

2012 LOW-COST AUTOMATION gripping, clamping, marking and cleaning.

2014 AMF presents the most extensive product range of automation solution in zero-point clamping technology.

2017 Wireless sensoring systems extend the expertise into Industry 4.0 and blends seamlessly into the AMF product range.

PLEDGES THAT COUNT IN EVERYDAY LIFE

For this reason, we have a few principles that we follow by conviction and which always apply..

INDIVIDUAL DEVELOPMENT

Even if the product you need does not even exist yet, we will find the right solution with you: from special designs to new developments, everything is possible.

WARRANTY

If, despite our high quality standard, there is a complaint, this is dealt with quickly and unbureaucratically, even beyond the warranty period.

HIGHEST QUALITY STANDARDS

Careful manufacturing based on tradition since 1890, and naturally with a modern quality management system according to ISO 9001 for many years.

SHORT DELIVERY TIME

With over 5,000 articles in our warehouse, you can expect your order to be dispatched on the same day.

COMPETENT SERVICE FROM EXPERTS

Your local retail partner or the specialists in our team will find the right solution for every task.

MADE IN GERMANY

Our entire product range is developed and manufactured exclusively by our employees in Germany.

Contents

For an overview in numerical / alphabetical order, see catalogue pages 208 - 210

INSTALLATION CLAMPING MODULES 14 - 30



SURFACE-MOUNTING CLAMPING MODULES 31 - 35



AUTOMATION MODULES 36 - 53



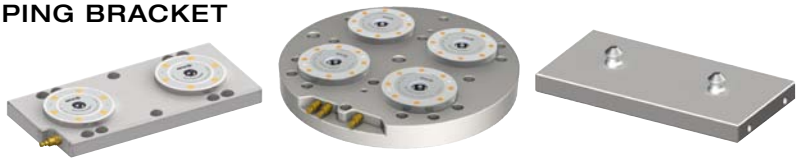
MECHANICAL CLAMPING MODULES 54 - 61



MODULAR ZERO-POINT CLAMPING SYSTEM 62 - 93



CLAMPING STATION AND CLAMPING BRACKET
QUICK-CHANGE PALLETS 94 - 121



PULL-STUDS AND ENGAGEMENT SCREWS 122 - 137



ACCESSOIRES 138 - 155



FIELD APPLICATIONS 156 - 199

CLAMPING MODULES GONZALES AND UNITOOL
FOR CONVERSION OF EXISTING CLAMPING SYSTEMS 200 - 206



NEW!



INSERTION TOOL

For sizes SP140 and SP150.
No. 6203ZMW, page 138

NEW!



ZERO-POINT CLAMPING SLEEVE

No. 6214ZN-250-03, page 123



NEW!

CLAMPING MODULE WITH LOCKING FUNCTION, MECHANICAL, SCREW-IN VERSION

No. 6214RM-251, page 55



NEW!

CLAMPING MODULE, SCREW-IN VERSION, SHORT DESIGN

No. 6215RP-251, page 16



NEW!

INSTALLATION CLAMPING MODULE, SCREW-IN VERSION

NEW! Size SP140
No. 6203SP, page 17

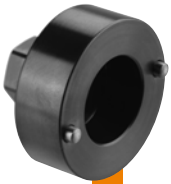


PULL-STUD SIZE 140

No. 6203ZN-140, page 125

NEW!

NEW!



INSERTION TOOL

For sizes KP5 and KH5.
No. 6370ZMW-5, page 138



PULL-STUD FOR ENGAGEMENT SCREW WITHOUT FITTING COLLAR

No. 6370ZNF-10 + 6370ZNF-20, page 133



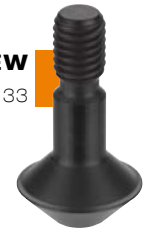
NEW!

PROTECTIVE CAP

No. 6370ZSS-04, page 153

ENGAGEMENT SCREW

No. 6370ZNSF, page 133





NEW!

ADAPTER WITH STRAIGHT CLAMP

No. 6210AGS, page 76



INSTALLATION CLAMPING MODULE FOR AUTOMATION SOLUTIONS, SCREW-IN VERSION

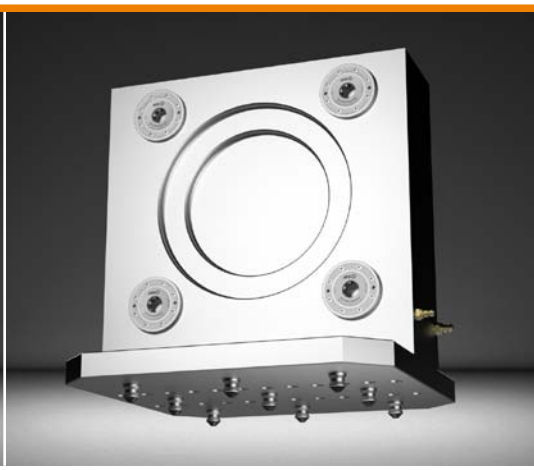
No. 6103LA-5, page 40



INSTALLATION CLAMPING MODULE FOR AUTOMATION SOLUTIONS

No. 6108LA-XX-08, page 41
New size!





ECONOMICAL, PRECISE, QUICK
- THE AMF ZERO-POINT SYSTEM

By using modern AMF zero-point systems, you optimize fixture and workpiece changeover in your production, correspondingly reduce set-up times on the machine and so save money!
The benefits of zero-point clamping technology are obvious:

- Increase in machine run-time
- Very fast workpiece or fixture changeover
- High repeatability
- A uniform interface for all machines
- Positioning and clamping in a single step





ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de









> The pull-stud in our zero-point system is the interface between the machine table and the workpiece or fixture. It ensures exact positioning and secure clamping. The resulting work forces are transferred through the pull-stud to the clamping module.

> The precisely manufactured clamping modules of the AMF Zero-Point System ensure a secure and firm hold of the workpiece or fixture to be clamped. With the high pull-in, closing and holding forces, they are suitable for every application.









Subject to technical alterations.



LARGE INTAKE CATCHMENT

No laborious searching for the holes anymore - self-centring via the diagonal side surfaces of the engagement screw.



SWING-FREE

Swing-free run-in and run-out through the optimal contour of the pull-stud.



FORM FIT

The balls are optimally encapsulated on 3 sides. As a result, the pull-stud always remains firmly clamped in the module.



YOUR ADVANTAGES - THOUGHT THROUGH IN DETAIL

Experience a zero point clamping system that, through its innovative and forward-looking features, presents its strengths in use in an advanced way.

Numerous advantages speak for themselves and make the AMF zero-point system into a technology that revolutionizes the zero-point clamping technology market.



SIMPLE CLEANING

Our zero-point clamping sytems can be blown out very simply with a commercially available compressed air cleaning pistol and do not require complicated suctioning out.



BLOW OUT

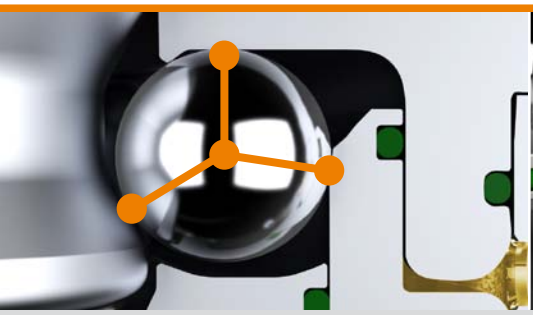
Our system has a pneumatic blow-out installed at the factory. As a result, chips and dirt inside are effectively blown out.



RUSTPROOF STAINLESS STEEL

High-alloy, hardened tool steel - and so no corrosion.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



THREE-POINT PRINCIPLE

Power transmission by means of the three-point principle! This optimised force distribution prevents shearing load on the balls.



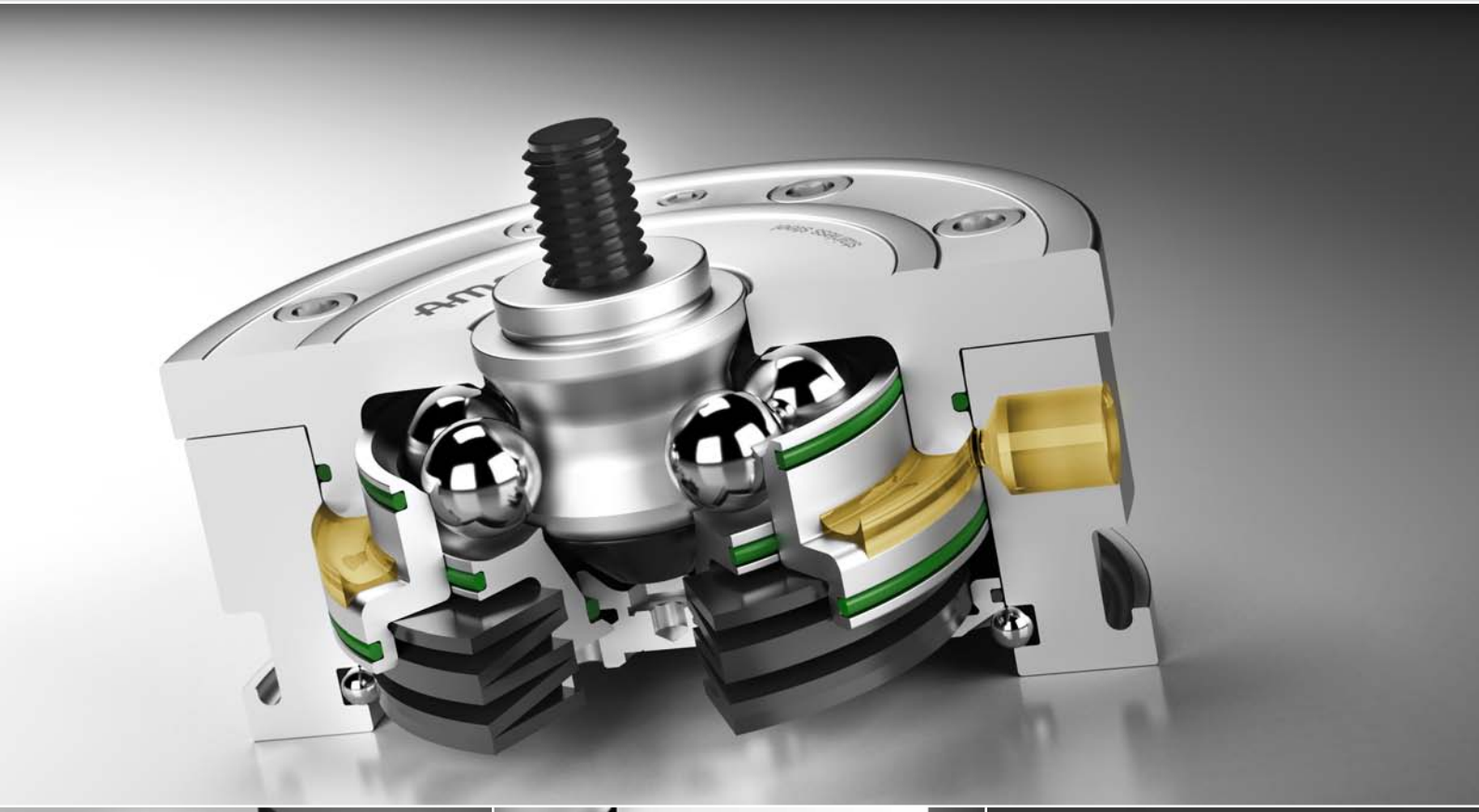
MEDIA FEED

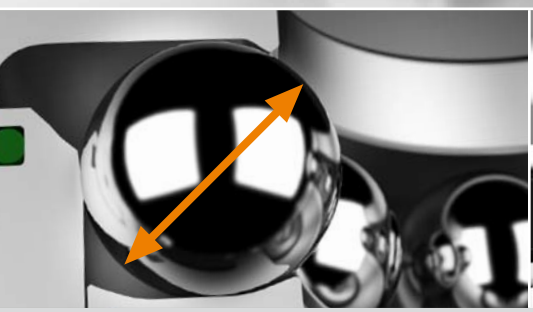
Due to the lateral media feed, low pallet thicknesses are possible and fewer feed holes are necessary.



NO BALL CAGE

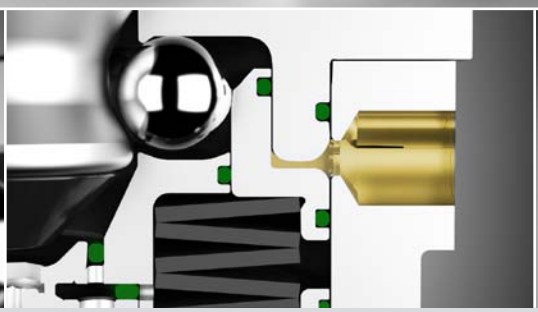
The balls lie freely in the ball canal. This freedom of movement enables the balls to continuously re-position themselves.





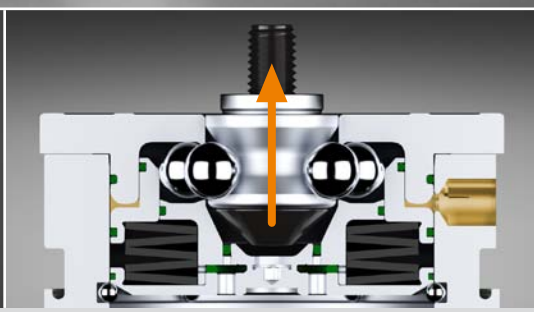
LARGE BALL DIAMETER

Ball surface is 784% greater than with traditional ball systems.



SAFETY SYSTEM

Process reliability - Clamping module always opens. A piston blockade is thus impossible.



GOOD HOLDING, PULL-IN AND LOCKING FORCES

Holding force of up to 105 kN*.
Pull-in and locking force of up to 40 kN.

* Please observe the installation instructions.

Subject to technical alterations.

FAQS ABOUT ZERO-POINT CLAMPS AND THE AMF ZERO-POINT SYSTEM

ARE SUBJECT TO THE AMF ZERO-POINT CLAMPING MODULE DEFINED IN STANDARD DIN EN ISO 13849?

> Yes, the AMF zero-point clamping modules in sizes KP, KH and BM were designed using the fundamental and proven safety principles defined in EN ISO 13849-2, Table A.1 and A.2 or B.1 and B.2, or Table C.1 and C.2. The user is obliged to comply with these safety principles during the implementation and operation of our products.

WHAT IS PULL-IN FORCE / HOLDING FORCE?

> The pull-in force describes the force with which the stud is pulled in and clamped with positive interlocking in the clamping module. The holding force, in contrast, specifies the maximum permissible pull force of the engagement screw.

WHAT IS REPEATABILITY?

> The repeatability specifies the tolerance range within which the recorded reference points on the workpiece lie after removal and reclamping of the same workpiece. The repeatability, also called repetition accuracy, is below 0.005mm.

WHAT ADVANTAGES RESULT FROM THE USE OF ZERO-POINT, TIMING AND UNDERSIZE PULL-STUDS?

> These different types of pull-studs offset the spacing tolerances of pull-studs and clamping modules. The fixed reference point is achieved through the zero-point pull-stud; the slit pull-stud serves to compensate for the still-free axis. The under size pull-stud does not have a centring function, but only a clamping and holding function.



CAN I INSERT THE PULL-STUD DIRECTLY INTO THE WORKPIECE FOR MACHINE PROCESSING?

> The high costs for chucking fixtures and workpiece clamping can be effectively saved here if the pull-studs are mounted in the workpiece, which is clamped directly using the clamping modules. As a result, a complete 5-sided processing of the workpiece is possible in one chucking. With the different stud sizes (attaching thread M6 to M16), workpieces of different sizes can be clamped.

HOW DOES THE SYSTEM COMPENSATE FOR HEAT, SUCH AS FROM METAL CUTTING?

> Through the different pull-stud designs, the system can compensate for temperature differences between the workpiece and the clamping module easily and controllably. For a graphic depiction of the stud array, see page 124 of the catalogue. If you have other technical questions, please contact us at any time.



WHAT SHOULD BE THE SPACING TOLERANCE OF THE PULL-STUDS AND THE CLAMPING MODULES IF SELF-PRODUCED?

> The permissible spacing tolerance of pull-studs and clamping modules is +/- 0.01 mm.

WHERE CAN I GET AN INSTALLATION DIAGRAM OR INSTALLATION MANUAL?

> We are happy to send them immediately when customers request them by e-mail.

IS THE CLAMPING MODULE SUITABLE FOR ERODING?

> The module is optimally suited for all normal processes, such as eroding, grinding, cutting and turning. Through the complete sealing, the clamping module can be used in liquids and under rough ambient conditions.

IS THE CLAMPING MODULE SUITABLE FOR USE ON INJECTION MOULDING MACHINES?

> Especially when injection moulds are changed frequently, the costs for a zero-point solution are amortized within the shortest of times for such machines. Unlike with mechanical clamps, clamping takes place quickly and easily just by pressing a button.

HOW HIGH IS THE MAX. OPERATING TEMPERATURE OF THE CLAMPING MODULES?

> The maximum processing temperature is 80°C in the standard design. Clamping modules for use at higher temperatures can be requested at any time.

WHAT IS BLOW-OUT AND HOW DOES IT WORK?

> Blow-out using compressed air is guided through the floor of the clamping module and blows out contamination, such as chips, coolant or the like from the central opening and from the sphere space of the module.

WHEN DO I USE THE HYDRAULIC PRESSURE INTENSIFIER AND WHEN THE PNEUMATIC PRESSURE INTENSIFIER?

> Hydraulic pressure intensifier: This transforms the pneumatic into hydraulic pressure in a ratio of 1:8 to open hydraulic modules. Pneumatic pressure intensifier: This is used to intensify the pneumatic pressure in the ratio of 1:2 for pneumatic clamping modules and compensates for pressure fluctuations in the supply line.

HOW DOES THE PATENTED SAFETY SYSTEM WORK IN THE HYDRAULIC CLAMPING MODULE AND WHEN IS IT USED?

> If the piston seal begins to leak, the spring space quickly fills with oil. The result is: The piston blocks and the module can no longer be opened. Destruction of the clamped fixture of the of clamping module would then be unavoidable. Here, the patented safety system ensures that the oil in the spring space can escape and the piston can be operated.

ARE YOU PRODUCING YET OR STILL SETTING UP?

THE CALCULATION IS VERY SIMPLE!

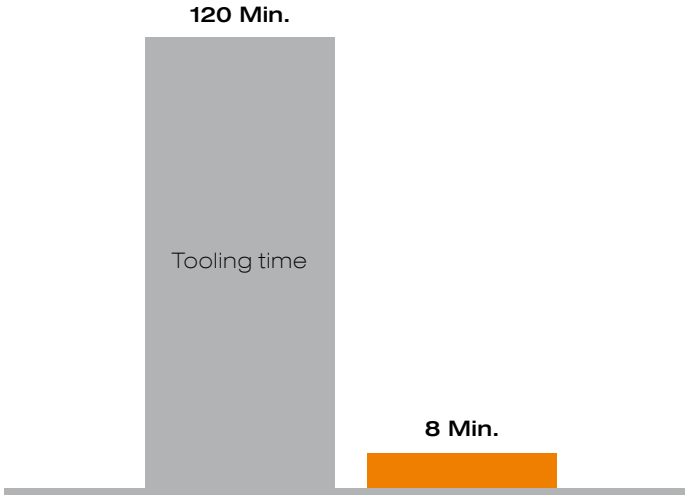
It has been shown that you can reduce your set-up times by over 90% through the use of the AMF Zero-Point System. High machine standstill times are avoided, set-up times minimized and cash saved...
Take the time to calculate your savings potential with the AMF Zero-Point System very simply.

SAMPLE CALCULATION OF A CUSTOMER BEFORE AND AFTER USE OF THE ZERO-POINT SYSTEM

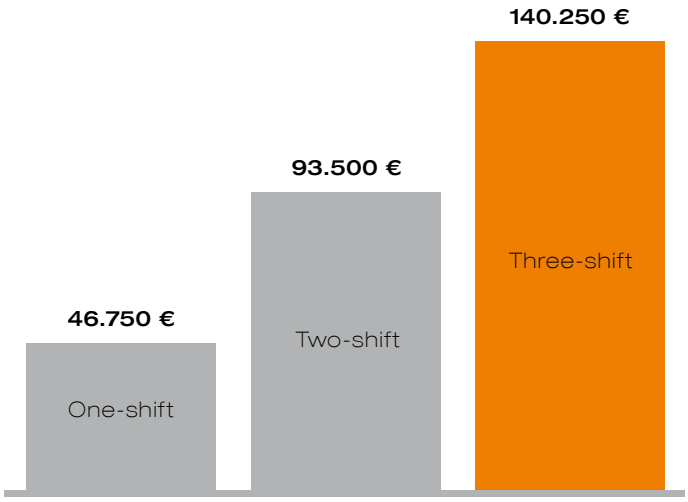
Procedure	Without zero-point clamping system	With the AMF Zero Point System
Machine costs	€100/h	€100/h
Number of set-ups per shift (8h)	4 x	4 x
Set-up time per procedure	30 mins.	2 mins.
Set-up time per shift (8h)	120 mins. (2 h)	8 mins. (0,13 h)
Set-up costs per shift (8h)	€ 200	€ 13
Set-up costs per shift each year (250 working days)	€ 50.000	€ 3.250
Annual savings per shift (8h)	**€46.750**	

DRASTICALLY REDUCED SET-UP TIMES GUARANTEE YOU WILL EXPERIENCE A RAPID RATIONALISATION EFFECT

If previously 120 mins had to be invested in four tooling procedures in a shift, the use of the AMF Zero Point System will reduce this to only 8 mins. Rapid switching of equipment and workpieces as well as tooling in parallel with operating time outside of the machine results in the rationalisation effect described.
The savings in our customer example of €140.250 per year, for three-shift production utilisation, guarantees rapid amortisation of the invested amounts of approx. €3,750 for a 4-capacity clamping station including accessories.



Tooling times drastically reduced from 120 mins to 8 mins - through the use of the AMF Zero Point System.



Whether one, two or three-shift operation - the savings from the AMF Zero Point System speak for themselves!

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

COLOUR CODING SYSTEM FOR HYDRAULIC AND PNEUMATIC CLAMPING MODULES.

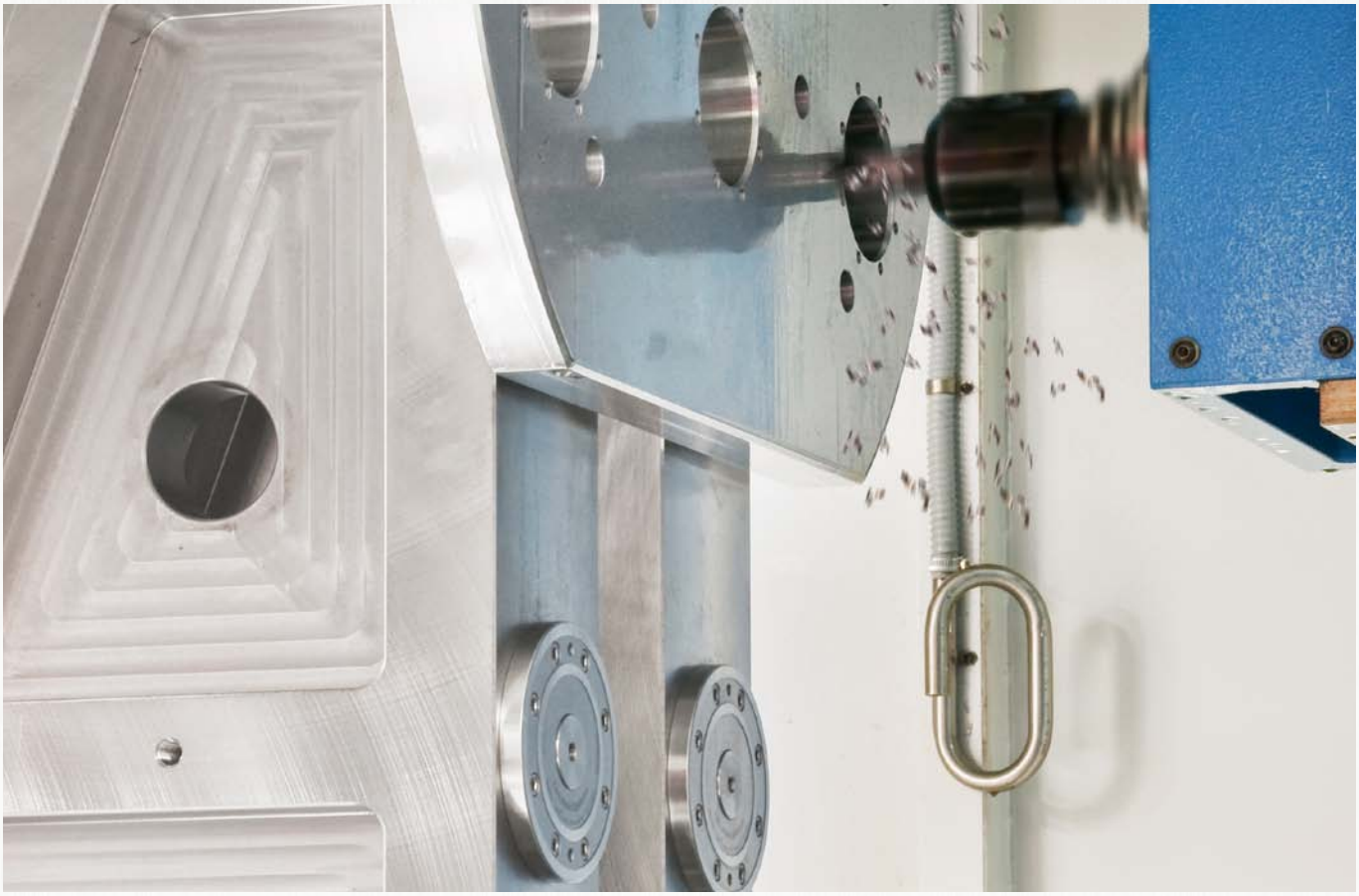
Table portion with bright ORANGE background: Open hydraulically!

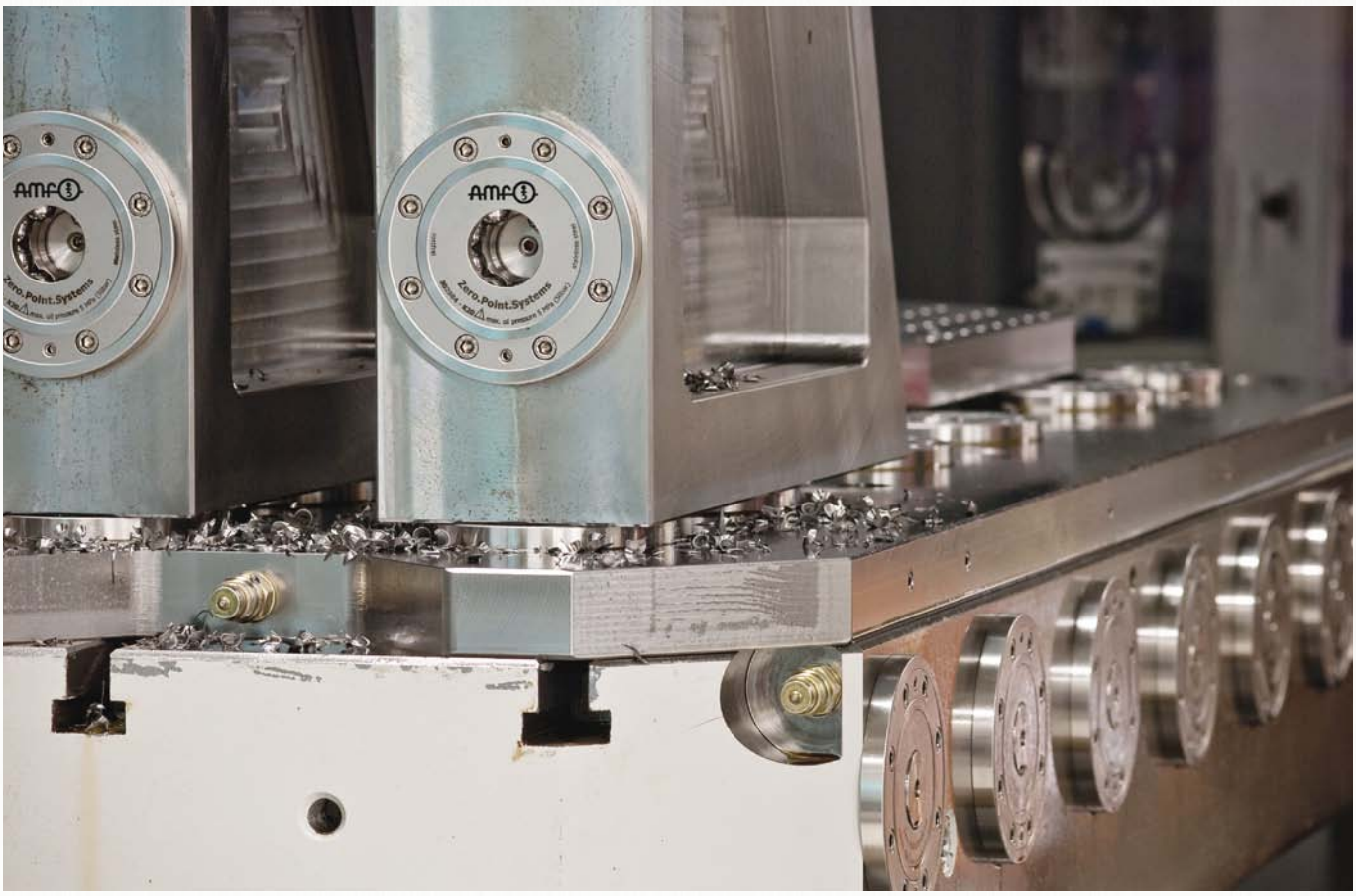
Table portion with bright BLUE background: Open pneumatically!

	RP250 RP251	SP140	SP150	KH5	KP5	KP5.3	KH10	KP10	KH10.2	KP10.3
	pneum.	pneum.	pneum.	hydr.	pneum.	pneum.	hydr.	pneum.	hydr.	pneum.
Pull-in/locking force in the system up to [kN]	0,1	0,07	0,23	5,0	1,5	1,5	10,0	8,5	10,0	10,0
Holding force* [kN]	1,0	0,5	6,0	13,0	13,0	13,0	25,0	25,0	25,0	25,0
Service according to ... clamping cycles* [St]	2.000.000	100.000	2.500.000	250.000	2.000.000	4.000.000	2.500.000	400.000	2.500.000	4.000.000
Min./max. operating pressure for opening [bar]	5 / 12	6 / 12	6 / 14	50 / 60	8 / 12	5 / 12	50 / 60	8 / 12	50 / 60	5 / 12
Min./max. operating pressure for reclamping [bar]	-	-	-	-	5 / 6	-	-	5 / 6	-	-
Opening volume [cm³]	0,5	0,2	1,0	1,5	1,5	5,0	3,0	3,0	3,0	17,0
Pre-positioning [mm]	1,0	1,0	1,0	4,0	4,0	4,0	6,5	6,5	6,5	6,5
Repeatability [mm]	< 0,1	< 0,02	< 0,02	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005

	KH20	KP20	KP20.3	KH20.3	KH40	KP40	Horizontal KH20	Horizontal KH40	Compakt KH10
	hydr.	pneum.	pneum.	hydr.	hydr.	pneum.	hydr.	hydr.	hydr.
Pull-in/locking force in the system up to [kN]	20,0	17,0	17,0	30,0	40,0	30,0	20	40	1,3
Holding force* [kN]	55,0	55,0	55,0	55,0	105,0	105,0	55	105	25
Service according to ... clamping cycles* [St]	1.500.000	150.000	4.000.000	1.000.000	100.000	150.000	1.500.000	100.000	150.000
Min./max. operating pressure for opening [bar]	50 / 60	8 / 12	4,5 / 12,0	60 / 70	50 / 60	8 / 12	50 / 60	50 / 60	50 / 60
Min./max. operating pressure for reclamping [bar]	-	5 / 6	-	-	-	5 / 6	-	-	-
Opening volume [cm³]	10,0	10,0	37,0	10,0	27,0	27,0	10,0	27,0	3,5
Pre-positioning [mm]	12,0	12,0	12,0	12,0	12,0	12,0	11,0	11,0	4,0
Repeatability [mm]	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005	< 0,005

* Please observe the installation instructions.





Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

INSTALLATION CLAMPING MODULES

The AMF installation clamping modules are used with low space requirement and low overall height. For installation in pallets, machine tables, clamping brackets and cubes. Usable when cutting, grinding, eroding and on plastic-processing machines as well as for fixture construction with mounting fixtures and handling systems. The AMF clamping modules can be installed in all positions. Whether vertical or overhead - mounting works completely without assembly tools.

Installation clamping modules come in 13 different sizes:

- **Clamping modules RP250** - Ø 22 mm
  Insertion/locking force up to 0,1 kN - holding force 1 kN*
- **Clamping modules RP251** - Ø 22,4 mm
  Insertion/locking force up to 0,1 kN - holding force 1 kN*
- **Clamping modules SP140** - Ø 15 mm
  Insertion/locking force up to 70 N - holding force 500 N*
- **Clamping modules SP150** - Ø 22 mm
  Insertion/locking force up to 0,23 kN - holding force 6 kN*
- **Clamping modules KP5 / KH5** - Ø 45 mm
  Insertion/locking force up to 5 kN - holding force 13 kN*
- **Clamping modules KP5.3** - Ø 78 mm
  Insertion/locking force up to 1,3 kN - holding force 13 kN*
- **Clamping modules KP10 / KH10** - Ø 78 mm
  Insertion/locking force up to 10 kN - holding force 25 kN*
- **Clamping modules KH10.2** - Ø 112 mm
  Insertion/locking force up to 10 kN - holding force 25 kN*
- **Clamping modules KP10.3** - Ø 112 mm
  Insertion/locking force up to 10 kN - holding force 25 kN*
- **Clamping modules KH20 / KP20** - Ø 112 mm
  Insertion/locking force up to 20 kN - holding force 55 kN*
- **Clamping modules KP20.3** - Ø 138 mm
  Insertion/locking force up to 17 kN - holding force 55 kN*
- **Clamping modules KP20.4** - Ø 112 mm
  Insertion/locking force up to 30 kN - holding force 55 kN*
- **Clamping modules KP40 / KH40** - Ø 148 mm
  Insertion/locking force up to 40 kN - holding force 105 kN*



* Please observe the installation instructions.

No. 6215RP-250

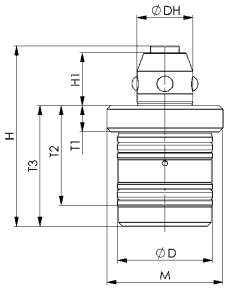
Clamping module, screw-in version

Pneumatic opening.
Opening operating pressure: min. 5 bar - max. 12 bar.
Housing and piston hardened.
Repetition accuracy < 0.1 mm.

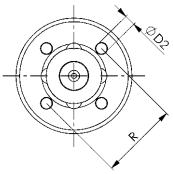
EDELSTAHL Rostfrei INOX STAINLESS STEEL







CAD



Order no.	Size	Pull-in/locking force up to [N]	Holding force* [N]	Weight [g]
561989	RP250	100	1000	40

Application:

Pneumatic zero point clamping system for set-up-time-optimised clamping during non-cutting machining.
Ideally suited for applications in the transfer automation range because no interference contour is present underneath the interchangeable pallet.

Note:

The zero-point clamping system is opened (1) pneumatically and locked mechanically by spring force. Subsequent uncoupling of the pressure line is possible at any time (zero-point clamping system is clamped at normal pressure).
The base plate serves as the contact surface, into which the zero-point clamping system is screwed.
A suitable mounting tool is available under the order no. 559439.
* Please observe the installation instructions.

On request:

- Installation drawings

Dimensions:

Order no.	Size	dia. D	dia. D2	ØDH	H	H1	M	R	T1	T2	T3
561989	RP250	18	2,2	10,6	34,3	10	M22 x 1	14,75	4,95	19	23

No. 6215RP-251

Clamping module, screw-in version, short design

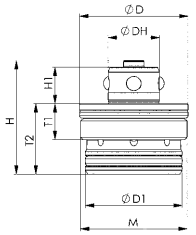
Pneumatic opening.
Operating pressure for opening: min. 5 bar - max. 12 bar.
Housing and piston hardened.
Repetition accuracy < 0.1 mm.

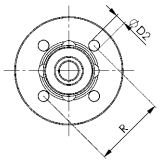
EDELSTAHL Rostfrei INOX STAINLESS STEEL





NEW!





Order no.	Size	Pull-in/locking force up to [N]	Holding force* [N]	Weight [g]
567134	RP251	100	1000	32

Application:

Pneumatic zero point clamping system for set-up-time-optimised clamping during non-cutting machining.
Ideally suited for applications in the transfer automation range because no interference contour is present underneath the interchangeable pallet.

Note:

The zero-point clamping system is opened (1) pneumatically and locked mechanically by spring force. Subsequent uncoupling of the pressure line is possible at any time (zero-point clamping system is clamped at normal pressure). Venting is performed via a connection (5).
The base plate serves as the contact surface, into which the zero-point clamping system is screwed.
A suitable mounting tool is available under the order no. 559439.
* Please observe the installation instructions.

On request:

- Installation diagrams

Dimensions:

Order no.	Size	dia. D	dia. D1	dia. D2	ØDH	H	H1	M	R	T1	T2
567134	RP251	22,4	20	2,2	10,6	23,4	7,6	M22 x 1	14,75	7,5	14,5

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6203SP

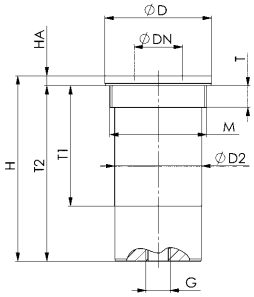
Installation clamping module, screw-in version

Pneumatic opening.
Opening operating pressure: min. 6 bar - max. 12 bar.
Cover and piston hardened.
Repeatability < 0.02 mm.

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL







CAD

Order no.	Size	Pull-in/locking force up to [N]	Holding force* [N]	Weight [g]
564839	SP140	70	500	12
427286	SP150	235	6000	48

NEW!

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

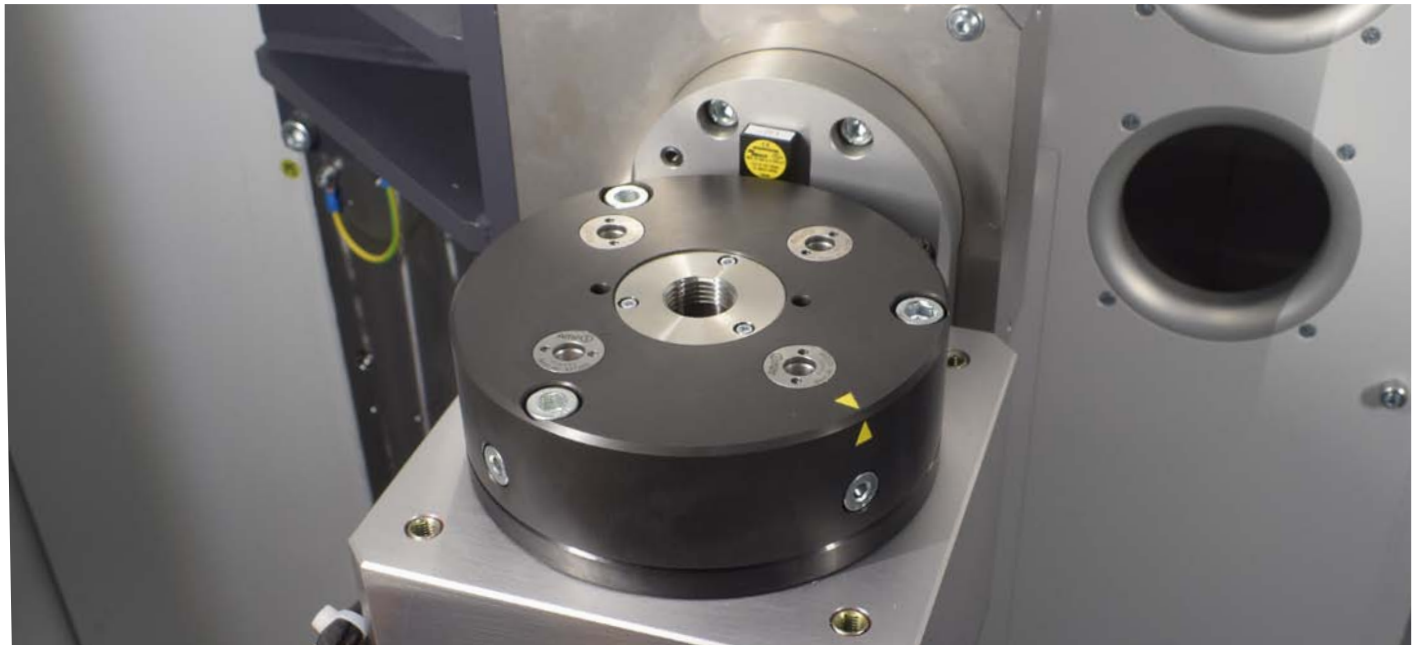
The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and locked mechanically through spring force. Subsequent uncoupling of the pressure lines is possible at any time (module is clamped pressure-free).
The clamping module has one connection:
1x pneum. Open (1).
For ease of installation, we recommend the size 140 installation tool Order no. 564843 and the size 150 installation tool Order no. 565395.
* Please observe the installation instructions.

On request:

- Installation diagrams

Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D2	G	H	HA	M	T	T1	T2
564839	SP140	15	7	12	M3	20,0	1,00	M13 x 0,5	3,5	-	19,00
427286	SP150	22	10	18	M5	38,5	2,05	M20 x 1,5	4,5	25	36,45



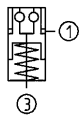
Subject to technical alterations.

No. 6370EARH

Installation clamping module, screw-in version

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [g]
305953	KH5	5	13	●	150

Application:

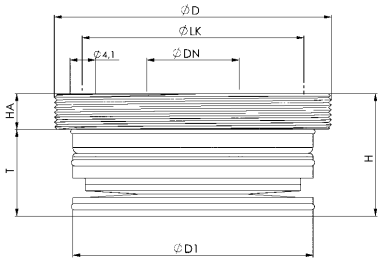
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining. With small space requirement and low installation height.

Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The contact surface serves as the upper housing surface.
The clamping module with blow-out has two connections: 1x hydr. opening (1), 1x pneum. Blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
The suitable installation tool is available under the AMF order no. 41046.
* Please observe the installation instructions.

On request:

- Installation diagrams



CAD

Dimensions:

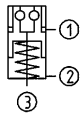
Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	T
305953	KH5	M45 x 1	15	39	19,8	5,8	36	14

No. 6370EARL

Installation clamping module, screw-in version

Pneumatic opening.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [g]
563900	KP5	1,5	13	●	150

Application:

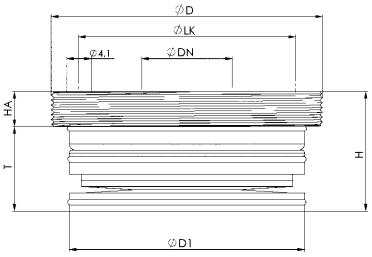
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining. With small space requirement and low installation height.

Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and locked mechanically through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at any time (module is clamped pressure-free). The contact surface is the upper surface of the housing. It is recommended to use the pneumatic pressure booster no. 6370ZVL.
The clamping module with blow-out has three connections: 1x pneum. Opening (1), 1x pneum. Retensioning (turbo) (2), 1x pneum. Blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
The suitable installation tool is available under the AMF order no. 41046.
* Please observe the installation instructions.

On request:

- Installation diagrams



CAD

Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	T
563900	KP5	M45 x 1	15	39	19,8	5,8	36	14

Subject to technical alterations.

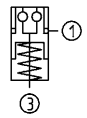
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6204HA

Installation clamping module

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427369	KH10.2	10	25	●	0,6

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

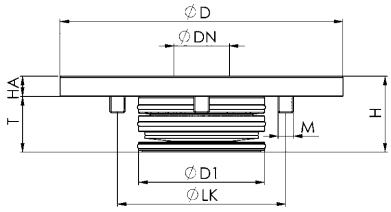
Note:

The installation clamping module KH10.2 is opened with the air-hydraulic pump, order no. 426569, with 5 bar pneumatic input pressure.
The clamping module has high holding, pull-in and locking forces. It is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Installation diagrams

CAD



Dimensions:

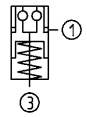
Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
427369	KH10.2	112	22	50	30	8	77	M6	22

No. 6204IHA

Installation clamping module with indexing

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
428490	KH10.2	10	25	●	0,6

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.
The indexing function of the clamping module prevents the pallet from twisting, enabling exact positioning every 90°.

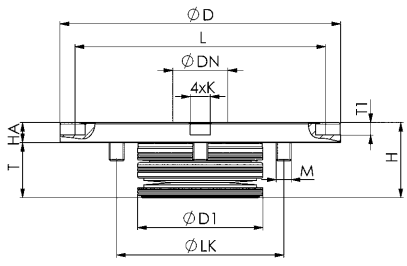
Note:

The installation clamping module KH10.2 with 4-way indexing is opened with the air-hydraulic pump, order no. 426569, with 5 bar pneumatic input pressure.
The clamping module has high holding, pull-in and locking forces. It is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Installation diagrams

CAD



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	K F6	L	dia. LK	M	T	T1
428490	KH10.2	112	22	50	30	8	8	100	77	M6	22	5

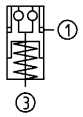
Subject to technical alterations.

No. 6370EARHA

Installation clamping module

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
428680	KH10	10	25	●	0,45
427971	KH20	20	55	●	1,40
429845	KH40	40	105	●	3,40

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

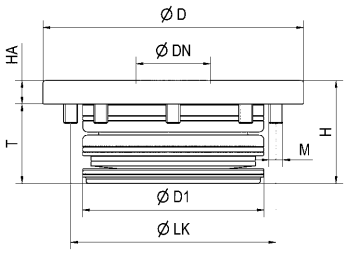
Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
Installation clamping module in flange version for simplified installation, see 6151HA.
* Please observe the installation instructions.

On request:

- Installation diagrams

CAD



Dimensions:

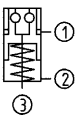
Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
428680	KH10	78	22	50	30	7	60	M5	23
427971	KH20	112	32	78	44	10	88	M6	34
429845	KH40	148	40	102	57	15	118	M8	42

No. 6370EARLA

Installation clamping module

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
305375	KP10	8	25	●	0,45
303016	KP20	17	55	●	1,40
303057	KP40	30	105	●	3,40

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

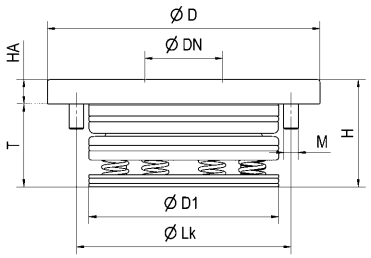
Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and locked mechanically through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at any time (module is clamped pressure-free). Use of the pneumatic pressure booster no. 6370ZVL is recommended.
The clamping module with blow-out and support control has three connections:
1x pneum. Opening (1) / 1x pneum. Retensioning (turbo) (2), 1x pneum. Blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Installation diagrams

CAD



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
305375	KP10	78	22	50	30	7	60	M5	23
303016	KP20	112	32	78	44	10	88	M6	34
303057	KP40	148	40	102	57	15	118	M8	42

Subject to technical alterations.

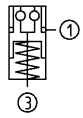
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370EAIHA

Installation clamping module with indexing

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
428425	KH20	20	55	●	1,4

Application:

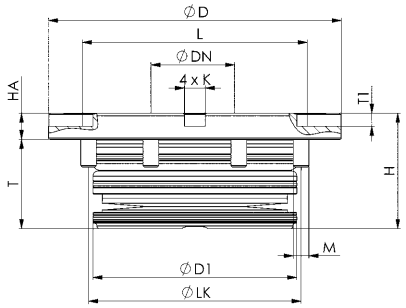
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.
The indexing function of the clamping module prevents the pallet from twisting, enabling exact positioning every 90°.

Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Installation diagrams



CAD

Dimensions:

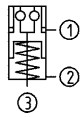
Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	K F6	L	dia. LK	M	T	T1
428425	KH20	112	32	78	44	10	8	86	88	M6	34	5

No. 6370EAILA

Installation clamping module with indexing

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
428441	KP20	17	55	●	1,4

Application:

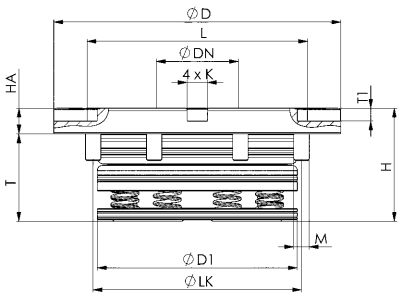
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.
The indexing function of the clamping module prevents the pallet from twisting, enabling exact positioning every 90°.

Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL is recommended.
The clamping module with blow-out and support control has three connections:
1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Installation diagrams



CAD

Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	K F6	L	dia. LK	M	T	T1
428441	KP20	112	32	78	44	10	8	86	88	M6	34	5

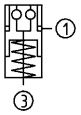
Subject to technical alterations.

No. 6217EARHA20

Installation clamping module

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 60 - max. 70 bar
Cover and piston hardened.
Repetition accuracy < 0.005 mm.

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
561990	**KH20.4**	30	55	●	1,7

Design:

Zero-point clamping system with increased pull-in/locking force and centric blow-out.

Application:

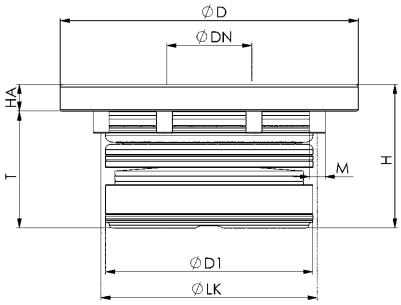
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at any time (module is clamped pressure-free).
The clamping module with blow-out and support control has two connections:
1x hydr. opening (1), 1x pneum. Blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Installation drawings



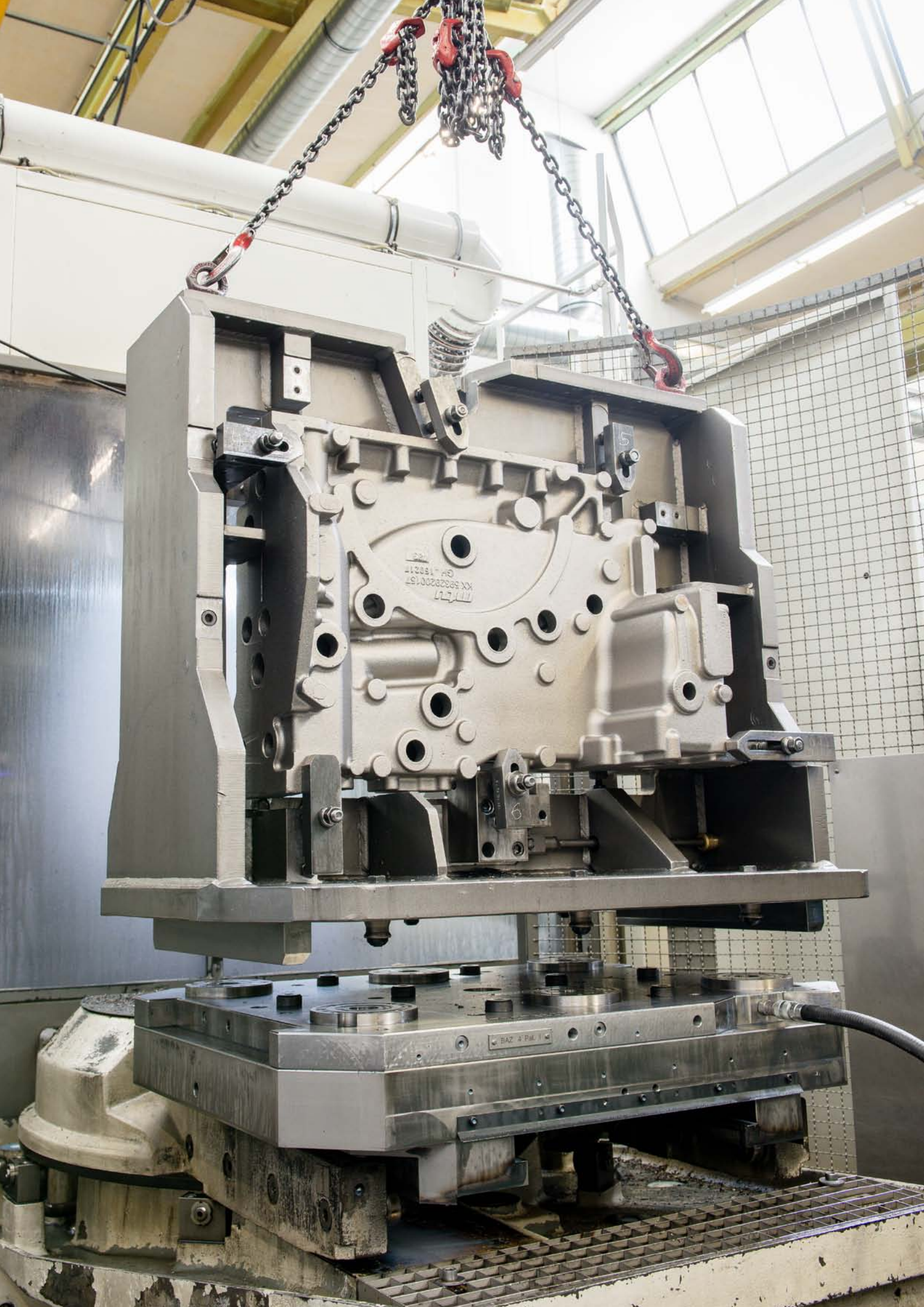
Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
561990	**KH20.4**	112	32	78	54	10	88	M6	44

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

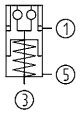

BAZ 4 Pal. 1

No. 6206LA

Installation clamping module

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure:
KP5.3 min. 5 bar - max. 12 bar.
KP10.3 min. 5 bar - max. 12 bar.
KP20.3 min. 4.5 bar - max. 12 bar.
Cover and piston hardened.
Repeat accuracy < 0.005 mm.

EDELSTAHL Rostfrei
INOX STAINLESS STEEL



ZERO-POINT CLAMPING FROM 4.5 BAR

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
553152	KP5.3	1,5	13	●	0,5
428730	KP10.3	10,0	25	●	1,4
428755	KP20.3	17,0	55	●	2,6

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

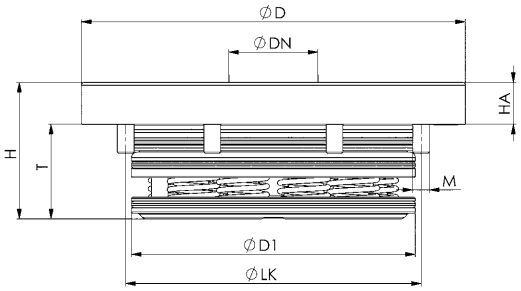
Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections:
1x pneum. opening (1), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Installation diagrams





Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
553152	KP5.3	78	15	54,5	29	8	62	M4	21
428730	KP10.3	112	22	78,0	35	10	88	M6	25
428755	KP20.3	138	32	102,0	49	15	115	M6	34

CAD

Subject to technical alterations.

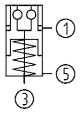
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6206ILA

Installation clamping module with indexing

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure:
KP10.3 min. 5 bar - max. 12 bar.
KP20.3 min. 4.5 bar - max. 12 bar.
Retensioning operating pressure > min. 5 bar / max. 6 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.

EDELSTAHL Rostfrei
INOX STAINLESS STEEL



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
428771	KP10.3	10	25	●	1,4
428797	KP20.3	17	55	●	2,6

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.
The indexing function of the clamping module prevents the pallet from twisting, enabling exact positioning every 90°.

Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections:
1x opening (1), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

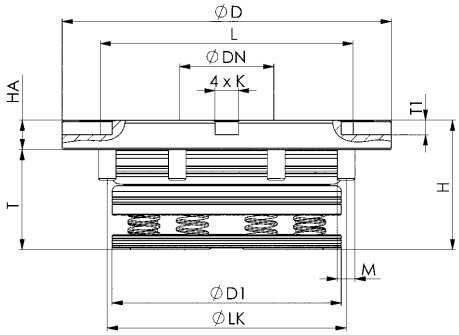
- Installation diagrams

ZERO-POINT CLAMPING FROM 4.5 BAR



KP20.3

KP10.3



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	K F6	L	dia. LK	M	T	T1
428771	KP10.3	112	22	78	35	10	8	100	88	M6	25	5
428797	KP20.3	138	32	102	49	15	10	108	115	M6	34	5

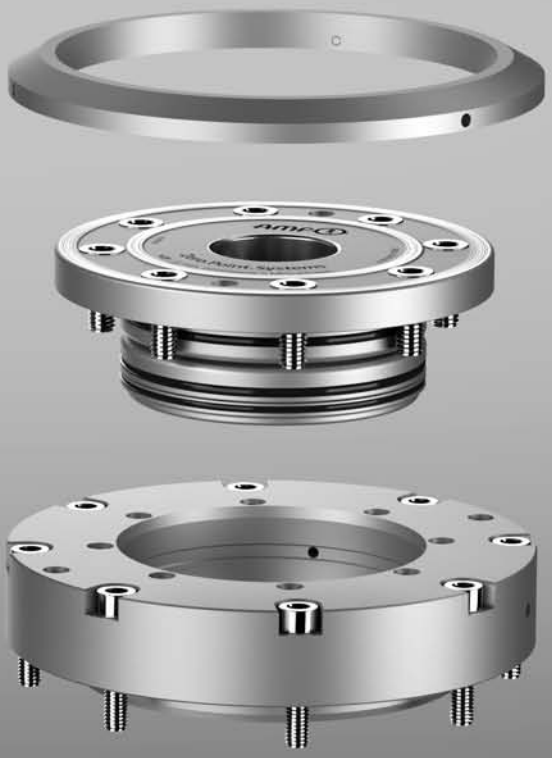
CAD

Subject to technical alterations.



SIMPLIFIED INSTALLATION IN THE BODY - THE INSTALLATION CLAMPING MODULE AS FLANGE VERSION

The flange version of the installation clamping module has a centring ring on the underside. This allows simplified and precisely positioned installation of the module in the body. Through the low depth of the required mounting hole for the centring ring, existing fixtures and be easily and inexpensively refitted with the AMF Zero-Point System. The clamping module can be operated from the outside via a tube connection or from the bottom via an O-ring connection.





Subject to technical alterations.

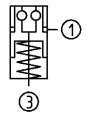
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 6766-196 · Web: www.amf.de

No. 6151HA

Installation clamping module, flange version

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





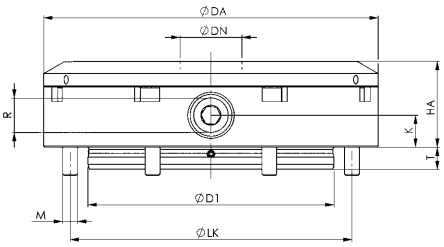
Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
424085	KH10	10	25	●	1,35
423962	KH20	20	55	●	3,75
424143	KH40	40	105	●	4,97

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

The flange version permits a simplified installation in the body. This is exactly positioned via the centring function. The clamping module can be operated from the outside via a tube connection or from the bottom via an O-ring connection.
This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections:
1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.



CAD

Dimensions:

Order no.	Size	dia. DA	dia. DN	dia. D1	HA	K	dia. LK	M	R	T
424085	KH10	100	22	67	24	9	90	M5	G1/8	5,9
423962	KH20	136	32	100	35	13	124	M6	G1/8	8,9
424143	KH40	180	40	125	45	15	163	M8	G1/4	11,9

No. 6151L

Installation clamping module, flange version

Pneumatic opening.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





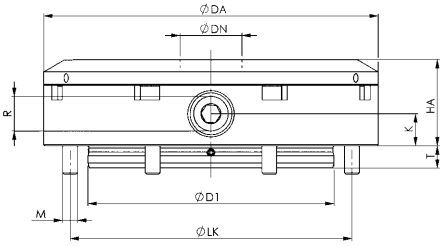
Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
424101	KP10	8	25	1,35
423988	KP20	17	55	3,75
424168	KP40	30	105	4,97

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

The flange version permits a simplified installation in the body. This is exactly positioned via the centring function. This is opened pneumatically (1) and mechanically locked through spring force.
To achieve the specified pull-in and locking forces, this must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
Use of the pneumatic pressure booster 6370ZVL is recommended.
The clamping module has two connections:
1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).
* Please observe the installation instructions.



CAD

Dimensions:

Order no.	Size	dia. DA	dia. DN	dia. D1	HA	K	dia. LK	M	R	T
424101	KP10	100	22	67	24	9	90	M5	G1/8	5,9
423988	KP20	136	32	100	35	13	124	M6	G1/8	8,9
424168	KP40	180	40	125	45	15	163	M8	G1/4	11,9

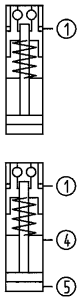
Subject to technical alterations.

No. 6370HARH

Horizontal rapid-clamping cylinder

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Advance motion, hydr. suspension piston	max. weight per suspension piston [kN]	Weight [Kg]
303065	KH20	20	55	-	5	2,1
306217	KH20	20	55	●	5	2,1
303107	KH40	40	105	-	8	5,2
306258	KH40	40	105	●	8	5,2

Design:

As standard, there is a manaul (hand power) or hydraulic run-out and run-in movements of the suspension piston.
- Cylinder has one connection: 1x hydr. opening (1),
- Cylinder with hydraulic advance motion has three connections: 1x hydr. opening (1),
Run out 1x hydr. suspension piston opening (5), run in 1x hydr. suspension piston opening (4).

Application:

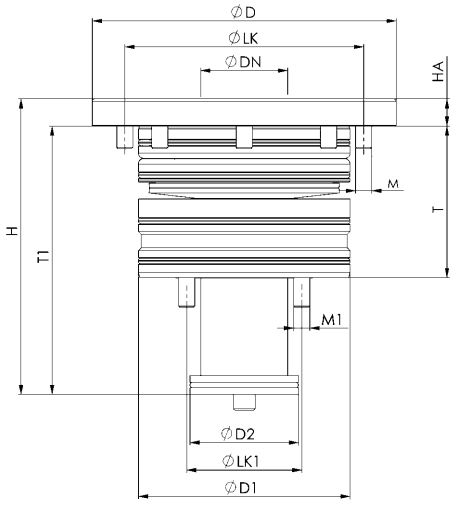
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining. For installation in clamping profiles, cubes and towers. The horizontal toggle clamp cylinder is used to change fixtures quickly and easily by means of the suspension piston with hand force, hydraulic or handling device.

Note:

The horizontal rapid-clamping cylinder has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). The maximum weight per suspension piston must not exceed 5 kN at KH20 and 8 kN at KH40.
* Please observe the installation instructions.

On request:

- Installation diagrams



CAD

Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	dia. D2	H	HA	dia. LK	dia. LK1	M	M1	T	T1
303065	KH20	112	32	78	40	109	10	88	60	M6	M6	56,5	99
306217	KH20	112	32	78	40	109	10	88	60	M6	M6	56,5	99
303107	KH40	148	40	102	48	144	15	118	76	M8	M8	73,0	129
306258	KH40	148	40	102	48	144	15	118	76	M8	M8	73,0	129

No. 6370ZMSH

Mounting key for horizontal rapid-clamping cylinder

Suitable for 6370HARH.



Order no.	Size	Weight [g]
424556	20	520
426866	40	940

Application:

The mounting key is needed for installation of the threaded sleeve of the horizontal rapid-clamping cylinder.

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

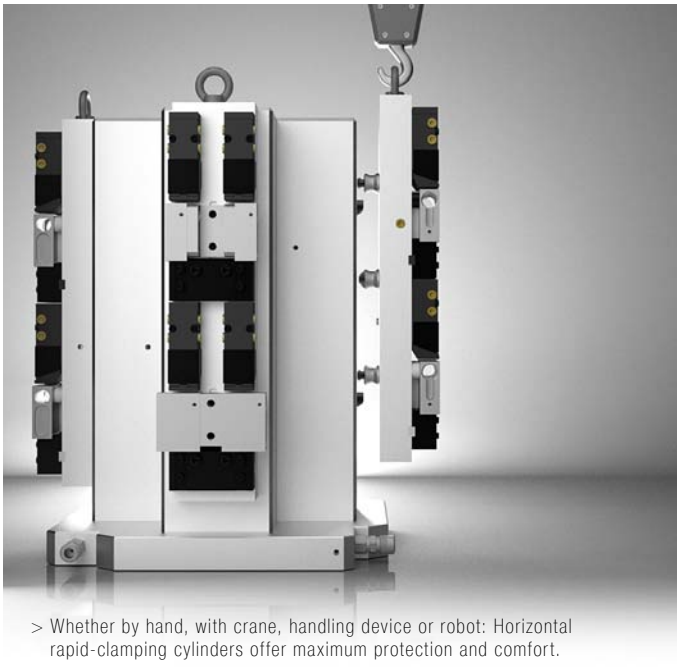
HORIZONTAL RAPID-CLAMPING CYLINDER

This is how to make vertical palletization quick and uncomplicated:

> No searching for the holes
> No hydraulic or pneumatic pre-tensioning
> No damage from zero-point hole and pull-stud
> No risk of injury
> Reduced set-up times and thus cost savings

Flexibly usable in clamping towers, clamping brackets, automated handling devices or in general machine building.





> Whether by hand, with crane, handling device or robot: Horizontal rapid-clamping cylinders offer maximum protection and comfort.



> After the pallet has been mounted, it can easily be pushed in and out. This process can be automated, if desired.

No. 6370KARH

Compact cylinder

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
303503	KH10	1,3	25	2,5

Application:

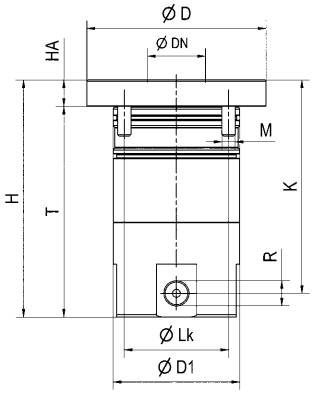
For retrofitting to modular profiles, columns, tombstones and cubes. Can be used with thin wall sections.

Note:

There are six standard connection options. Four connections are located on the side of the lateral surface at 90° intervals. Seals on the external diameter make it possible to connect a deep-hole drill bore in the base plate. Connection is also possible on the floor surface of the compact cylinder.
* Please observe the installation instructions.

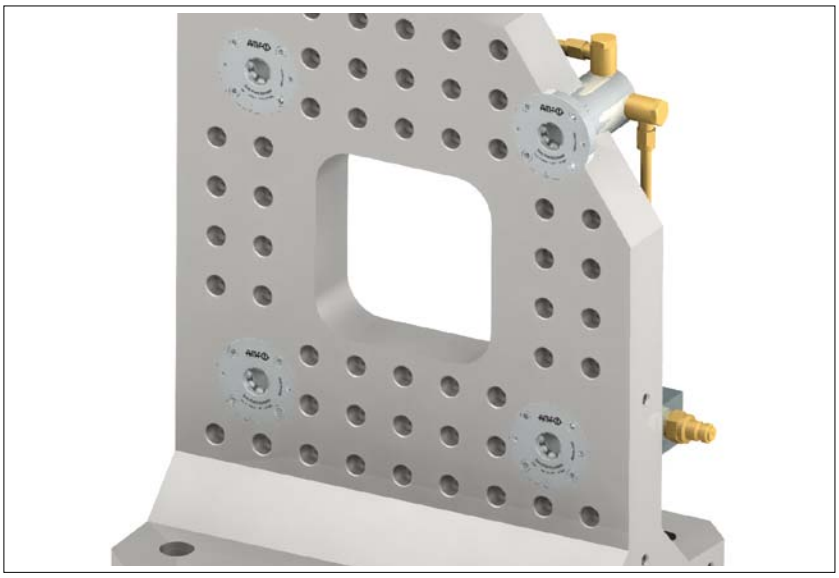
On request:

- Installation diagrams



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	K	dia. LK	M	R	T
303503	KH10	68	22	48	90	10	81	4x56	M6	G1/8	80



CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

SURFACE-MOUNTED CLAMPING MODULES

The AMF surface-mounted clamping modules are installed on pallets, machine tables, clamping brackets and cubes. Usable when cutting, grinding, eroding and on plastic-processing machines as well as for fixture construction with mounting fixtures and handling systems.

The AMF clamping modules can be installed in all positions. Whether vertical or overhead - mounting works completely without assembly tools.

Surface-mounted clamping modules are available in four different sizes:

- **Clamping modules KH5 / KP5** - dia. 62 mm - pull-in/locking force up to 5 kN - holding force 13 kN*
- **Clamping modules KH10 / KP10** - dia. 78 mm - pull-in/locking force up to 10 kN - holding force 25 kN*
- **Clamping modules KH20 / KP20** - dia. 112 mm - pull-in/locking force up to 20 kN - holding force 55 kN*
- **Clamping modules KH40 / KP40** - dia. 148 mm - pull-in/locking force up to 40 kN - holding force 105 kN*



* Please observe the installation instructions.

No. 6370AARH

Surface-mounted clamping module

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
306159	KH5	5	13	300

Application:

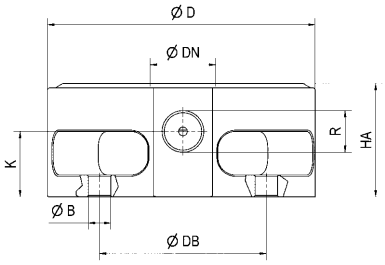
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The contact surface is the upper surface of the housing.
The clamping module has one connection: 1x hydr. opening (1).
* Please observe the installation instructions.

On request:

- Individual housing



CAD

Dimensions:

Order no.	Size	dia. B	dia. D	dia. DB	dia. DN	HA	K	R
306159	KH5	5,8	62	54	15	26	15	G1/8

No. 6370AARL

Surface-mounted clamping module

Pneumatic opening.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
306175	KP5	1,5	13	300

Application:

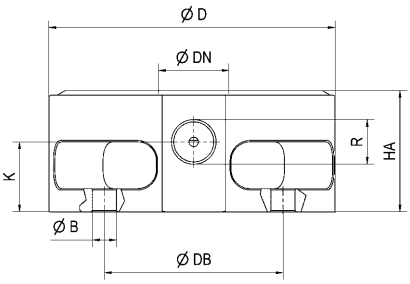
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The contact surface is the upper surface of the housing.
Use of the pneumatic pressure booster 6370ZVL is recommended.
The clamping module has two connections:
1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).
* Please observe the installation instructions.

On request:

- Individual housing



CAD

Dimensions:

Order no.	Size	dia. B	dia. D	dia. DB	dia. DN	HA	K	R
306175	KP5	5,8	62	54	15	26	15	G1/8

Subject to technical alterations.

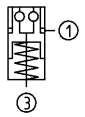
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370AARHA

Surface-mounted clamping module

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
303545	KH10	10	25	●	0,9
302836	KH20	20	55	●	2,7
302877	KH40	40	105	●	6,6

Application:

Zero-point clamping system in combination with hook clamping flange 63707B for set-up-time-optimised clamping during cutting and non-cutting machining.

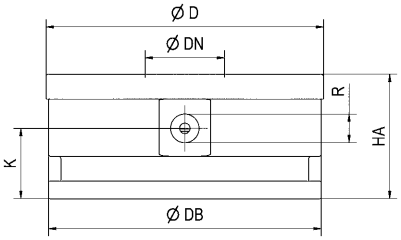
Note:

The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module with blow-out and support control has two connections: 1x hydr. opening (1) / 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Individual housing

CAD



Dimensions:

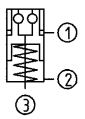
Order no.	Size	dia. D	dia. DB	dia. DN	HA	K	R
303545	KH10	78	77,5	22	32	16,50	G1/8
302836	KH20	112	110,0	32	50	28,25	G1/4
302877	KH40	148	146,0	40	62	32,50	G1/4

No. 6370AARLA

Surface-mounted clamping module

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
305193	KP10	8	25	●	0,9
302851	KP20	17	55	●	2,6
302893	KP40	30	105	●	6,6

Application:

Zero-point clamping system in combination with hook clamping flange 63707B for set-up-time-optimised clamping during cutting and non-cutting machining.

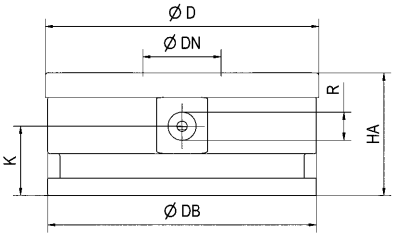
Note:

The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
Use of the pneumatic pressure booster 6370ZVL is recommended.
The clamping module with blow-out and support control has three connections:
1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2), 1x pneum. blow-out and support control (3). (The pneumatic blow-out and support control can optionally be connected.)
* Please observe the installation instructions.

On request:

- Individual housing

CAD



Dimensions:

Order no.	Size	dia. D	dia. DB	dia. DN	HA	K	R
305193	KP10	78	77,5	22	32	16,50	G1/8
302851	KP20	112	110,0	32	50	28,25	G1/4
302893	KP40	148	146,0	40	62	32,50	G1/4

Subject to technical alterations.

No. 6370ZB

Clamping flange, Set

Consisting of two single-clamp buckles, nitrided.

Order no.	Size	Set contents [St]	dia. D	dia. DB	H	dia. LK	M	Weight [g]
426825	10	2	114	77,5	7,75	94	8,5	360
426833	20	2	164	110,0	13,00	136	11,0	800
426841	40	2	202	146,0	16,00	172	13,0	1100

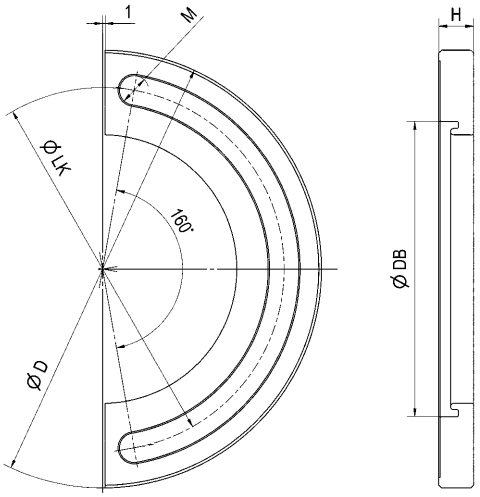
Application:

Clamping flanges are used to fasten surface-mounted clamping modules on the machine table.

On request:

- Special clamping flanges for various T-slot tables
- Clamping flange and housing manufactured as a single piece

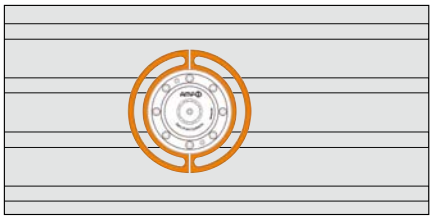




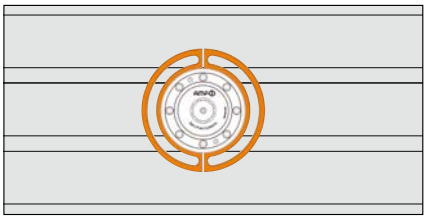
CAD

Examples of machine-table mounting:

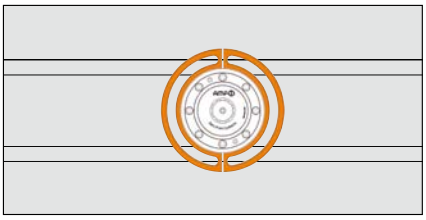
K10 - Groove distance 50 mm



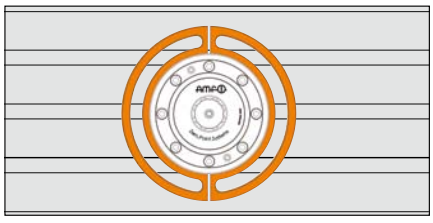
Groove distance 63 mm



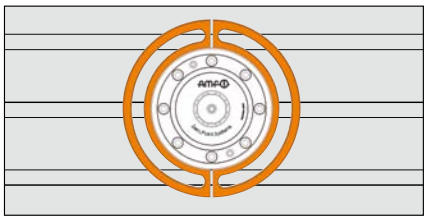
Groove distance 80 mm



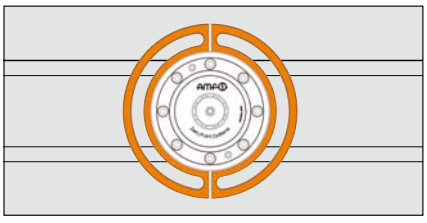
K20 - Groove distance 50 mm



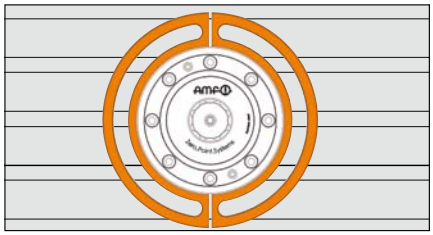
Groove distance 63 mm



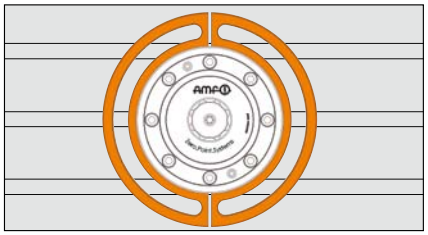
Groove distance 80 mm



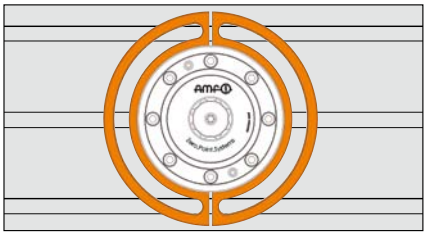
K40 - Groove distance 50 mm



Groove distance 63 mm



Groove distance 80 mm



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

ZERO-POINT SYSTEMS FROM AMF -
THE UNIFORM INTERFACE
IN ADDITIVE MANUFACTURING



+ **Designed for the special requirements of additive manufacturing**
+ **A uniform interface in 3D printing and post-processing**
+ **Drastic reduction of your set-up times**
+ **Integrated blow-out of the clamping modules**

PLEASE ASK US!

Subject to technical alterations.

AUTOMATION SOLUTIONS FROM AMF

The enormous capability and flexibility of use of modern processing machines is undisputed. To be able to use these capabilities in reality requires more than just fast machines. An automation solution consists today of a number of multiply linked, versatile products and technologies. Through the possibility of a fully automatic and process-sure machine configuration, our automation solutions meet the requirements for seamless integration into the automation system. Numerous sensing options, optional media ducts and blow-out and blow-off of the modules speak for themselves!

Persuade yourself of the automation potential of the AMF zero-point clamping modules!

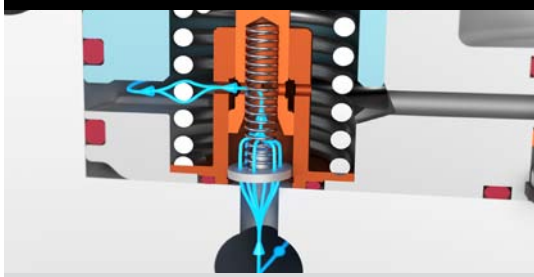
1. OPENING CONTROL



IS THE MODULE OPEN?

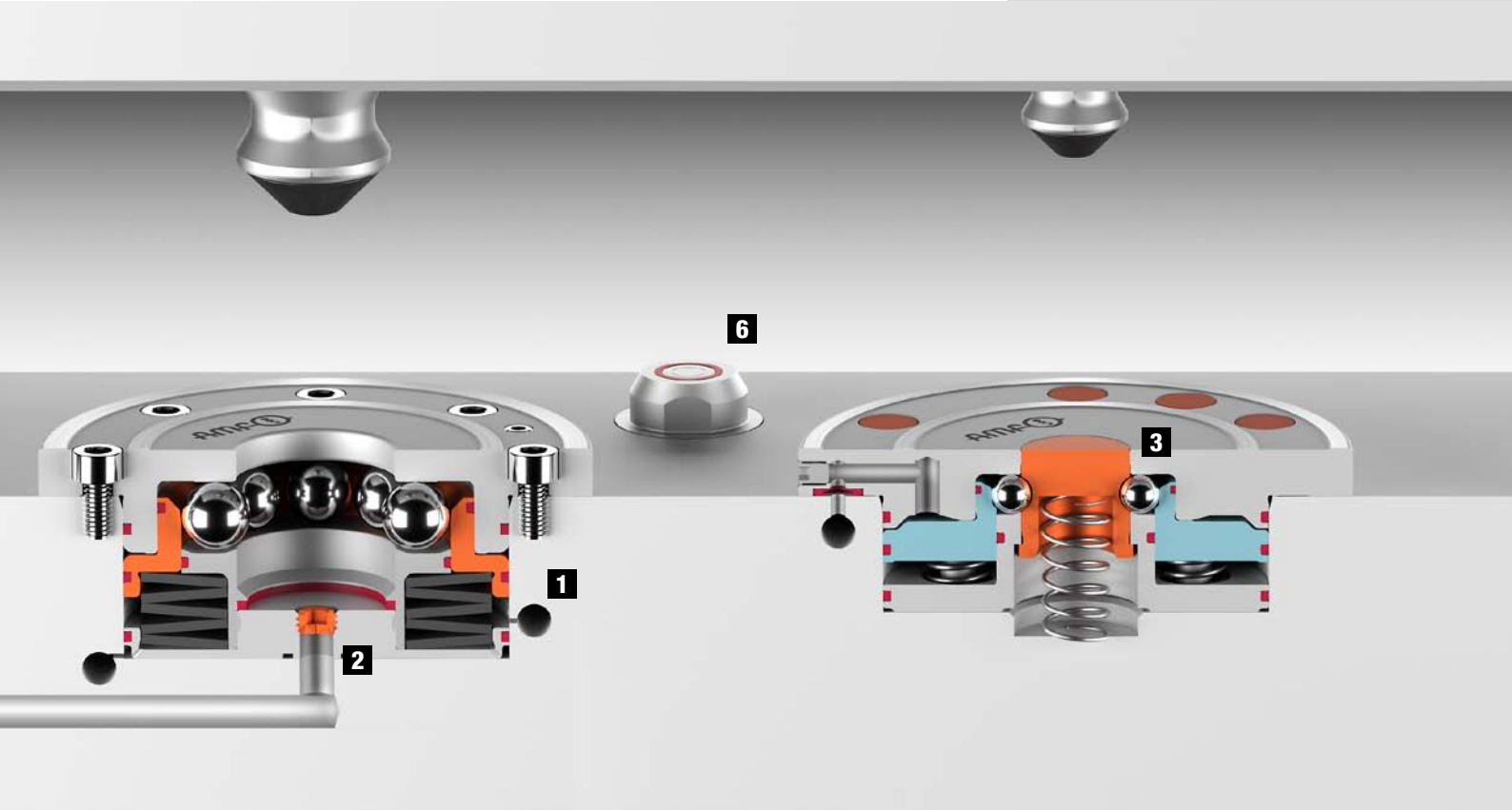
Through the direct monitoring of the piston position (opened) by means of pneumatic back pressure, the position can be sensed by means of a differential pressure switch.

5. LOCKING CONTROL



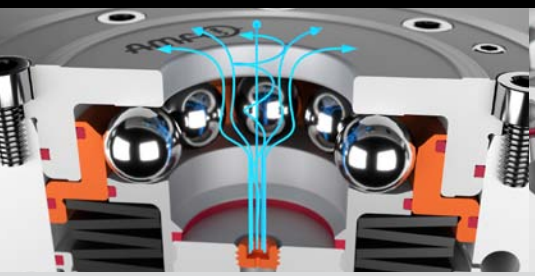
IS THE MODULE LOCKED?

With an open module, the integrated stop valve creates a pneumatic static pressure, which is sensed via a differential pressure switch.



ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

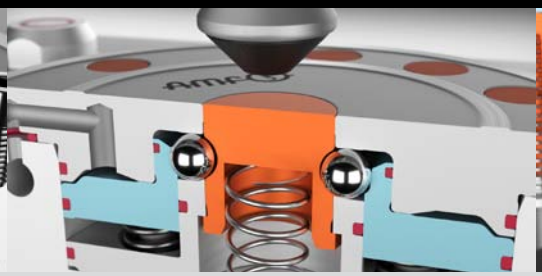
2. INTERNAL BLOW-OUT



DIRT AND CHIPS IN THE CLAMPING MODULE?

Blowing out with compressed air cleans the inside from all dirt and chips and can be used simultaneously for workpiece support control by means of a differential pressure sensor.

3. CENTRAL LOCK



DIRT AND CHIPS UNWELCOME IN THE MODULE?

The lagging central lock prevents penetration of dirt and chips when the pull-stud is being run out. The central lock replaces the previously required protection pull-stud.

4. STUD SENSING



IS THE PULL-STUD PRESENT ON THE FIXTURE?

The retracting stud actuates a stop valve, which eliminates the pneumatic or hydraulic static pressure. This condition is sensed via a differential pressure switch.

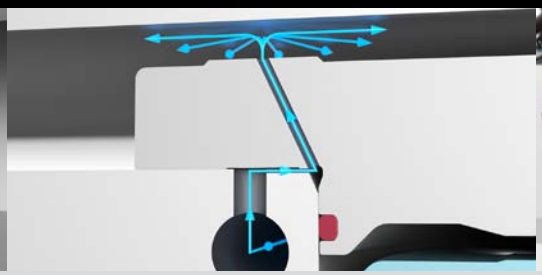
6. MEDIA DUCTS



ARE MEDIA DUCTS TO A FIXTURE NECESSARY?

Oil, compressed air, water, etc. can be run through our couplings without leaks.

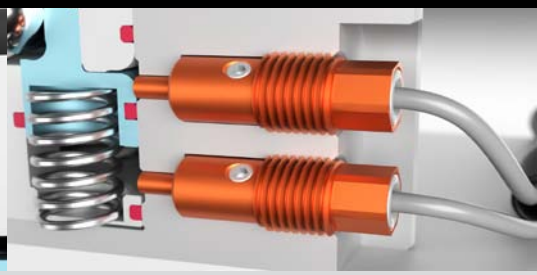
7. BLOW-OFF/SUPPORT CONTROL



CHIPS AND DIRT? IS A WORKPIECE LYING WITHOUT GAP OR NOT?

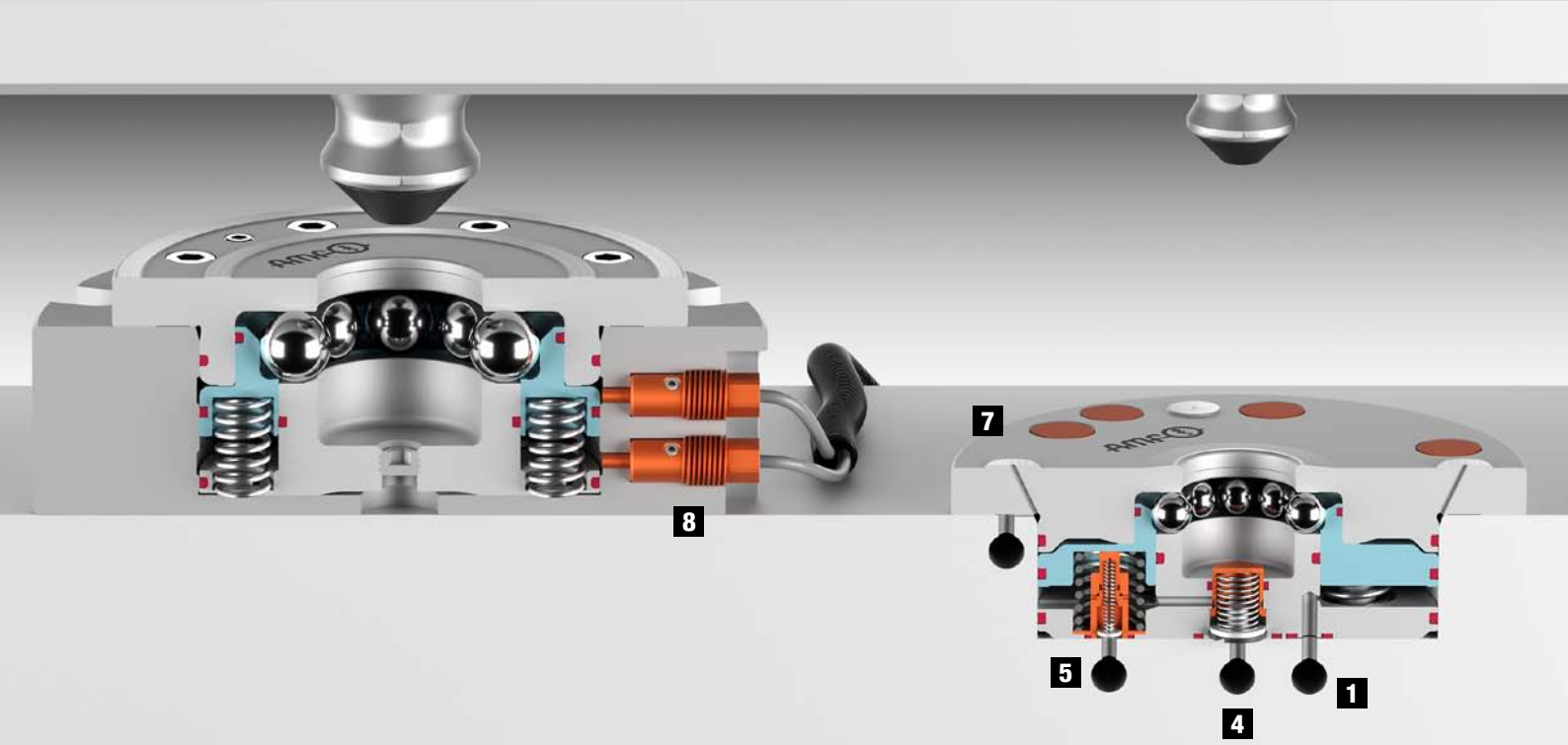
The blow-out function with compressed air cleans the support surfaces and can be used simultaneously for workpiece support control by means of a differential pressure sensor.

8. ELECTRICAL SENSING



IS THE MODULE OPEN OR CLOSED?

The integrated inductive sensor can sense the piston position (open/closed) of the clamping module.



Subject to technical alterations.

OUR AUTOMATION SOLUTIONS -
THE RIGHT CLAMPING MODULE FOR EVERY APPLICATION

	SP150 Order no. 559089	**KP5** Order no. 561992	**KP5.3** Order no. 558051	**KP10** Order no. 552963	**KP10.3** Order no. 559390	**KP10.3** Order no. 552967	**KP10.3** Order no. 559391	**KP10.3** Order no. 550257	**KP10.3** Order no. 550259	**KP10.3** Order no. 550261
	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.
Support diameter max. [mm]	22	45	78	78	112	112	112	112	112	-
Raised supports with discharge and support control										●
Pull-in/locking force in the system up to [kN]	235 N	1,5	1,5	8	10	10	10	10	10	10
Holding force* [kN]	6	13	13	25	25	25	25	25	25	25
Operating pressure for pneum. opening min. - max. [bar]	6 - 14	8 - 12	5 - 12	8 - 12	5 - 12	5 - 12	5 - 12	5 - 12	5 - 12	5 - 12
Operating pressure for pneum. re-clamping min. - max. [bar]		5 - 6		5 - 6						
Operating pressure for hydr. opening min. - max. [bar]										
Pneum. blow-out		●			●		●	●	●	●
Pneum. support control		●			●		●	●	●	●
Pneum. locking control		●					●	●	●	●
Opening control pneum.		●					●	●	●	●
Hydr. locking control										
Opening control hydr.									●	●
Pneum. pull-stud sensing										
Sensor monitor opened	●		●	●		●				
Sensor monitor closed	●		●	●		●				
Central lock					●		●			
Central lock with pneum. blow-out										

* Please observe the installation instructions.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

KH20 Order no. 428409	**KH20** Order no. 427161	**KH20** Order no. 550279	**KP20** Order no. 552964	**KP20.3** Order no. 552968	**KP20.3** Order no. 550258	**KP20.3** Order no. 550260	**KP20.3** Order no. 550262	**KP40** Order no. 552965	
hydr.	hydr.	hydr.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	
112	-	112	112	138	138	138	-	148	Support diameter max. [mm]
	●						●		Raised supports with discharge and support control
20	20	20	17	17	17	17	17	30	Pull-in/locking force in the system up to [kN]
55	55	55	55	55	55	55	55	105	Holding force* [kN]
			8 - 12	4,5 - 12,0	4,5 - 12,0	4,5 - 12,0	4,5 - 12,0	8 - 12	Operating pressure for pneum. opening min. - max. [bar]
			5 - 6					5 - 6	Operating pressure for pneum. re-clamping min. - max. [bar]
60 - 70	50 - 60	60 - 70							Operating pressure for hydr. opening min. - max. [bar]
●		●			●	●	●		Pneum. blow-out
●	●	●			●	●	●		Pneum. support control
					●	●	●		Pneum. locking control
●	●	●			●	●	●		Opening control pneum.
	●								Hydr. locking control
	●					●	●		Opening control hydr.
	●								Pneum. pull-stud sensing
			●	●				●	Sensor monitor opened
			●	●				●	Sensor monitor closed
									Central lock
		●							Central lock with pneum. blow-out

* Please observe the installation instructions.

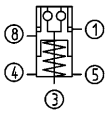
Subject to technical alterations.

No. 6103LA-5

Installation clamping module for automation solutions, screw-in version

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 - max. 6 bar
Cover and piston hardened.
Repetition accuracy < 0,005 mm.
With locking control (pneum.), opening control (pneum.) and support control (pneum.).

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [g]
561992	KP5	1,5	13	●	175

Design:

Centric blow-out, support control, opening and locking control.

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

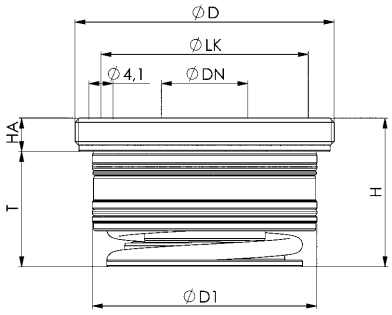
Locking control: Dynamic pressure with locked clamping module, flow-through with opened clamping module.
Opening control: Dynamic pressure with opened clamping module, flow-through with locked clamping module.
The installation clamping module is opened pneumatically and locked mechanically by spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (5).
Subsequent uncoupling of the pressure line is possible at any time (module is clamped at normal pressure).
The contact surface is the upper surface of the housing. It is recommended to use a pneumatic pressure booster no. 6370ZVL. Matching mounting tool is available under the AMF order no. 41046.

The clamping module has five connections:
1 = pneum. Opening
3 = pneum. Blow-out
4 = pneum. Opening control inlet
5 = pneum. Retensioning and venting
8 = pneum. Inlet locking control

* Please observe the installation instructions.

On request:

- Installation drawings



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	T
561992	KP5	M45 x 1	15	39	25,8	5,8	36	20

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

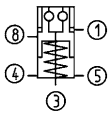
No. 6108LA-XX-08

Installation clamping module for automation solutions

NEW!

Pneumatic opening.
Pneumatic blow-out.
Operating pressure for opening:
KP5.3 min. 5 bar - max. 12 bar.
KP10.3 min. 5 bar - max. 12 bar.
KP20.3 min. 4.5 bar - max. 12 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.
With locking control (pneum.), opening control (pneum.) and support control (pneum.).

EDELSTAHL Rostfrei
INOX STAINLESS STEEL



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
561991	KP5.3	1,5	13	●	0,5
550257	KP10.3	10	25	●	1,4
550258	KP20.3	17	55	●	2,6

Design:

Centric blow-out, support control and opening and locking control.

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

Locking control: Dynamic pressure with locked clamping module, flow-through with opened clamping module.
Opening control: Dynamic pressure with opened clamping module, flow-through with locked clamping module. Support control via the blow-out function: Dynamic pressure with supported interchangeable pallet.
The installation clamping module is opened pneumatically and locked mechanically by spring force. Subsequent uncoupling of the pressure line is possible at any time (module is clamped at normal pressure).

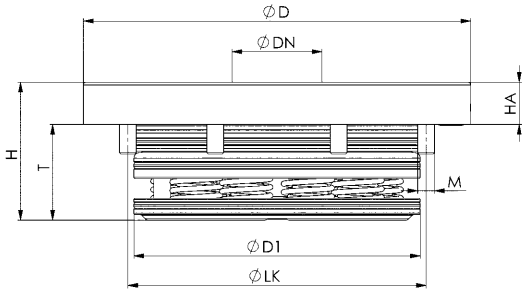
The clamping module has five connections:
1 = pneum. Opening
3 = pneum. Blow-out
4 = pneum. Opening control inlet
5 = venting
8 = pneum. Locking control inlet

* Please observe the installation instructions.

On request:

- Installation diagrams





Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
561991	KP5.3	78	15	54,5	29	8	62	M4	21
550257	KP10.3	112	22	78,0	35	10	88	M6	25
550258	KP20.3	138	32	102,0	49	15	115	M6	34

CAD

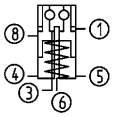
Subject to technical alterations.

No. 6108LA-XX-09

Installation clamping module for automation solutions

Pneumatic opening.
Pneumatic blow-out.
Operating pressure for opening:
KP10.3 min. 5 bar - max. 12 bar.
KP20.3 min. 4.5 bar - max. 12 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.
With locking control (pneum.), opening control (pneum.), support control (pneum.) and pull-stud sensing (pneum.).

EDELSTAHL Rostfrei INOX STAINLESS STEEL



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
550259	**KP10.3**	10	25	●	1,4
550260	**KP20.3**	17	55	●	2,6

Design:

Centric blow-out, support control and opening and locking control and pull-stud sensing.

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

Locking control: Dynamic pressure with locked clamping module, flow-through with opened clamping module.
Opening control: Dynamic pressure with opened clamping module, flow-through with locked clamping module.
Pull-stud sensing: Dynamic pressure with pull-stud present, flow-through if pull-stud is not present.
Support control via the blow-out function: Dynamic pressure with supported interchangeable pallet.
The installation clamping module is opened pneumatically and locked mechanically by spring force.
Subsequent uncoupling of the pressure line is possible at any time (module is clamped at normal pressure).

The clamping module has six connections:
1 = pneum. opening
3 = pneum. blow-out
4 = pneum. opening control inlet
5 = vent
6 = pneum. pull-stud control, inlet
8 = pneum. locking control, inlet

* Please observe the installation instructions.

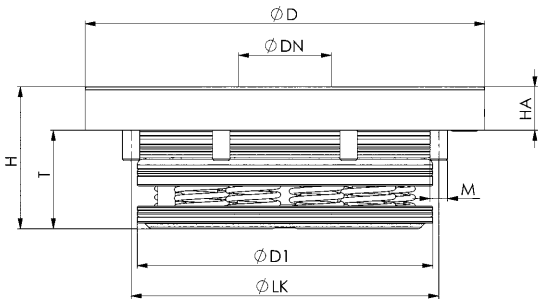
On request:

- Installation diagrams



KP20.3

KP10.3



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
550259	**KP10.3**	112	22	78	35	10	88	M6	25
550260	**KP20.3**	138	32	102	49	15	115	M6	34

CAD

Subject to technical alterations.

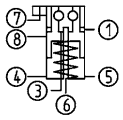
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6108LA-XX-10

Installation clamping module for automation solutions

Pneumatic opening.
Pneumatic blow-out.
Operating pressure for opening:
KP10.3 min. 5 bar - max. 12 bar.
KP20.3 min. 4.5 bar - max. 12 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.
With locking control (pneum.), opening control (pneum.), support control (pneum.) and pull-stud sensing (pneum.) and insular support.

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
550261	KP10.3	10	25	●	1,4
550262	KP20.3	17	55	●	2,6

Design:

Contact surfaces as isolated design with integrated blow-out, centric blow-out, support control, locking control and pull-stud sensing.

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

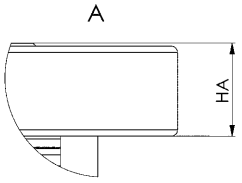
Locking control: Dynamic pressure with locked clamping module, flow-through with opened clamping module.
Opening control: Dynamic pressure with opened clamping module, flow-through with locked clamping module.
Pull-stud sensing: Dynamic pressure with pull-stud present, flow-through if pull-stud is not present.
Support control: Dynamic pressure with supported interchangeable pallet.
The installation clamping module is opened pneumatically and locked mechanically by spring force. Subsequent uncoupling of the pressure line is possible at any time (module is clamped at normal pressure).

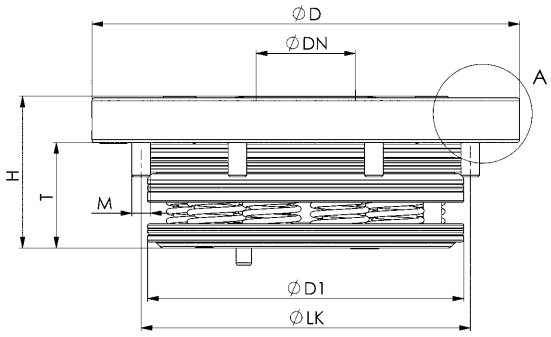
The clamping module has seven connections:
1 = pneum. opening
3 = pneum. blow-out
4 = pneum. opening control inlet
5 = vent
6 = pneum. pull-stud control, inlet
7 = pneum. support control
8 = pneum. locking control, inlet

* Please observe the installation instructions.

On request:

- Installation diagrams





Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
550261	KP10.3	112	22	78	35	10	88	M6	25
550262	KP20.3	138	32	102	49	15	115	M6	34

CAD

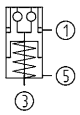
Subject to technical alterations.

No. 6111LA-10-01

Installation clamping module with central lock for automation solutions

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 5 bar - max. 12 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
559390	**KP10.3**	10	25	●	1,4

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

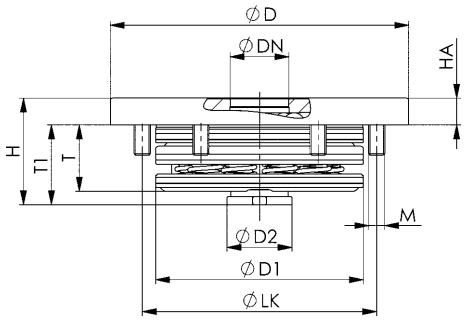
The central lock actuated by spring force for protection of the clamping module. The pull-stud is fastened and installed using an M8 DIN ISO countersunk head screw. Support control via the blow-out function: Dynamic pressure with supported interchangeable pallet. The clamping module is opened pneumatically and locked mechanically by spring force. Subsequent disconnection of the pressure line is possible at any time (clamping module is clamped without pressure).

The clamping module has three connections:
1 = pneum. Opening
3 = pneum. Blow-out
5 = venting

* Please observe the installation instructions.

On request:

- Installation diagrams



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	dia. D2	H	HA	dia. LK	M	T	T1
559390	**KP10.3**	112	22	78	25	40	10	88	M6	25	30

CAD

Subject to technical alterations.

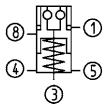
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6111LA-10-05

Installation clamping module with central lock for automation solutions

Pneumatic opening.
Pneumatic blow-out.
Opening operating pressure: min. 5 bar - max. 12 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.
With locking control (pneum.), opening control (pneum.) and support control (pneum.).

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
559391	KP10.3	10	25	●	1,4

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

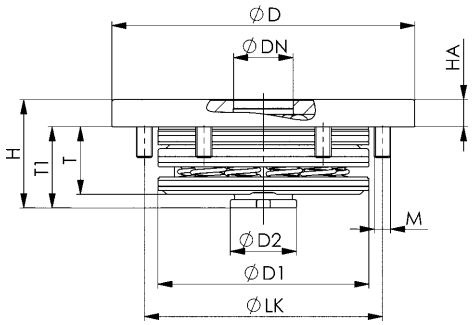
The central lock actuated by spring force for protection of the clamping module. The pull-stud is fastened and installed with a DIN ISO countersunk head screw M8.
Locking control: Dynamic pressure with locked clamping module, flow-through with opened clamping module.
Opening control: Dynamic pressure with opened clamping module, flow-through with locked clamping module. Support control via the blow-out function: Dynamic pressure with supported interchangeable pallet. The clamping module is opened pneumatically and locked mechanically by spring force. Subsequent uncoupling of the pressure line is possible at any time (clamping module is clamped at normal pressure).

The clamping module has five connections:
1 = pneum. opening
3 = pneum. blow-out
4 = pneum. opening control inlet
5 = vent
8 = pneum. locking control, inlet

* Please observe the installation instructions.

On request:

- Installation diagrams



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	dia. D2	H	HA	dia. LK	M	T	T1
559391	KP10.3	112	22	78	25	40	10	88	M6	25	30

CAD

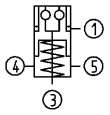
Subject to technical alterations.

No. 6103HA-20-05

Installation clamping module for automation solutions

Hydraulic opening.
Pneumatic blow-out.
Opening operating pressure: min. 60 bar - max. 70 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.
With opening control (pneum.) and support control (pneum.).

EDELSTAHL Rost frei
INOX
STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
428409	KH20	20	55	●	1,4

Design:

Centric blow-out, support control and opening control.

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

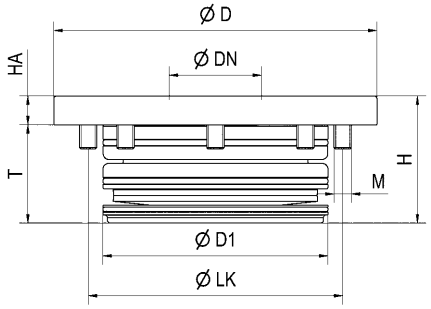
Opening control: Dynamic pressure with opened clamping module, flow-through with locked clamping module.
Support control via the blow-out function: Dynamic pressure with supported interchangeable pallet. The installation clamping module is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at any time (module is clamped pressure-free).

The clamping module has four connections:
1 = hydr. opening
3 = pneum. Blow-out and support control
4 = pneum. Opening control inlet
5 = pneum. Opening control outlet

* Please observe the installation instructions.

On request:

- Installation diagrams



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	M	dia. LK	T
428409	KH20	112	32	78	44	10	M6	88	34

CAD

Subject to technical alterations.

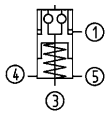
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6107HA-20-07

Installation clamping module with central lock for automation solutions

Hydraulic opening.
Pneumatic blow-out.
Operating pressure: 60 bar - 70 bar.
Cover and piston hardened.
Repetition accuracy < 0.005 mm.
With opening control (pneum.) and support control (pneum.).

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
550279	KH20	20	55	●	1,4

Design:

With central lock, blow-out, support control and opening control.

Application:

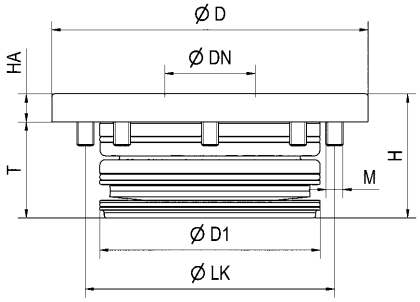
Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

Central lock with pneum. cleaning function of support surfaces.
Fastening and installation of the pull-stud by means of DIN ISO countersunk head screw M12.
Opening control: Dynamic pressure with opened clamping module, flow-through with locked clamping module.
Support control via the blow-out function: Dynamic pressure with supported interchangeable pallet.
The installation clamping module is opened hydraulically and mechanically locked through spring force. Subsequent uncoupling of the pressure line is possible at any time (module is clamped at normal pressure).

The clamping module has four connections:
1 = hydr. opening
3 = pneum. Blow-out and support control
4 = pneum. Opening control inlet
5 = pneum. Opening control outlet

* Please observe the installation instructions.



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
550279	KH20	112	32	78	44	10	88	M6	34

CAD

Subject to technical alterations.

No. 6370ZSA-02

Pneumatic sensor unit, Control and sensor module

Operating pressure 4-7 bar.





Order no.	A	B	dia. B1	C	E	H	H1	K	L	M	N	P	dia. Q	S	Weight [g]
553182	95	20,5	5,5	75	68,5	83	78,5	18	115,5	M12 x 1	10,2	17,4	6	50	510

Design:

Pneumatic sensor unit with a control module, preassembled sensor module with integrated LCD display for displaying the operating status and two connecting cables each 5 meters in length and one open end.

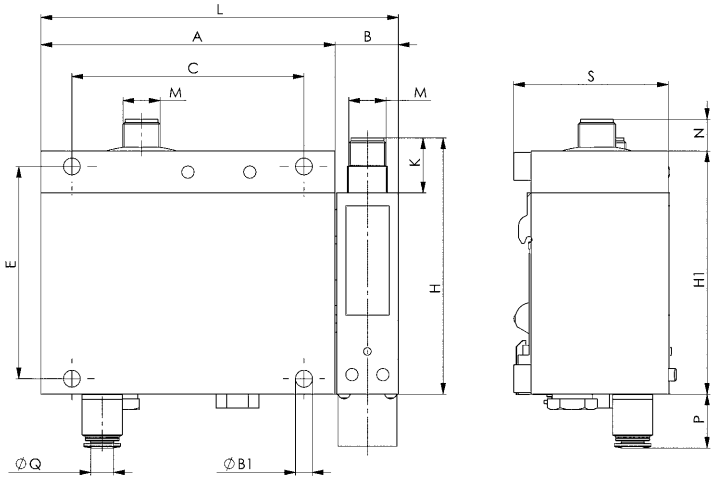
Technical data per sensor module:
Distance measuring range: 0.02 - 0.2 mm
Pneumatic connection: Q6 Plug connection 6 mm
Electrical output: 2 switch outputs PNP
Electrical connection: M12 plug, A-coded

Application:

Pneumatic sensor unit for querying and condition monitoring of the AMF zero-point clamping system for the automation. The switchpoints of the sensor modules are applied directly in the teach-in process and can then be finely adjusted and adapted manually to the individual requirements.

Note:

A maximum of four sensor modules can be mounted and connected per control module.
Observe the maximum line length.



CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

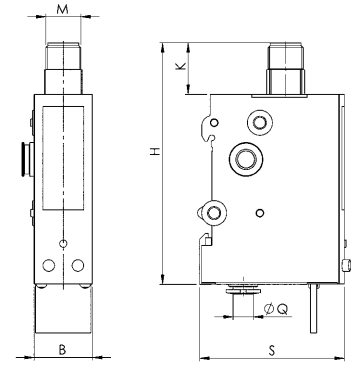
No. 6370ZSA-03

Sensor module for pneumatic sensor unit

Operating pressure 4-7 bar.

Order no.	B	H	K	M	dia. Q	S	Weight [g]
553183	20,5	83	18	M12 x 1	6	50	60





CAD

Design:

Sensor module as extension module for the pneumatic sensor unit with integrated LCD display for displaying the operating status and one connecting cable with 5 meters in length and one open end.

Technical data:
Distance measuring range: 0.02 - 0.2 mm
Pneumatic connection: Q6 Plug connection 6 mm
Electrical output: 2 switch outputs PNP
Electrical connection: M12 plug, A-coded

Application:

Sensor module for querying and condition monitoring of the AMF zero-point clamping system for the automation. The switchpoints of the sensor modules are applied directly in the teach-in process and can then be finely adjusted and adapted manually to the individual requirements.

Note:

A maximum of four sensor modules can be mounted and connected per control module.

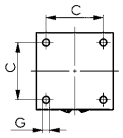
No. 6370ZSA-01

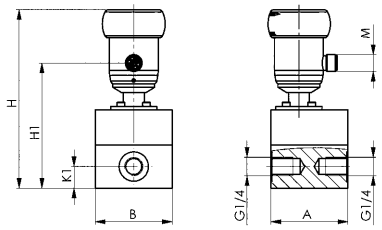
Flow meter

Hydraulic.

Order no.	A	B	C	G	H	H1	K1	M	Nominal bore [NW]	Weight [g]	Q [l/min]
553154	55	55	41	M6	128	90	15,5	M12 x 1	8	700	0,02-2







CAD

Design:

Flow meter for hydraulic volume flow of 0.02 - 2.0 l/min incl. 5-metre connecting cable.

Technical data:
Nominal diameter: DN008
Connection: Internal thread G1/4
Compressive strength: PN 200
Measurement range: 0.02 - 2.0 l/min
Medium temperature: - 25 .. + 80 °C
Ambient temperature: - 20 .. + 70 °C
Programming: via adjusting ring POM
Electrical connection: Round plug M12 x 1. 5-polig
Power supply: 18 .. 30 V DC
Protection class: IP 67
Hysteresis: adjustable
Display: LCD Display + LED

Application:

Through the very exact measurement resolution of this unit, it is possible to check and monitor whether the zero-point clamping system is in an opened or closed state.
The gearwheel flow meter measures the hydraulic flow in the connection lines of the AMF zero-point clamping system for automation and emits an output signal when the preset threshold value is reached.

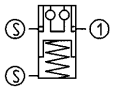
Subject to technical alterations.

No. 6109SP-150

Installation clamping module with sensor query for opening and interlock

Pneumatic opening.
Opening operating pressure: min. 6 bar - max. 14 bar.
Cover and piston hardened.
Case: Aluminium.
Repetition accuracy < 0.02 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [N]	Holding force* [N]	Weight [g]
559089	SP150	235	6000	51

Application:

Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

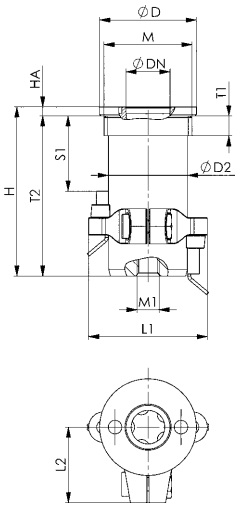
Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and locked mechanically through spring force. Subsequent uncoupling of the pressure lines is possible at any time (module is clamped pressure-free).

The clamping module has one connection:
1 = pneum. opening

The installation clamping module with sensor query contains the fastening kit order no. 559403. It has two reed sensors with connection cables (Ø 0.75 mm, cable length 100 mm) for status check opened / locked and a fastening clamp.
For simple installation of the installation clamping module, we recommend the AMF pin wrench, order no. 50914.

* Please observe the installation instructions.



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D2	H	HA	L1	L2	M	M1	S1	T1	T2
559089	SP150	22	10	18	38,5	2,05	27	17,2	M20x1,5	M5	17	4,5	36,45

CAD

No. 6109ZB-150

Fastening kit with sensors

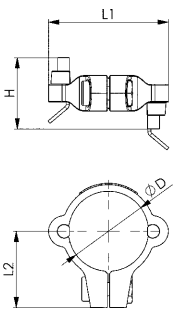
Suitable for installation clamping module SP150 with sensor query.



Order no.	Size	dia. D	H	L1	L2	Weight [g]
559403	150	18	16	27	17,2	4

Note:

The fastening kit contains two reed sensors with connection cables (Ø 0.75 mm, cable length 100 mm) for status check opened / locked and a fastening clamp.
This kit can be fastened to the clamping module SP150 with sensor query.



CAD

Subject to technical alterations.

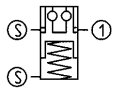
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6104L

Clamping module with sensor query for opening and interlock

Pneumatic opening.
Operating pressure for opening:
KP5.3 min. 5 bar - max. 12 bar.
KP10.3 min. 5 bar - max. 12 bar.
KP12.3 min. 4.5 bar - max. 12 bar.
Cover and piston hardened.
Flange housing: aluminium.
Repetition accuracy < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
558051	KP5.3	1,5	13	1,2
552967	KP10.3	10	25	2,6
552968	KP20.3	17	55	5,0

Application:

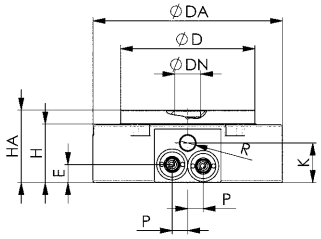
Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

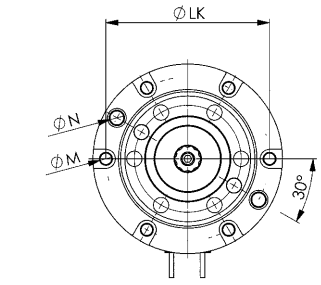
Note:

The clamping module with sensor query has two inductive sensors (connection type: plug S8, cable length 150 mm) for the status check (opened / locked). This is opened pneumatically (1) and locked mechanically through spring force. Subsequent uncoupling of the pressure line is possible at any time (module is clamped at normal pressure).

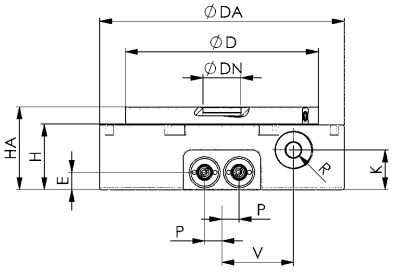
The clamping module has one connection:
1 = pneum. opening

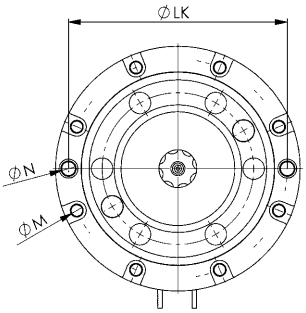
* Please observe the installation instructions.



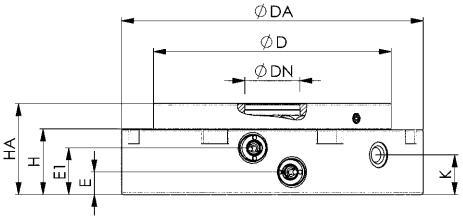


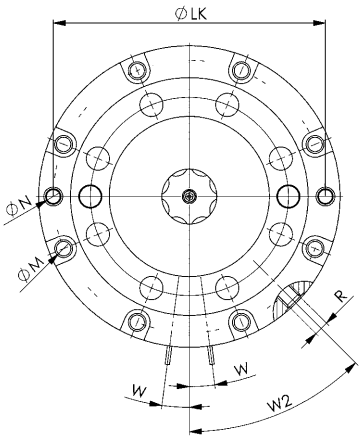
KP5.3





KP10.3





KP20.3

Dimensions:

Order no.	Size	dia. D	dia. DA	dia. DN	E	E1	H	HA	K	dia. LK	dia. M	dia. N H7	P	R	V	W	W2
558051	KP5.3	78	110	15	10,5	-	34	42	23	95	6,6	8	9	G1/8	-	-	-
552967	KP10.3	112	142	22	10	-	38	48	23	127	6,6	8	10	G1/8	41,5	-	-
552968	KP20.3	138	175	32	13	27	38	53	23	158	8,4	8	-	G1/8	-	7,5°	45°

CAD

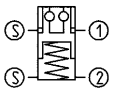
Subject to technical alterations.

No. 6101L

Clamping module with sensor query for opening and interlock

Pneumatic opening.
Opening operating pressure: min. 8 bar - max. 12 bar.
Re-clamping operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Flange housing: Stainless steel
Repetition accuracy < 0.005 mm.

EDELSTAHL Rostfrei
INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
552963	KP10	8	25	2,4
552964	KP20	17	55	6,9
552965	KP40	30	105	11,0

Application:

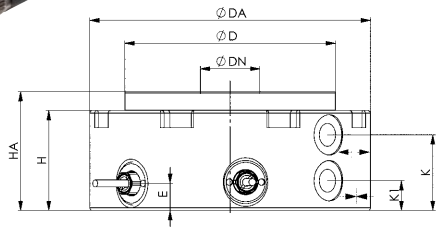
Zero-point clamping system for automation solutions for set-up-time-optimised clamping during cutting and non-cutting machining.

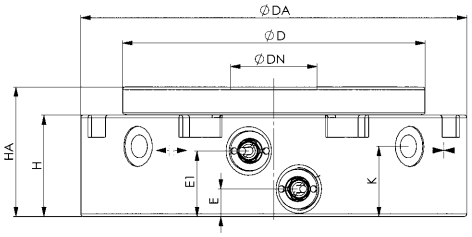
Note:

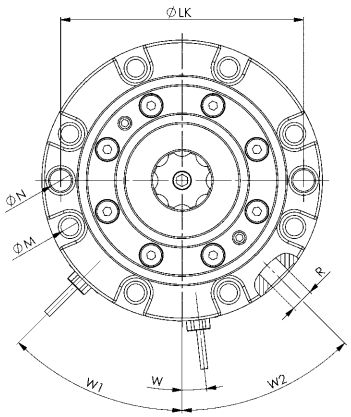
The installation clamping module with sensor query contains 2 inductive sensors (connection type: S8 plug, cable length: 150 mm) for status check (opened / locked). This is pneumatically opened (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at any time (module is clamped pressure-free).
Use of the pneumatic pressure booster no. 6370ZVL is recommended.

The clamping module has two connections:
1 = pneum. opening
2 = pneum. retensioning (turbo)

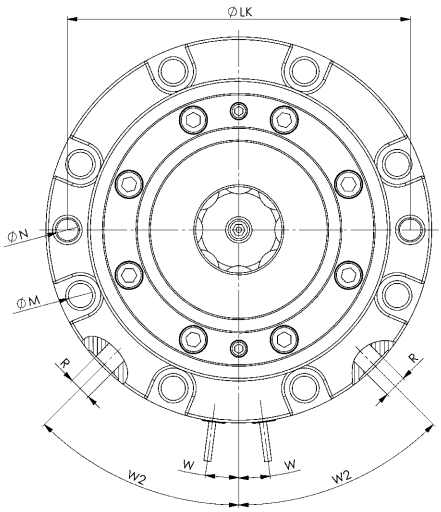
* Please observe the installation instructions.







KP10



KP20, KP40

Dimensions:

Order no.	Size	dia. D	dia. DA	dia. DN	E	E1	H	HA	K	K1	dia. LK	dia. M	dia. N H7	R	W	W1	W2
552963	KP10	78	104	22	10,0	-	37	44	28	11	90	6,6	8	G1/8	6,4°	45°	45°
552964	KP20	112	143	32	10,0	24	38	48	26	-	127	9,0	8	G1/8	7,5°	-	45°
552965	KP40	148	188	40	13,6	31	47	62	32	-	168	11,0	10	G1/8	5,0°	-	45°

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de


KUKA

No. 6214RM-250

Clamping module, mechanical, screw-in version

Mechanical opening.
Housing and piston hardened.
Repetition accuracy < 0.1 mm.

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL



Order no.	Size	Pull-in/locking force up to [N]	Holding force* [N]	Weight [g]
559090	RM250	100	1000	26

Application:

Mechanical zero point clamping system for set-up-time-optimised clamping during non-cutting machining.

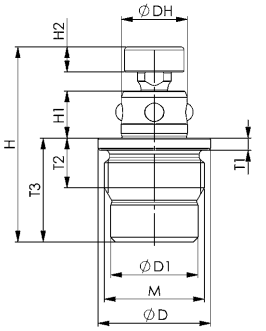
Note:

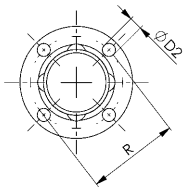
The mechanical zero-point clamping system is opened by pressing the actuator knob with hand force.
Interlock is achieved mechanically via spring force. A tool is not required for this.
The base plate serves as the contact surface, into which the clamping module is screwed.
An extended actuating pin with a height of 20 mm is available under the order no. 561391.
A suitable mounting tool is available under the order no. 559439.
Order numbers of the clamping sleeves: 559092 and 559093.

* Please observe the installation instructions.

On request:

- Installation diagrams





CAD

Dimensions:

Order no.	Size	dia. D	dia. D1	dia. D2	ØDH	H	H1	H2	M	R	T1	T2	T3
559090	RM250	18	14	2,1	10,6	28,2 - 31,3	7,6	4	M16 x 1	14,75	1,95	8	16,7



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6214RM-251

Clamping module with locking function, mechanical, screw-in version

Mechanical opening.
Housing and piston hardened.
Repetition accuracy < 0.1 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

NEW!



Order no.	Size	Pull-in/locking force up to [N]	Holding force* [N]	Weight [g]
567133	**RM251**	100	1000	28

Application:

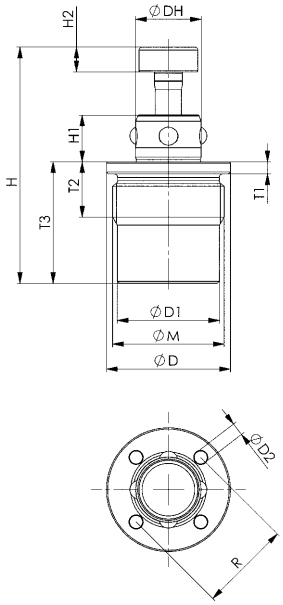
Mechanical zero point clamping system with detent function for set-up-time-optimised clamping during non-cutting machining. Very suitable for clamping smaller fixtures, e.g. in assembly.

Note:

The mechanical zero-point clamping system is opened by pressing the actuator knob with hand force and it remains in this position. Locking involves pressing the actuator knob again mechanically using spring force. A tool is not required for this. The base plate serves as the contact surface, into which the clamping module is screwed. An extended actuating pin with a height of 20 mm is available under the order no. 561391. A suitable mounting tool is available under the order no. 559439.
* Please observe the installation instructions.

On request:

- Installation diagrams



Dimensions:

Order no.	Size	dia. D	dia. D1	dia. D2	ØDH	H	H1	H2	M	R	T1	T2	T3
567133	**RM251**	20	16,5	2,1	10,6	31,2 - 38,8	7,6	4	M18 x 1	14,75	1,95	9	19,7

Subject to technical alterations.

No. 6208M

Clamping module, mechanical

Mechanical opening and closing.
Tempered steel, plasma-nitrided and burnished.
Repetition accuracy < 0.01 mm.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Tightening torque [Nm]	Weight [g]
559678	**BM10**	6	25	30	1064
562354	**BM20**	10	55	30	3330

Application:

Mechanical zero point clamping system for time-optimised clamping during cutting and non-cutting machining. Especially suitable for the modular design of clamping solutions via zero point clamping system.

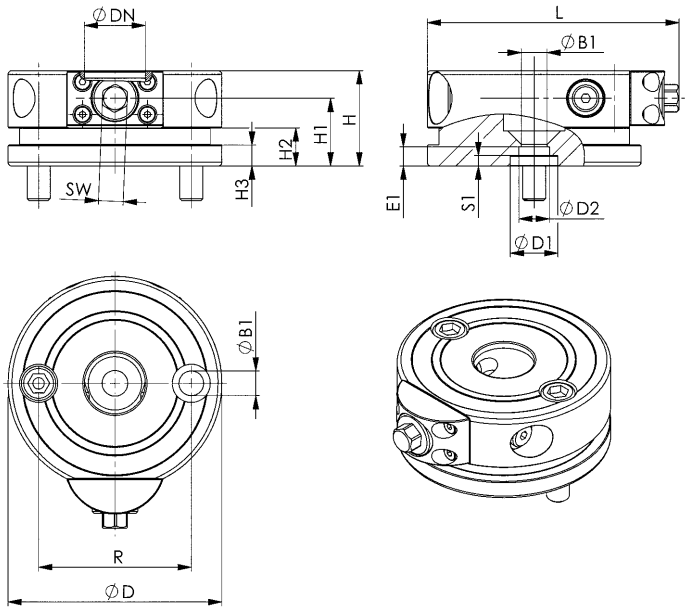
Note:

The mechanical assembly clamping module has high holding, pull-in and locking forces.
The clamping module can be positioned on the machine table and fastened with standard clamping elements at the circumferential clamping rim.
The positioning bore for stop sleeves and a through-hole for fastening onto grid plates with countersunk head screws are present underneath (observe the max. permitted screw force). The mounting bore for the 20 pull-stud is also in the module.

Pull-stud: The zero point, timing or undersize pull-stud (without colour coding) can be used, depending on the application. The BM10 clamping module can only be used with the size 10 pull-studs in the M8 version, BM20 only with the size 20 pull-studs in the M12 version.

The fastening bolts are supplied as standard.

This clamping module can be used at ambient temperatures of up to max. 200°C.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. DN	E1	H ±0.01	H1	H2	H3	L	R	S1	SW
559678	**BM10**	9,0	78	15	15	22	4,5	32	22,0	-	-	93	50	-	10
562354	**BM20**	13,5	112	25	16	32	10	50	35,5	20	11	132	80	5,5	13

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

Clamping module, mechanical, with indexing

No. 6208IM

Clamping module, mechanical, with indexing

Mechanical opening and closing.
Tempered steel, plasma-nitrided and burnished.
Repetition accuracy < 0.01 mm.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Tightening torque [Nm]	Weight [g]
559680	BM10	6	25	30	1031
562355	BM20	10	55	30	3295

Application:

Mechanical zero point clamping system with indexing grooves offset by 90° for time-optimised clamping during cutting and non-cutting machining.
Especially suitable for the modular design of clamping solutions via zero point clamping system.

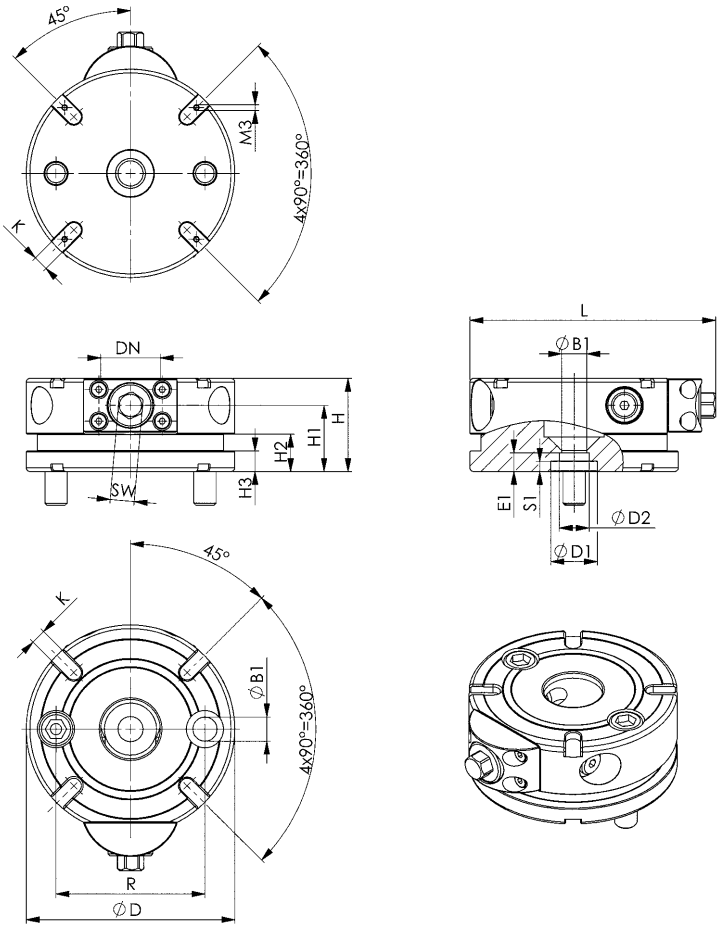
Note:

The mechanical assembly clamping module with indexing notches offset by 90° has high holding, pull-in and locking forces.
The clamping module can be positioned on the machine table and fastened with standard clamping elements at the circumferential clamping rim.
The positioning bore for stop sleeves and a through-hole for fastening onto grid plates with countersunk head screws are present underneath (observe the max. permitted screw force). The mounting bore for the 20 pull-stud is also in the module.

Pull-stud: The zero point, timing or undersize pull-stud (without colour coding) can be used, depending on the application. The BM10 clamping module can only be used with the size 10 pull-studs in the M8 version, BM20 only with the size 20 pull-studs in the M12 version.

A cylinder pin, as well as fastening bolts for use with the support elements (6210S) or for use on a fixture, are supplied as standard.

This clamping module can be used at ambient temperatures of up to max. 200°C.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. DN	E1	H ±0.01	H1	H2	H3	K F6	L	R	S1	SW
559680	BM10	9,0	78	15	-	22	4,5	32	22,0	-	-	8	93	50	-	10
562355	BM20	13,5	112	25	16	32	10,0	50	35,5	20	11	8	132	80	5,5	13

CAD

Subject to technical alterations.

No. 6208MD

Double clamping module, mechanical

Mechanical opening and closing.
Tempered steel, plasma-nitrided and burnished.
Repetition accuracy < 0.01 mm.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Tightening torque [Nm]	Weight [Kg]
559681	BM10	6	25	30	1,6
562356	BM20	10	55	30	5,1

Application:

Mechanical „double clamping module“ for setting time-optimised clamping during cutting and non-cutting machining. Especially suitable for the modular design of clamping solutions via zero point clamping system.

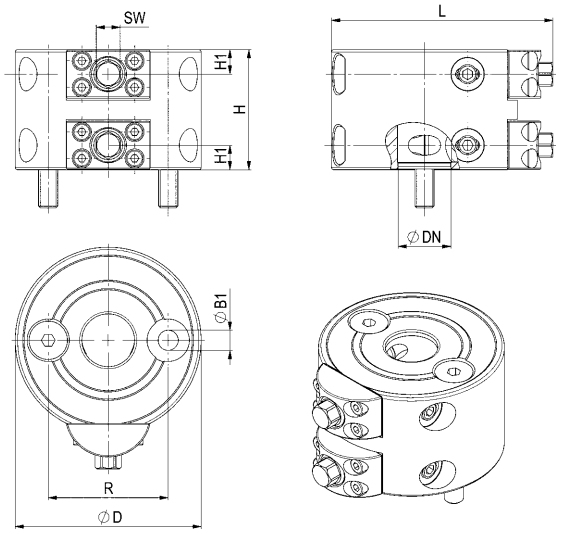
Note:

This clamping system combines two separately operable mechanical zero-point clamping systems. In conjunction with the pull-stud for T-slots, this clamping module is simply and quickly fastened to the machine table via clamping slots. Additional height adapters, workpieces or fixtures can be fastened to the top with pull-studs.

Pull-stud: The zero point, timing or undersize pull-stud (without colour coding) can be used, depending on the application. The BM10 clamping module can only be used with the size 10 pull-studs in the M8 version, BM20 only with the size 20 pull-studs in the M12 version.

The fastening bolts are supplied as standard.

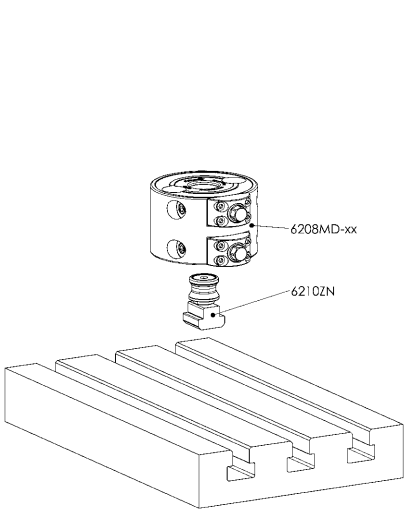
This clamping module can be used at ambient temperatures of up to max. 200°C.
* Please observe the installation instructions.

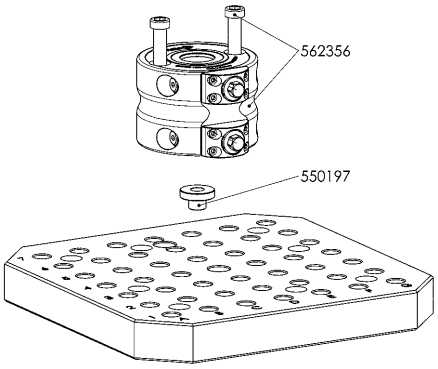


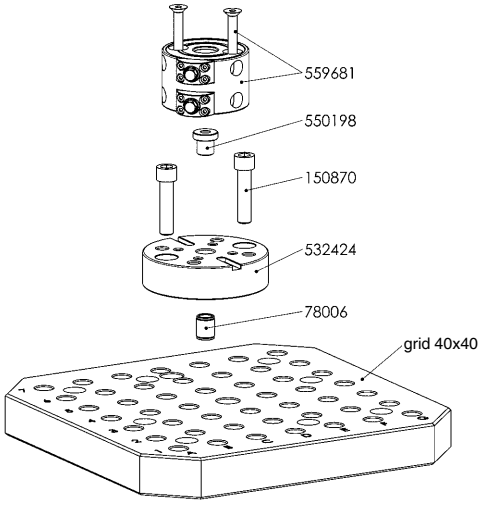
CAD

Dimensions:

Order no.	Size	dia. B1	dia. D	dia. DN	H ±0.01	H1	L	R	SW
559681	BM10	9,0	77,5	22	50	10,2	92	50	10
562356	BM20	13,5	112,0	32	80	15,0	132	80	13







Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210ZN

Pull-stud for T-slots



Order no.	Size	A	dia. DN	G	H	L	Weight [g]
550438	**10**	10	22	M8	16	30	48
550439	**10**	12	22	M8	16	35	51
550440	**10**	14	22	M8	16	35	54
550441	**20**	14	32	M12	23	45	143
550442	**20**	16	32	M12	23	45	147
550443	**20**	18	32	M12	23	50	157

Application:

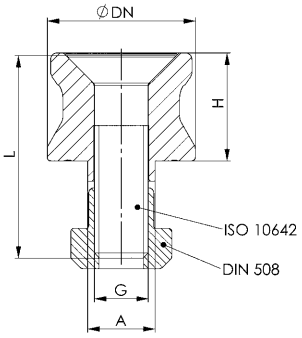
The pull-stud for T-slots enables the AMF zero-point clamping system to be positioned and clamped directly to the machine table by means of clamping slots.
These pull-studs can be used for pneumatic, hydraulic and mechanical clamping modules, and also for mechanical double clamping modules.

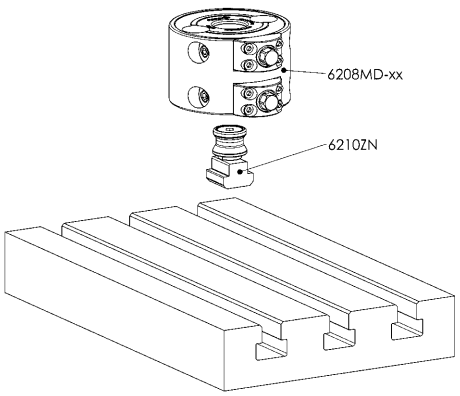
Advantage:

Simple, quick and flexible clamping of workpieces on the machine table with varying clearances of the pull-stud bores.

Note:

Supplied as standard is, as shown:
- zero point pull-studs with slot (dimension A)
- T-nut
- countersunk head screw (strength class 10.9)





CAD

Subject to technical alterations.

No. 6212M

Clamping module, mechanical

Open and close mechanically.
Tool steel, hardened.
Repetition accuracy < 0.01 mm.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
553405	BM10	10	17	360
559094	BM20	20	43	1330

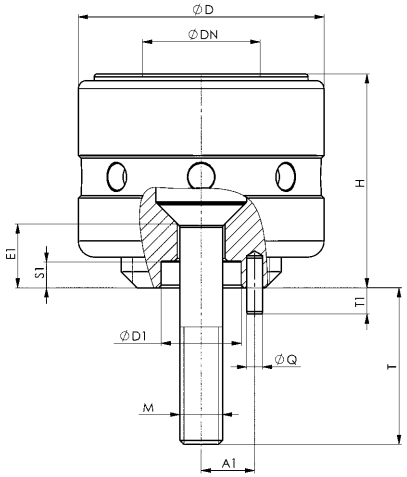
Application:

Mechanical zero point clamping system for setting time-optimised clamping during cutting or non-cutting machining. Particularly suitable for the modular design of clamping solutions via zero point clamping system.

Note:

The mechanical zero-point clamping system has high holding, pull-in and locking forces.
The B10 clamping module is fastened centrically with an M8 flat-head screw, the BM20 clamping module with an M12 cylinder screw.
The BM20 clamping module can only be used with the B20 pull-studs in the M12 version.
To open and close the clamping modules, we recommend the following AMF hook spanner:
- size 10= order no. 54940
- size 20= order no. 54973

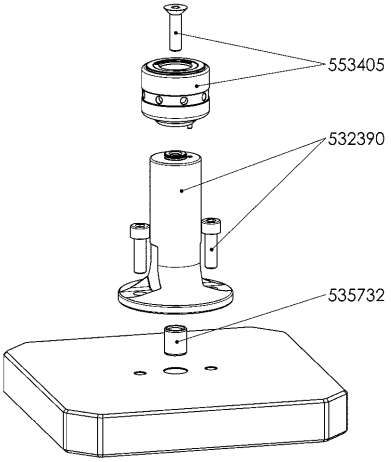
A cylinder pin is supplied as standard. In addition, fastening bolts for use with the support elements (order no. 532390, 532374) and for use on a fixture are included.
* Please observe the installation instructions.

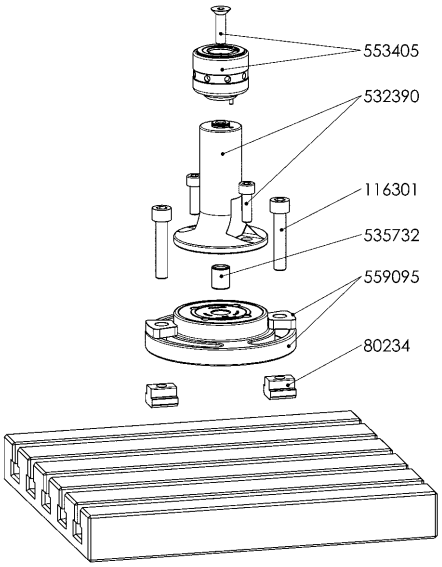


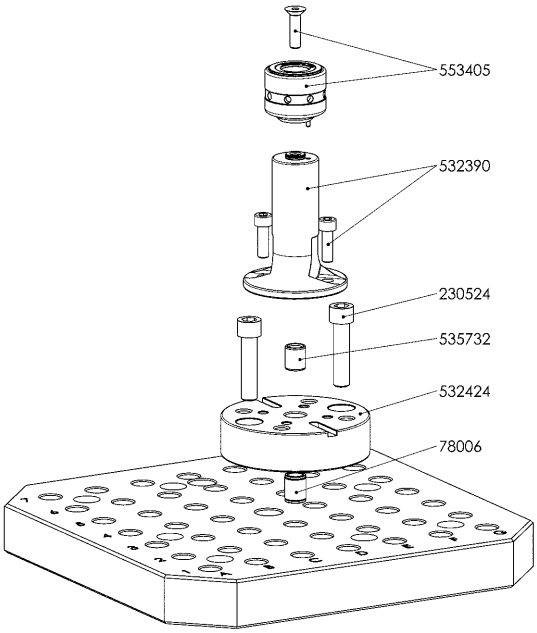
CAD

Dimensions:

Order no.	Size	A1	dia. D	dia. D1 0/+0,01	dia. DN	E1	H ±0.01	M	dia. Q	S1	T	T1
553405	BM10	10	46	15	22	12	40	M8	3	5,0	29	4,9
559094	BM20	16	70	25	32	14	60	M12	4	5,5	16	5,2







Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de





Subject to technical alterations.

SIMPLY CLEVER COMBINATIONS -
MODULAR HEIGHT ADAPTER FOR YOUR FLEXIBLE PRODUCTION

With the new modular height adapters from AMF, your production becomes even more flexible and economical. Cleverly combined, you now have an efficient opportunity to adapt your production process more simply, flexibly and quickly to constantly changing requirements.



The modular height adapters consist of three levels. The foot elements form the interface to the existing machine table. Building on this and with the use of intermediate elements, every clamping height can be achieved and, by combining different sizes, adapted flexibly to the contour of the workpiece.

Assembly elements with integrated zero point clamping modules of the AMF Zero Point system complete the adapters. Through this, the workpiece is clamped in a process-reliable way.

THE ADVANTAGES:

> Simple direct clamping of the workpiece
> Flexibly adaptable to every workpiece size and thickness
> Convenient 5-sided processing
> Freely selectable standard dimension



No. 6210H-10-05

Adapter clamping module B10 to BH5, hydr.

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
534776	BH5	5	13	2328

Application:

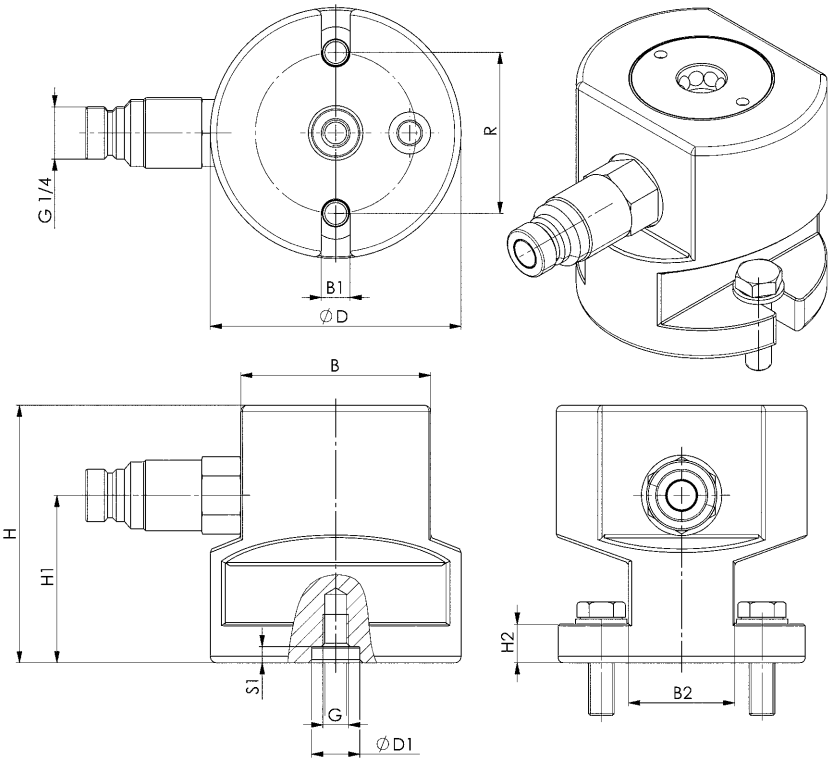
The adapter element is used to reduce the intermediate element size B10 to the hydraulic clamping module BH5. Workpieces or fixtures can be clamped with repetition accuracy directly onto the hydraulic clamping module BH5 using pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order no. for the centering sleeve Ø 15 mm: 535732
The hydr. quick-release coupling, connector version, and the fastening screws are supplied as standard.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	B	B1	B2	dia. D	ØD1 F7	G	H ±0.01	H1	H2	R	S1
534776	BH5	59	9	33	78	15	M8	80	52	12	50	5

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210IH-10-05

Adapter clamping module B10 to BH5, hydr. with indexing

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
534719	BH5	5	13	2318

Application:

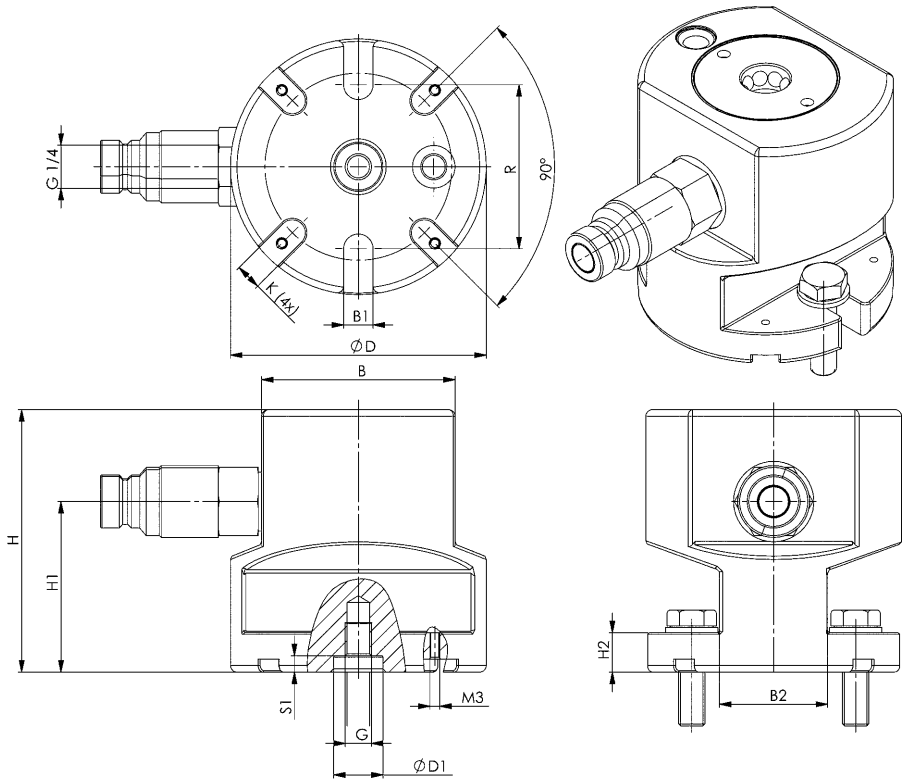
The adapter element is used to reduce the intermediate element size B10 to the hydraulic clamping module BH5. Workpieces or fixtures can be clamped with repetition accuracy directly onto the hydraulic clamping module BH5 using pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.
Thanks to the indexing option, workpieces under large machining forces can be secured to prevent radial distortion.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order no. for the centering sleeve Ø 15 mm: 535732
Order no. for the slot nuts: 430264
The hydr. quick-release coupling, connector version, and the fastening screws are supplied as standard.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	B	B1	B2	dia. D	ØD1 F7	G	H ±0.01	H1	H2	K F6	R	S1
534719	BH5	59	9	33	78	15	M8	80	52	12	8	50	5

CAD

Subject to technical alterations.

No. 6210L-10-05

Adapter clamping module B10 to BP5, pneum.

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
534768	BP5	1,5	13	2272

Application:

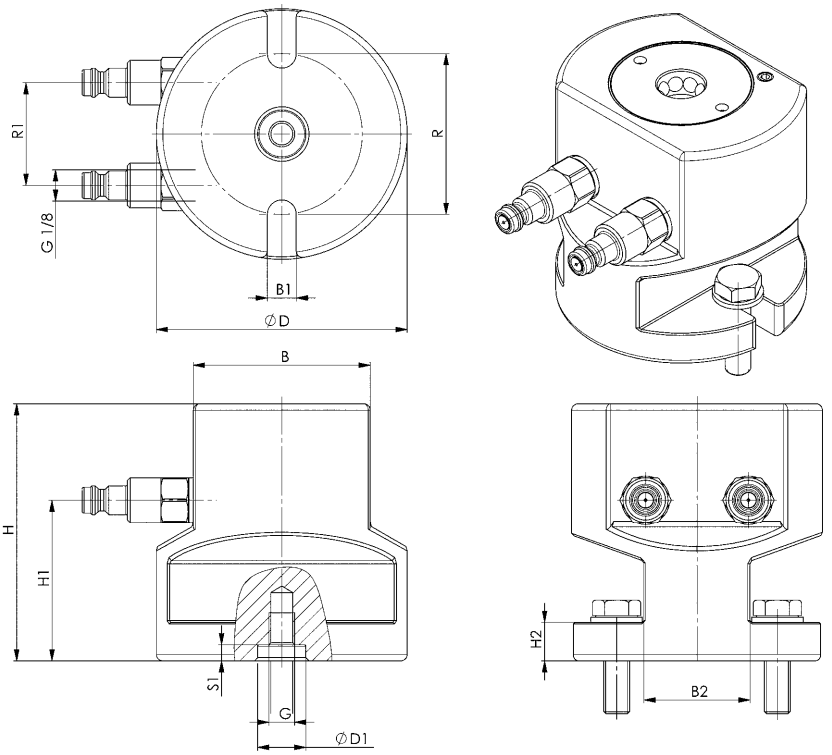
The adapter element is used to reduce the intermediate element size B10 to the pneumatic clamping module BP5. Workpieces or fixtures can be clamped with repetition accuracy directly onto the pneumatic clamping module BP5 using pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order no. for the centering sleeve Ø 15 mm: 535732
The pneum. quick-release coupling, connector version, and the fastening screws are supplied as standard.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	B	B1	B2	dia. D	ØD1 F7	G	H ±0.01	H1	H2	R	R1	S1
534768	BP5	59	9	33	78	15	M8	80	52	12	50	32	5

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210IL-10-05

Adapter clamping module B10 to BP5, pneum. with indexing

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
532853	BP5	1,5	13	2248

Application:

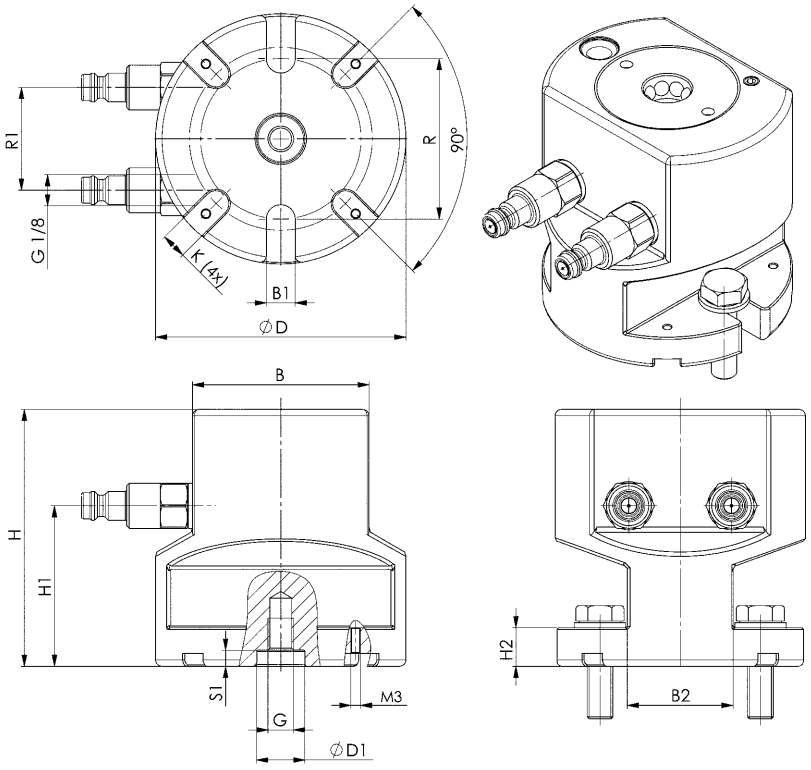
The adapter element is used to reduce the intermediate element size B10 to the pneumatic clamping module BP5. Workpieces or fixtures can be clamped with repetition accuracy directly onto the pneumatic clamping module BP5 using pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.
Thanks to the indexing option, workpieces under large machining forces can be secured to prevent radial distortion.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order no. for the centering sleeve Ø 15 mm: 535732
Order no. for the slot nuts: 430264
The pneum. quick-release coupling, connector version, and the fastening screws are supplied as standard.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	B	B1	B2	dia. D	ØD1 F7	G	H ±0.01	H1	H2	K F6	R	R1	S1
532853	BP5	59	9	33	78	15	M8	80	52	12	8	50	32	5

CAD

Subject to technical alterations.

No. 6210H

Assembly element BH10 and BH20, hydraulic

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
534883	BH10	10	25	2835
534800	BH20	20	55	7311

Application:

The assembly element is used to clamp with repetition accuracy workpieces or fixtures directly onto the hydraulic clamping modules BH10 or BH20 via pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

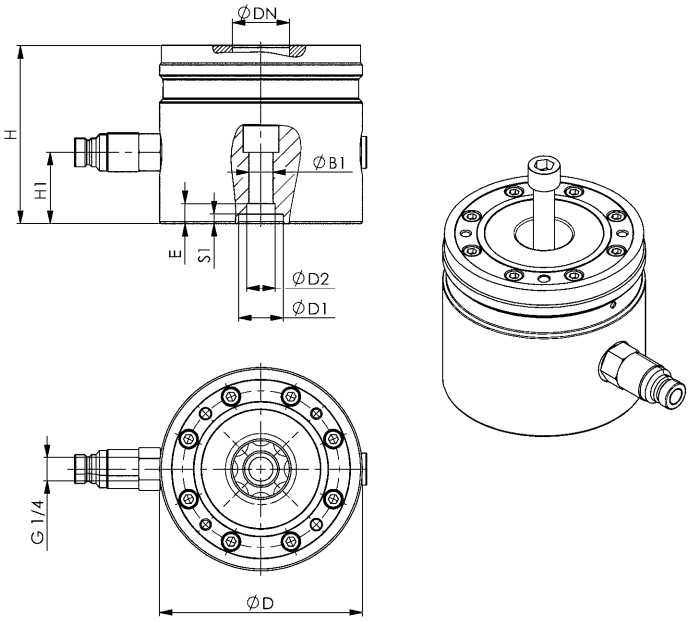
Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order numbers for the centering sleeves
- Ø 15 mm: 535732
- Ø 16 mm: 78006

The hydr. quick-release coupling, connector version, and the fastening screw are supplied as standard.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. DN	E	H ±0.01	H1	S1
534883	BH10	9,0	80	-	15	22	5,0	80	35	-
534800	BH20	13,5	114	25	16	32	11,25	100	40	5,5

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210IH

Assembly element BH20, hydraulic, with indexing

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
534412	**BH20**	20	55	7154

Application:

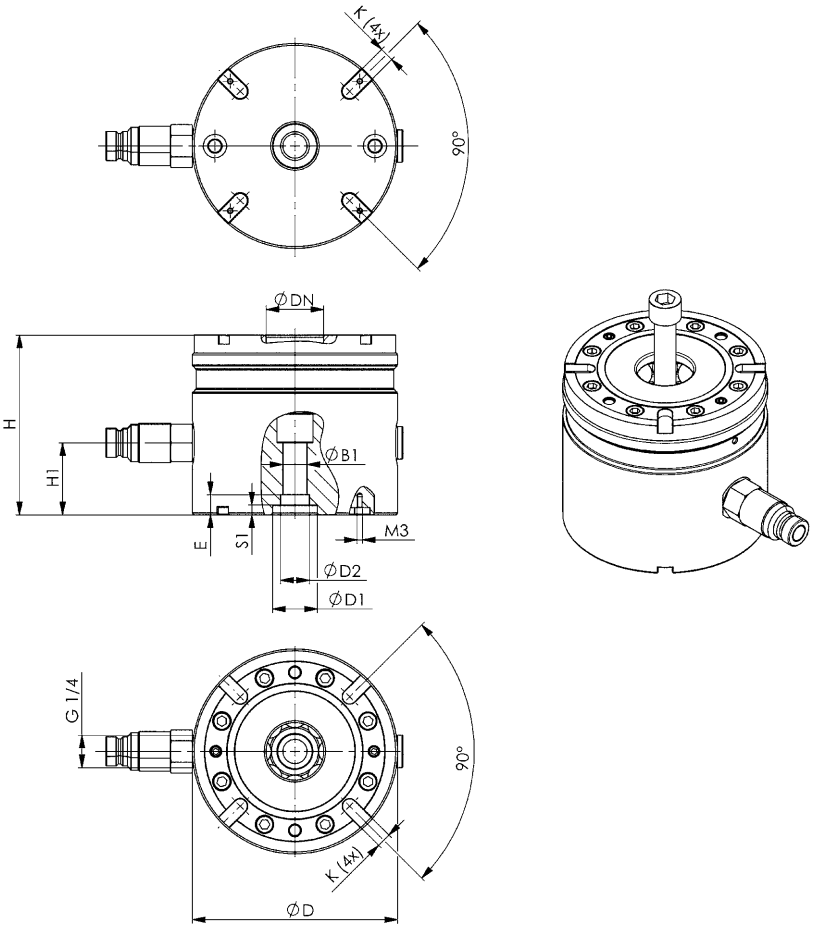
The assembly element is used to clamp with repeat accuracy workpieces or fixtures directly onto the hydraulic clamping module BH20 with 4-point indexing via pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order no. for the centering sleeve Ø 16 mm: 78006
Order no. for the slot nuts: 430264
The hydr. quick-release coupling, connector version, and the fastening screw are supplied as standard.
* Please observe the installation instructions.



Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. DN	E	H ±0.01	H1	K F6	S1
534412	**BH20**	13,5	114	25	16	32	11,25	100	40	8	5,5

CAD

Subject to technical alterations.

No. 6370ZSZ-112

Collet attachment for clamping module KH20 and BH20, hydr.

Material: high-strength aluminium.

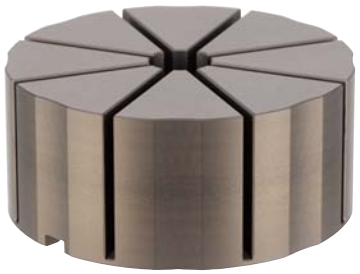
Order no.	dia. D	dia. D1	ØD2 0/+0.01	Clamping stroke Ø [mm]	H	H1	Weight [g]
550286	112	20	25	0,5	50	30	1133

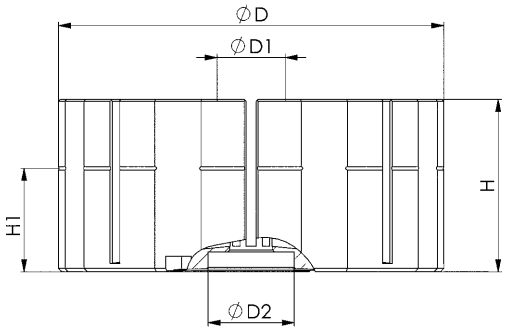
Design:

The collet attachment with a diameter of 112 mm is suitable for the AMF zero-point hydraulic clamping modules KH20 (Order no. 428425) and BH20 (Order no. 534412) with indexing. The collet is made from anodised, high-strength aluminium.

Application:

The collet attachment is placed on the AMF Zero Point clamping system size KH20 or BH20 in the hydraulic version and guides the radial clamping force to the workpiece after the clamping module is closed. The workpiece contour is milled into the collet attachment with a minimum clamping depth of 2 mm. The collet attachment can be milled off to a height of H1, allowing new workpiece contours to be introduced. The maximum workpiece diameter is 100 mm.





CAD

No. 6370ZSB

Mounting kit for collet attachment

for collet No. 6370ZSZ-112

Order no.	Size	Weight [g]
550287	20	190

Design:

The mounting set includes:
- 1 pull-stud size 20, design: sword
- 1 captive screw size 20
- 1 lock nut M12
- 2 indexing notches, width 8 mm

Application:

The mounting set is mounted with the collet attachment 112 mm, order no. 550286. After installation, the collet attachment can be securely and hydraulically clamped onto the AMF clamping modules, size 20.



CAD

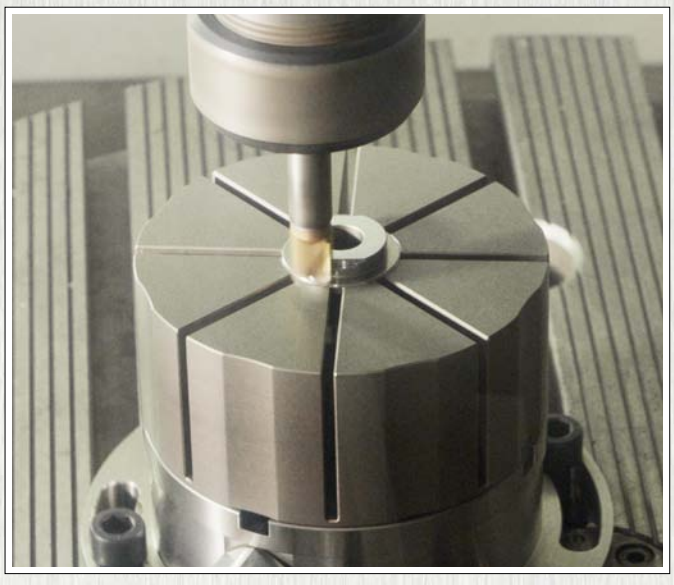
Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

Collet attachment for clamping module KH20 and BH20, hydr.
550286

Mounting kit for collet attachment
550287

Assembly element BH20, hydraulic, with indexing
534412





Subject to technical alterations.

No. 6210L

Assembly element BP10, BP10.3 and BP20, pneumatic

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
534925	BP10	8	25	2720
534537	BP10.3	10	25	7708
534842	BP20	17	55	7185

Application:

The assembly element is used to clamp with repetition accuracy workpieces or fixtures directly onto the pneumatic clamping modules BP10, BP10.3 and BP20 via pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

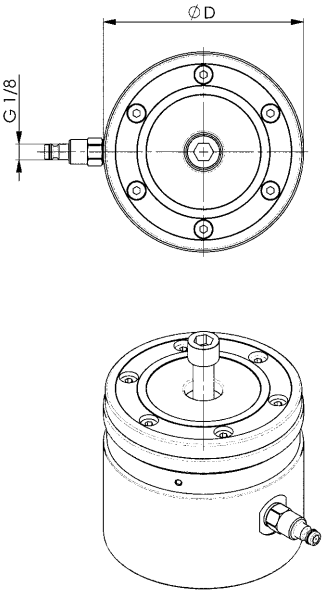
Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

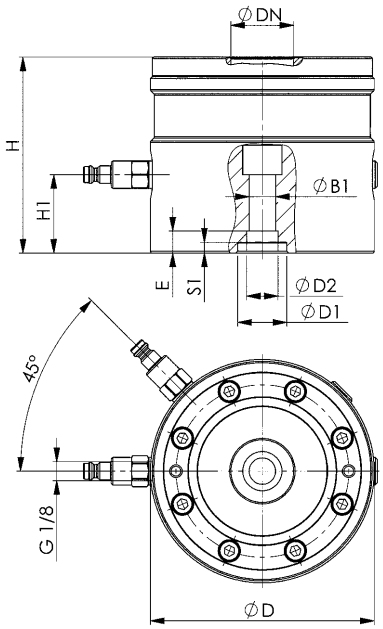
Note:

Order numbers for the centering sleeves
- Ø 15 mm: 535732
- Ø 16 mm: 78006

The pneum. quick-release coupling, connector version, and the fastening screw are supplied as standard.
* Please observe the installation instructions.



BP10.3



BP10, BP20

Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. DN	E	H ±0.01	H1	S1
534925	BP10	9,0	80	-	15	22	5,0	80	35	-
534537	BP10.3	13,5	114	25	16	22	11,25	100	40	5,5
534842	BP20	13,5	114	25	16	32	11,25	100	40	5,5

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210IL

Assembly element BP10.3 and BP20, pneumatic, with indexing

Housing: tempered steel, gas-nitrided and oxidised.
Clamping module: cover and piston hardened.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [g]
534495	BP10.3	10	25	7668
534453	BP20	17	55	7162

Application:

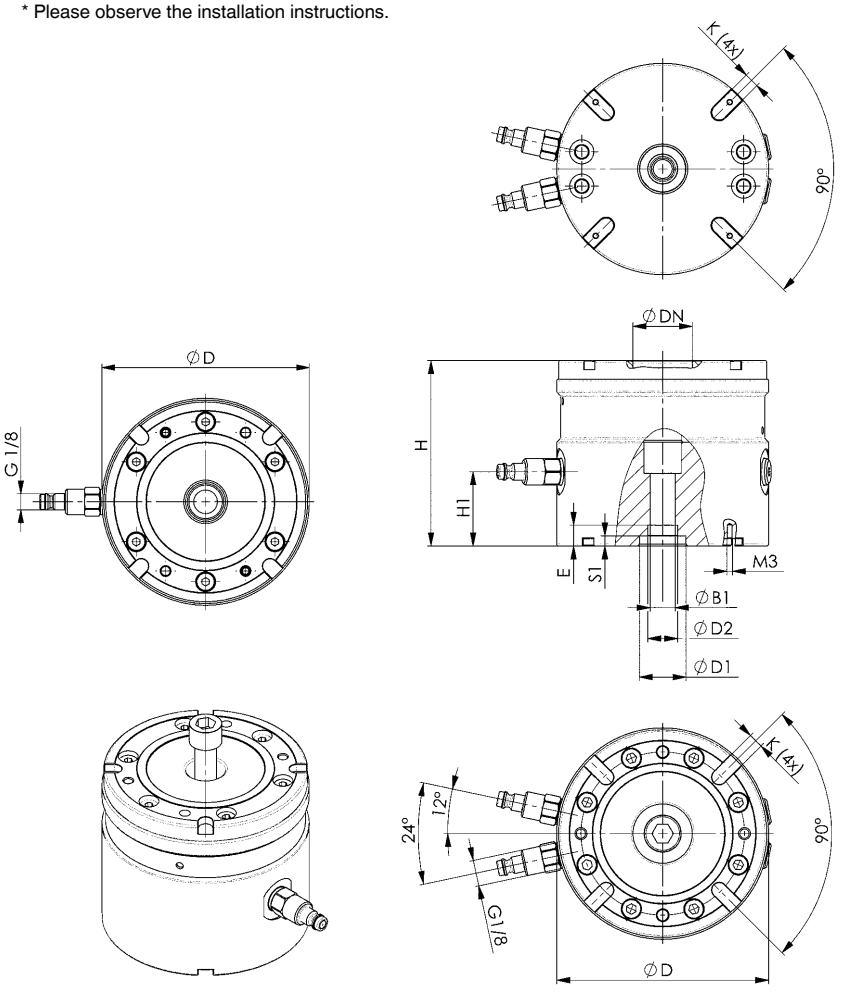
The assembly element is used to clamp workpieces or fixtures with repetition accuracy directly onto the pneumatic clamping modules BP10.3 and BP20 using pull-studs.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.
Thanks to the quadruple 90° indexing option, workpieces under large machining forces can be secured to prevent radial distortion.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order no. for the centering sleeve Ø 16 mm: 78006
Order no. for the slot nuts: 430264
The pneum. quick-release coupling, connector version, and the fastening screw are supplied as standard.
* Please observe the installation instructions.



BP10.3 BP20

Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. DN	E	H ±0.01	H1	K F6	S1
534495	BP10.3	13	114	25	16	22	11,25	100	40	8	5,5
534453	BP20	13	114	25	16	32	11,25	100	40	8	5,5

CAD

Subject to technical alterations.

No. 6210S

Support element, fixed

Housing: tempered steel, gas-nitrided and oxidised.



Order no.	Size	H ±0.01	Weight [g]
532390	B10	100	995
532374	B20	100	1790

Application:

The support element enables workpieces to be received into the bore for the pull-stud, depending on size (10 or 20) and to be clamped to the main or the intermediate element.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

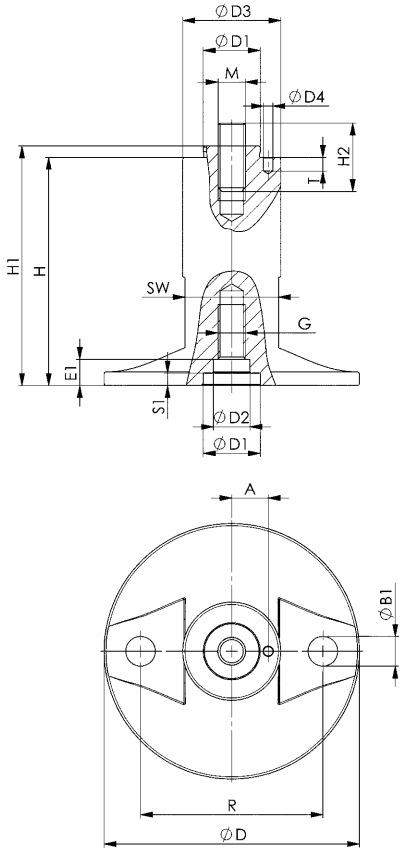
Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Two fastening bolts and a threaded stud are supplied as standard.

Order numbers of the centring sleeves
- Ø15: order no. 535732
- Ø16: order no. 78006
- Ø22: order no. 78238



Dimensions:

Order no.	Size	A	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. D3	dia. D4	E1	G	H1	H2	M	R	S1	SW	T
532390	B10	10	9	78	-	15	35	3,1	-	M8	103	20	M8	50	5	30	6
532374	B20	16	13	112	25	16	43	4,1	12,0	M12	105	30	M12	80	6	41	6

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210S

Support element, adjustable ± 5 mm

Housing: tempered steel, gas-nitrided and oxidised.



Order no.	Size	H ±0.01	Weight [g]
532416	B10	95-105	974
532432	B20	95-105	2020

Application:

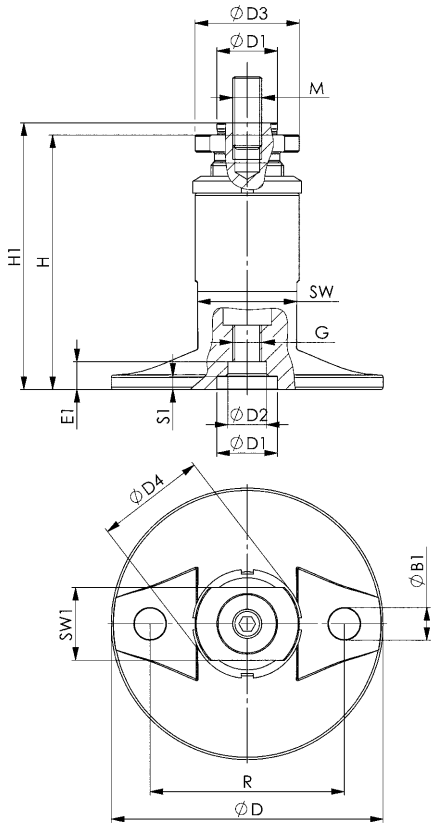
The support element enables workpieces to be received into the bore for the pull-stud, depending on size (10 or 20) and to be clamped to the main or the intermediate element. Thanks to the adjustment and counter option, the support element can be steplessly adapted to the workpiece contour by ± 5 mm.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order numbers for the centering sleeves:
- Ø15: Order no. 535732
- Ø16: Order no. 78006
- Ø22: Order no. 78238



Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. D3	dia. D4	E1	G	H1	M	R	S1	SW	SW1
532416	B10	9	78	-	15	35	38	5,0	M8	98-108	M8	50	4,5	30	27
532432	B20	13	112	25	16	43	45	11,5	M12	100-110	M12	80	5,5	41	30

CAD

Subject to technical alterations.

No. 6210AGS

Adapter with straight clamp

Adapter made from tempered steel, plasma-nitrided and burnished. Clamp burnished from tempered steel.

NEW!



Order no.	Size	H ±0,1	H1	Weight [g]
567136	B10	28	15 - 40	1225
567137	B20	40	15 - 45	3600

Application:

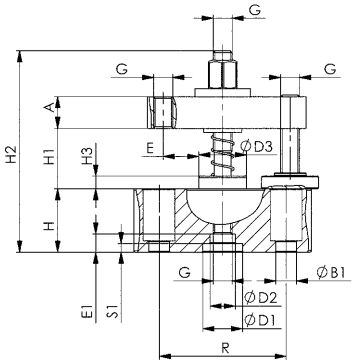
The adapter is used with a straight clamp to implement the first clamping of a workpiece by the AMF modular system. For this, the adapter can be clamped to basic or intermediate elements of sizes B10 and B20, or to clamping modules BH10, BP10, BH20, BP20.
The adapter has an integrated stop for the workpiece and a supporting spring element to hold the clamp in position which simplifies handling. The clamping height is variable and different compression pieces can be used to adapt to the clamp.

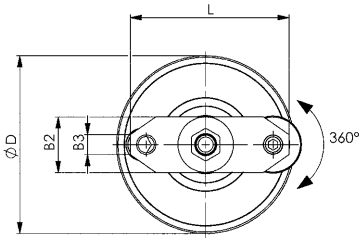
Advantage:

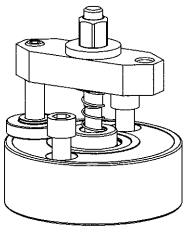
Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for moving workpieces into the required height for machining in the machine tool and to clamp it safely.

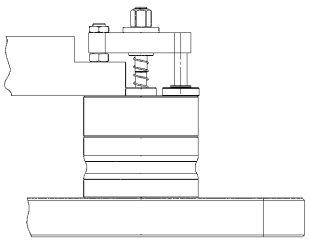
Note:

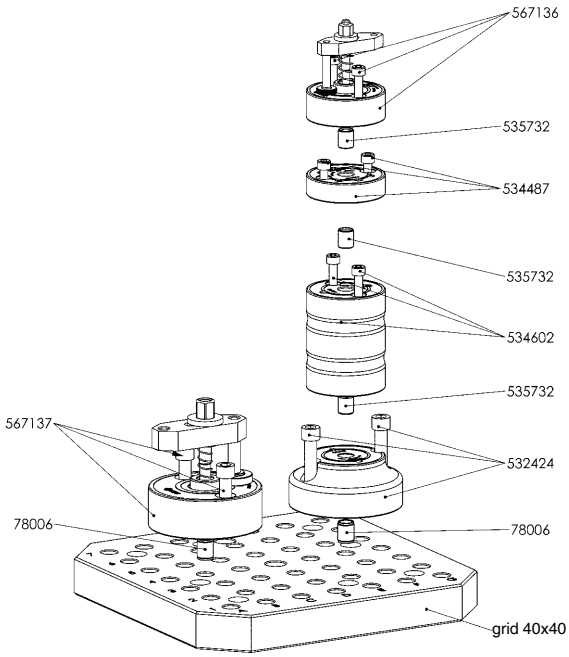
The fastening bolts are supplied as standard.
Suitable compression pieces, e.g. 7110DIX-**xM** and 7110DKX-**xM** can be found in the AMF „Standard clamping elements“ catalogue.











Dimensions:

Order no.	Size	A	dia. B1	B2	B3	dia. D	dia. D1 ±0.01	dia. D2 F7	dia. D3	E	E1	Cylinder screw ISO 4762	G	H2	H3	L	R	S1
567136	B10	12	9	25	8	78	-	15	24	10,0 - 20,0	5,0	M8 x 30	M8	9	8	70	50	-
567137	B20	20	13	35	13	112	25	16	30	15,5 - 32,0	11,5	M12 x 25, M12 x 50	M12	127	8	100	80	5,5

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6209MXY

Counterbalance element XY-plane

Mechanical opening and clamping.
Tempered steel, plasma-nitrided.

Order no.	Size	Shear force [kN]	XY counterbalance [mm]	Tightening torque Md max. [Nm]	Weight [Kg]
558905	B10	3	4	30	1300
558906	B20	7	4	40	3400

Application:

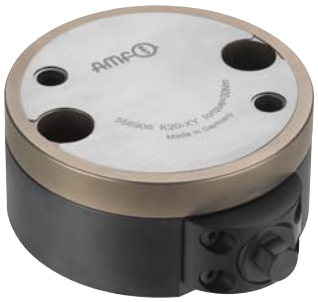
The counterbalance element can compensate for a position tolerance of up to 4 mm in the plane. It is used to compensate for distance tolerances of the pull-studs. The upper part can be pushed to the base in the opened condition and is clamped without twisting by actuating the clamping screw.

Advantage:

Simple, quick and flexible clamping on the machine table of complex workpiece contours with large pull-stud distance tolerances.

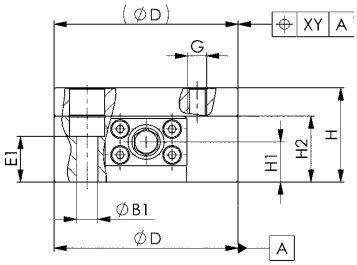
Note:

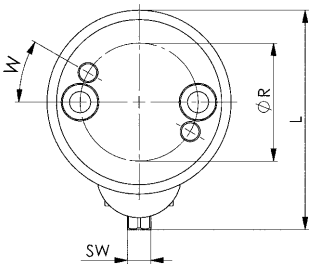
The fastening bolts are supplied as standard.

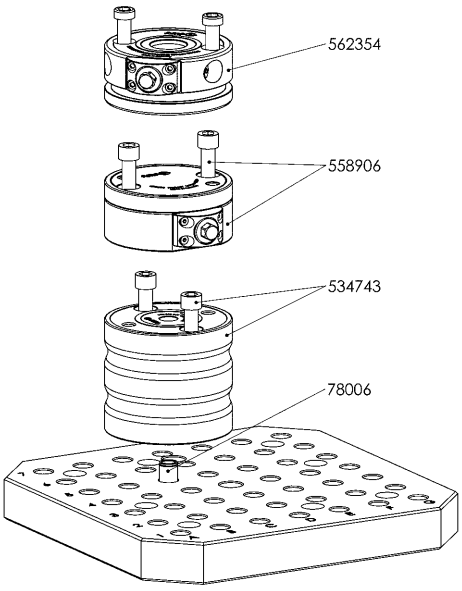


Dimensions:

Order no.	Size	dia. B1	dia. D	E1	G	H	H1	H2	L	ØR	SW	W
558905	B10	9,0	78	19,4	M8	40	17	28	93	50	10	30°
558906	B20	13,5	112	22,4	M12	50	20	35	132	80	13	45°







CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6209MZ

Height adjustment element

Mechanical clamping.
Tempered steel, plasma-nitrided.

Order no.	Size	Contact force F1 [N]	Support force F2 [kN]	Tightening torque Md max. [Nm]	Weight [Kg]
554058	B10	44 - 52	12	30	3,5
558903	B20	100 - 122	20	30	6,9



Application:

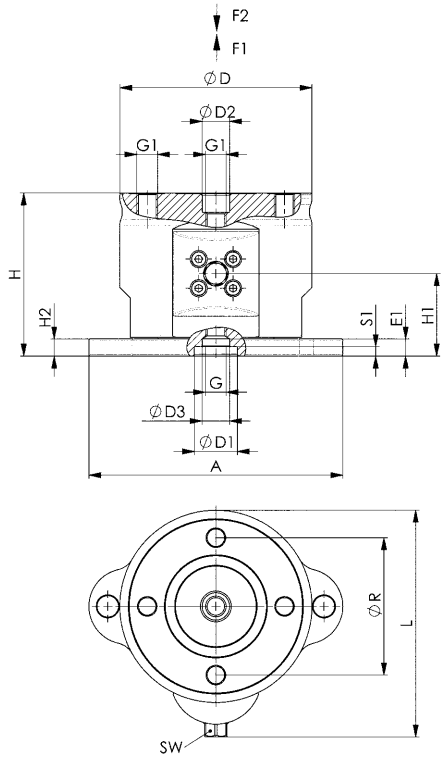
The height counterbalance element is used to clamp a workpiece distortion-free, beginning with the fourth support point. The element attaches itself by spring force and is then fastened by turning the clamping screw. The height counterbalance element is normally extended.
This element can also be used as a support element to prevent bending and vibration of the workpieces.

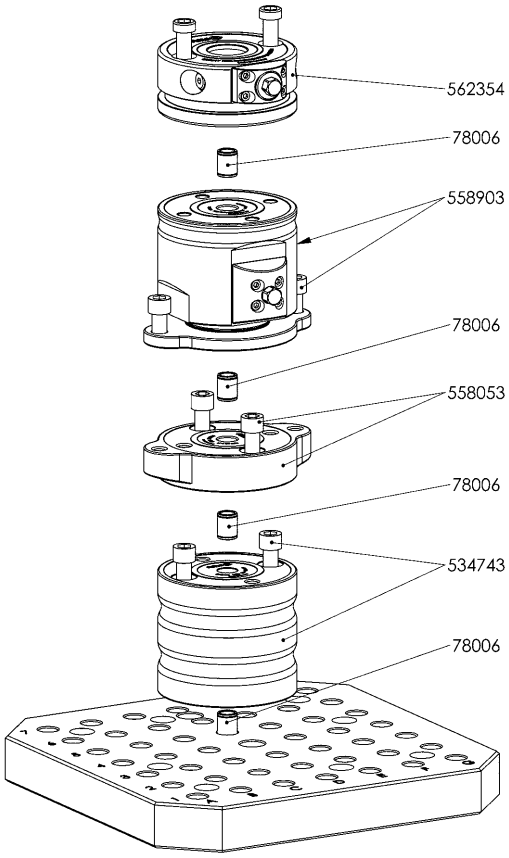
Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Particularly suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool for clamping these securely.

Note:

The fastening bolts are supplied as standard.
Order number of the centring sleeves:
- size B10: order no. 535732 and 430223
- size B20: order no. 78006





CAD

Dimensions:

Order no.	Size	A	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. D3	E1	G	G1	H	H1	H2	L	ØR	SW	S1
554058	B10	105	78	25	15	-	-	M12	M8	95-105	48	10	96	50	10	5,5
558903	B20	148	112	25	16	16	10	M12	M12	95-105	48	10	132	80	13	5,5

Subject to technical alterations.

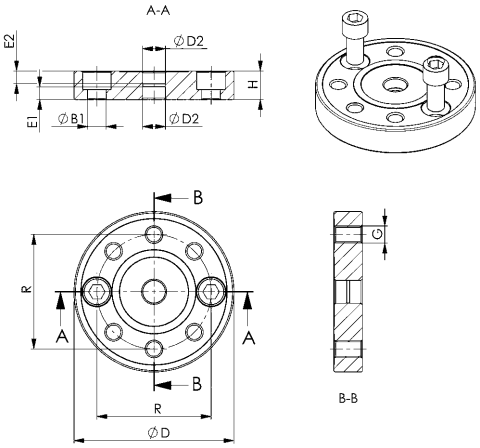
No. 6210Z

Intermediate element

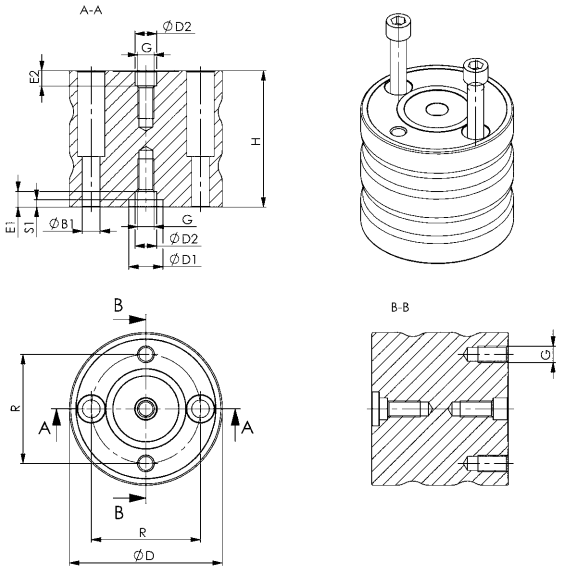
Tempered steel, plasma-nitrided and burnished.



height 20, 28 and 30 mm



from height 40 mm



CAD

Order no.	Size	H ±0.01	Weight [g]
534487	B10	20	667
559683	B10	28	1000
534503	B10	30	1012
534529	B10	40	1353
534545	B10	50	1698
534560	B10	60	2043
534586	B10	80	2731
534602	B10	100	3443
534628	B20	20	1394
534644	B20	30	2092
534669	B20	40	2800
534685	B20	50	3508
534701	B20	60	4225
534727	B20	80	5661
534743	B20	100	7012

Application:

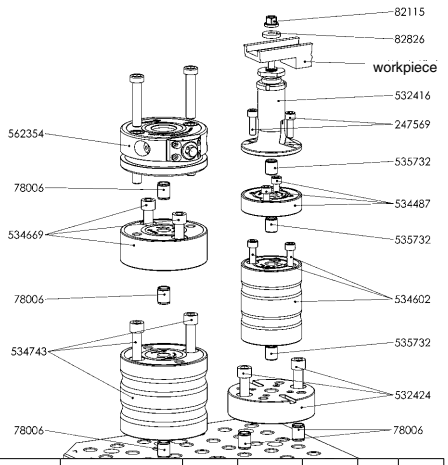
The intermediate elements are used as height adapters for workpieces and clamping fixtures, and are mounted to the main elements. Workpieces are clamped by means of assembly elements. This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

For the adaptation to zero point clamping modules, with the exception of the installation heights H20, 28 and 30, the mounting bore for the pull-studs, corresponding to sizes 10 and 20, is already made in the intermediate element.
If two or more intermediate elements are used, they can be axially aligned and then bolted using centring sleeves. The fastening bolts are supplied as standard.
When fastening to AMF grid plates, pay attention to bolt lengths!
Order numbers on the centring sleeves:
- size 10: Order no. 535732
- size 20: Order no. 78006



Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	Screw DIN84 or ISO4762	E1	E2	G	R	S1
534487	B10	9	78	-	15	M8x30	5,0	13,0	M8	50	-
559683	B10	9	78	-	15	M8x30	5,0	13,0	M8	50	-
534503	B10	9	78	-	15	M8x30	5,0	13,0	M8	50	-
534529	B10	9	78	15	15	M8x30	5,0	13,0	M8	50	3,5
534545	B10	9	78	15	15	M8x45	5,0	13,0	M8	50	3,5
534560	B10	9	78	15	15	M8x50	5,0	13,0	M8	50	3,5
534586	B10	9	78	15	15	M8x50	5,0	13,0	M8	50	3,5
534602	B10	9	78	15	15	M8x50	5,0	13,0	M8	50	3,5
534628	B20	13	112	-	16	M12x25	9,0	9,0	M12	80	-
534644	B20	13	112	-	16	M12x25	11,5	11,25	M12	80	-
534669	B20	13	112	25	16	M12x25	11,5	11,25	M12	80	5,5
534685	B20	13	112	25	16	M12x55	11,5	11,25	M12	80	5,5
534701	B20	13	112	25	16	M12x55	11,5	11,25	M12	80	5,5
534727	B20	13	112	25	16	M12x55	11,5	11,25	M12	80	5,5
534743	B20	13	112	25	16	M12x55	11,5	11,25	M12	80	5,5

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210IZ

Intermediate element, with indexing

Tempered steel, plasma-nitrided and burnished.



Order no.	Size	H ±0.01	Weight [g]
531996	B10	20	632
559684	B10	28	940
532010	B10	30	987
532036	B10	40	1327
532051	B10	50	1651
532077	B10	60	2001
532093	B10	80	2713
532119	B10	100	3429
532135	B20	20	1361
532150	B20	30	2087
532176	B20	40	2788
532192	B20	50	3439
532218	B20	60	4165
532234	B20	80	5632
532242	B20	100	6980

Application:

The intermediate elements with indexing are used as height adapters for workpieces and clamping fixtures, and are mounted to the main elements. Workpieces are clamped by means of assembly elements.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.
Thanks to the 4-point 90° indexing option, workpieces under strong machining forces can be secured to prevent radial distortion.

Advantage:

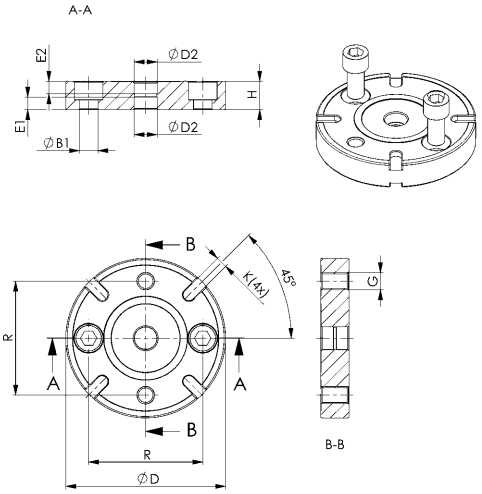
Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

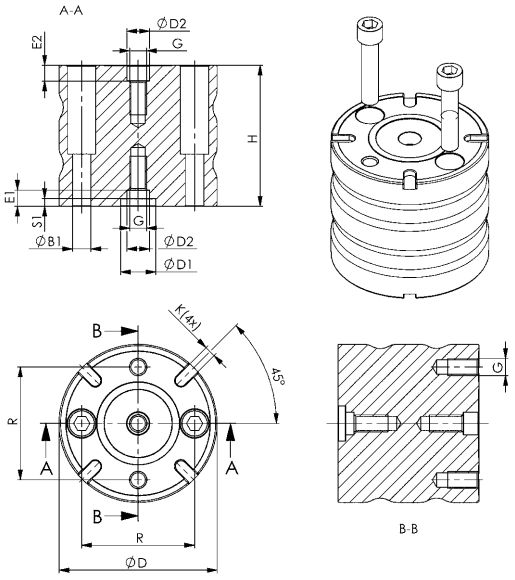
For the adaptation to zero point clamping modules, with the exception of the installation heights H20, 28 and 30, the mounting bore for the pull-studs, corresponding to sizes 10 and 20, is already made in the intermediate element.
If two or more intermediate elements are used, they can be axially aligned and then bolted using centring sleeves. The fastening bolts are supplied as standard.
When fastening to AMF grid plates, pay attention to bolt lengths!
Order numbers of the centring sleeves:
- size 10: Order no. 535732
- size 20: Order no. 78006

Order number for the T-nuts: 430264

height 20, 28 and 30 mm



from height 40 mm



CAD

Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	Screw DIN84 or ISO4762	E1	E2	G	K F6	R	S1
531996	B10	9	78	-	15	M8x30	5,0	13,0	M8	8	50	-
559684	B10	9	78	-	15	M8x30	5,0	13,0	M8	8	50	-
532010	B10	9	78	-	15	M8x30	5,0	13,0	M8	8	50	-
532036	B10	9	78	15	15	M8x30	5,0	13,0	M8	8	50	3,5
532051	B10	9	78	15	15	M8x45	5,0	13,0	M8	8	50	3,5
532077	B10	9	78	15	15	M8x50	5,0	13,0	M8	8	50	3,5
532093	B10	9	78	15	15	M8x50	5,0	13,0	M8	8	50	3,5
532119	B10	9	78	15	15	M8x50	5,0	13,0	M8	8	50	3,5
532135	B20	13	112	-	16	M12x25	9,0	9,0	M12	8	80	-
532150	B20	13	112	-	16	M12x25	11,5	11,25	M12	8	80	-
532176	B20	13	112	25	16	M12x25	11,5	11,25	M12	8	80	5,5
532192	B20	13	112	25	16	M12x55	11,5	11,25	M12	8	80	5,5
532218	B20	13	112	25	16	M12x55	11,5	11,25	M12	8	80	5,5
532234	B20	13	112	25	16	M12x55	11,5	11,25	M12	8	80	5,5
532242	B20	13	112	25	16	M12x55	11,5	11,25	M12	8	80	5,5

Subject to technical alterations.

No. 6210IFR

Base element, with indexing for grid plates

Tempered steel, plasma-nitrided and burnished.



Order no.	Size	H ±0.01	Weight [g]
532424	M12	30	2018
532440	M16	40	3881

Application:

The main element with indexing is positioned on grid plates M12 and M16 via a centering sleeve and then bolted. Intermediate elements or assembly elements can be adapted.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

Advantage:

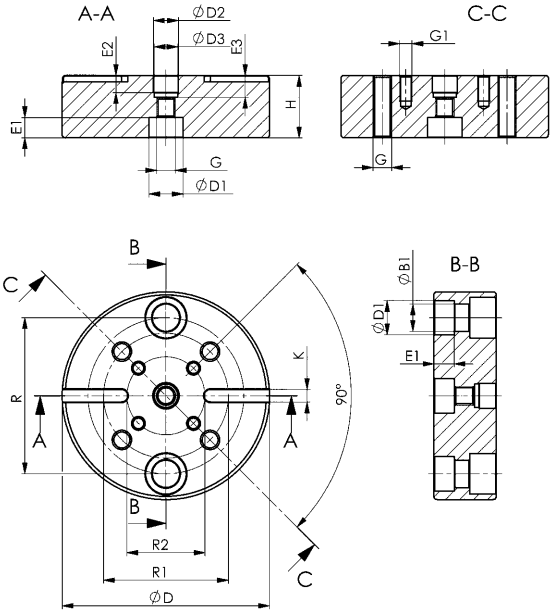
Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

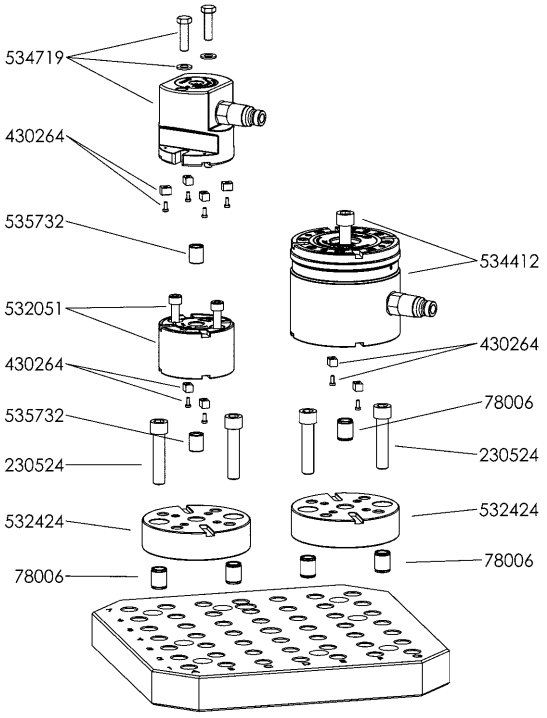
Note:

Order numbers for the centering sleeves:
- Ø15: Order no. 535732
- Ø16: Order no. 78006
- Ø22: Order no. 78238

Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1	dia. D2 F7	dia. D3	E1	E2	E3	G	G1	K F6	R	R1	R2
532424	M12	13,5	112	16	16	15	9	11	14	M12	M8	8	80	80	50
532440	M16	17,5	133	22	16	15	13	11	14	M12	M8	8	100	80	50





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6210FNT

Base element, flat, for T-slot plate

Tempered steel, plasma-nitrided and burnished.

Order no.	Size	H ±0.01	Weight [g]
559097	B10	30	3861
559098	B20	30	6758

Application:

The main element can be freely positioned and fastened on the machine table with T-slots. Intermediate elements or assembly elements can be adapted. This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table with T-slots.

Advantage:

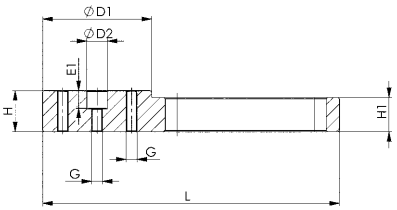
Through arrangement of the mounting slots, simple, quick and flexible clamping of complex workpiece contours on the machine table is possible with T-slots. Particularly suitable for levelling workpieces or clamping fixtures at the necessary machining heights in the machine tool and clamping these securely.

Note:

Centring sleeves:
- Ø15: order no. 535732
- Ø16: order no. 78006

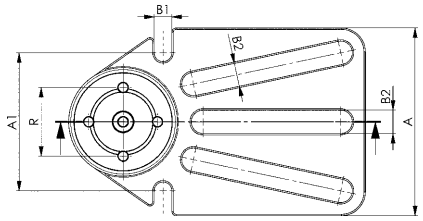


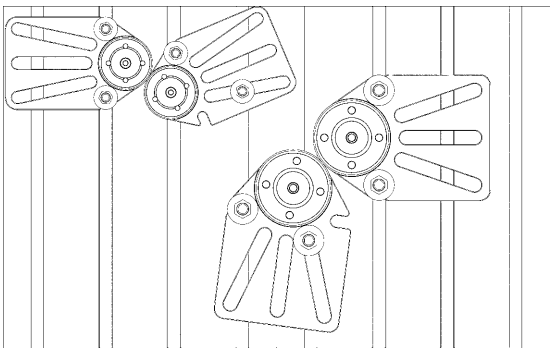
CAD

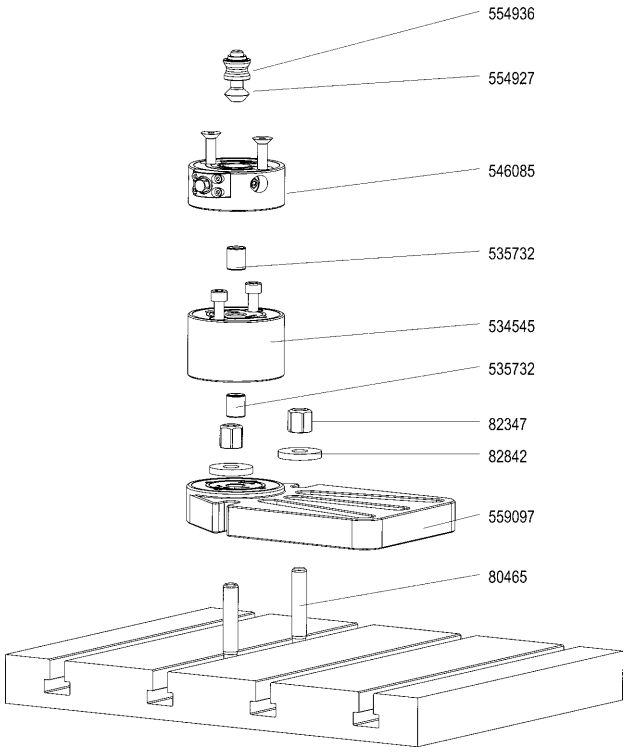


Dimensions:

Order no.	Size	A	A1	B1	B2	dia. D1	dia. D2 F7	E1	G	H1	L	R
559097	B10	136,5	100,5	13	17	79	15	13	M8	25	215,5	50
559098	B20	184,5	138,5	17	20	113	16	11	M12	25	259,5	80







Subject to technical alterations.

No. 6210FN

Base element, round, for T-slot plate

Tempered steel, plasma-nitrided and burnished.

Order no.	Size	H ±0.01	Weight [g]
559095	B10	30	1554
559096	B20	30	3080



Application:

The main element can be freely positioned and fastened on the machine table with T-slots at the circumferential clamping rim. Intermediate elements or assembly elements can be adapted.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table with T-slots.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

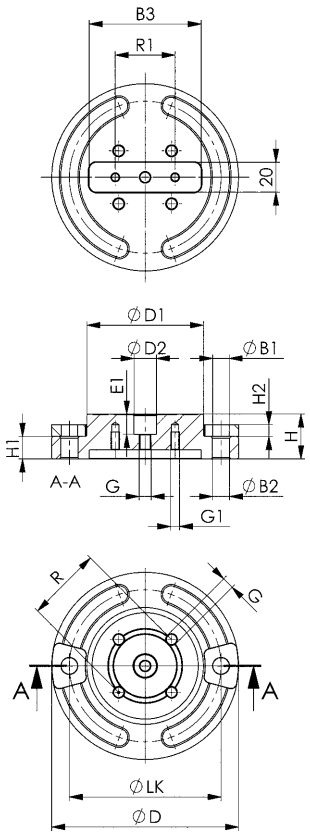
Centring sleeves:
- Ø15: order no. 535732
- Ø16: order no. 78006

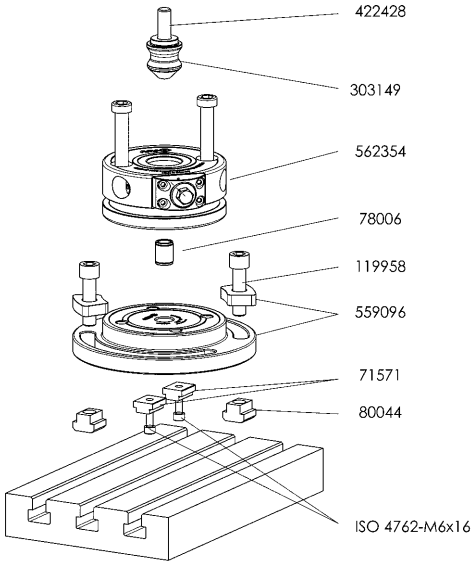
Spring washer
- order no. B10 = 559140
- order no. B20 = 535757.

T-nut no. 6322A with cylinder screws
ISO 4762-M6x10 can be used for positioning on a T-slot plate.

Dimensions:

Order no.	Size	dia. B1	dia. B2	B3	dia. D	dia. D1	ØD1 F7	E1	G	G1	H1	H2	dia. LK	R	R1
559095	B10	11,0	11,5	75	125	78	15	13,5	5 x M8	2 x M6	15	8	102	50	40
559096	B20	13,5	13,0	95	166	112	16	11,5	5 x M12	2 x M6	15	10	140	80	53





CAD

Subject to technical alterations.

No. 6210FN-10-2

Spring washer for base element, round

Tempered steel, hardened and burnished.

Order no.	Size	dia. B1	H2	L	L1	Weight [g]
559140	B10	11,0	8	22,5	30,5	31
535757	B20	13,5	10	26,0	41,0	62

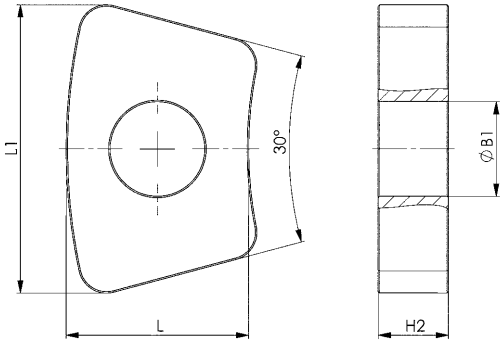
Application:

The spring washer is used to securely fasten the base element for T-slot plates with cylinder-head screws onto the machine table.

Note:

Order no. 559140 suitable for base element, round order no. 559095,
order no. 535757 suitable for base element, round order no. 559096.





CAD

Subject to technical alterations.

No. 6210A-20-10

Adapter reduction from KH20, KP20, KP10.3 to B10

Tempered steel, plasma-nitrided and burnished.



Order no.	Size	H ±0.01	Weight [g]
534750	B10	50	2923

Application:

The adapter element is used to reduce module sizes KH20, KP20 and KP10.3 to an intermediate element size B10. Intermediate elements or assembly elements can be adapted.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.

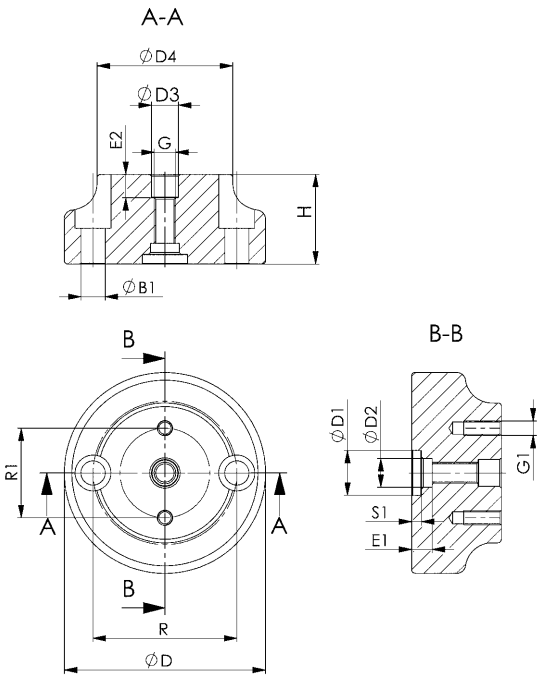
Advantage:

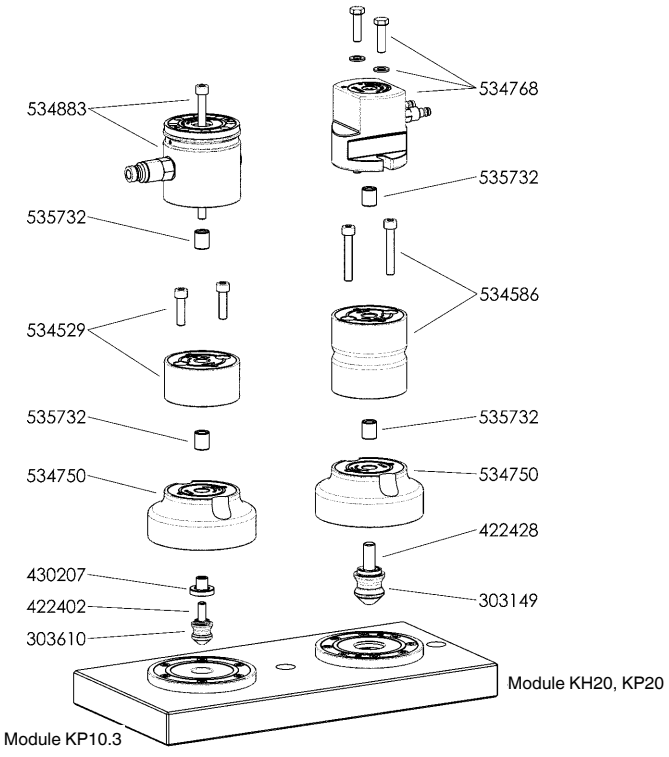
Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order numbers for the centering sleeves:
- Ø15: Order no. 535732
- Ø16: Order no. 78006
- Ø22: Order no. 78238

The fastening screws are supplied as standard.





CAD

Dimensions:

Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. D3	dia. D4	Screw DIN84 or ISO4762	E1	E2	G	G1	R	R1	S1
534750	B10	13,5	112	25	16	15	78	M12x50	11,5	13	M12	M8	80	50	5,5

Subject to technical alterations.

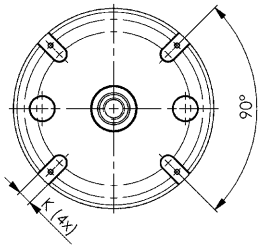
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

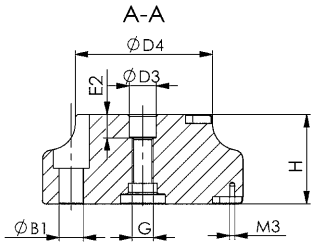
No. 6210IA-20-10

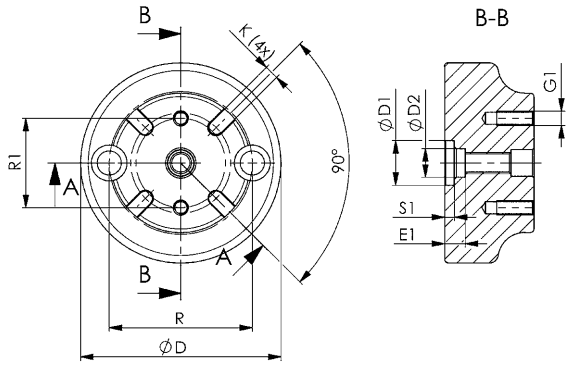
Adapter reduction from KH20, KP20, KP10.3 to K10, with indexing

Tempered steel, plasma-nitrided and burnished.









CAD

Order no.	Size	H ±0.01	Weight [g]
532499	B10	50	2892

Application:

The adapter element is used to reduce module sizes KH20, KP20 and KP10.3 to an intermediate element size B10. Intermediate elements or assembly elements can be adapted.
This clamping system can be used to move workpieces to the required machining height in the machine for 5-sided machining, or for the safe and quick clamping of workpieces with ledges and different clamping heights on the machine table.
Thanks to the 4-point 90° indexing option, workpieces under strong machining forces can be secured to prevent radial distortion.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Especially suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool and for the reliable clamping of same.

Note:

Order numbers for the centering sleeves:
- Ø15: Order no. 535732
- Ø16: Order no. 78006
- Ø22: Order no. 78238

Slot nuts: Order no. 430264.
The fastening screws are supplied as standard.

Dimensions:

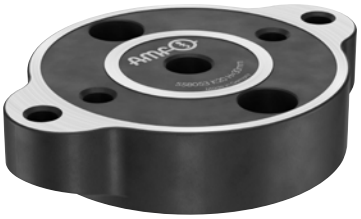
Order no.	Size	dia. B1	dia. D	dia. D1 0/+0,01	dia. D2 F7	dia. D3	dia. D4	Screw DIN84 or ISO4762	E1	E2	G	G1	K F6	R	R1	S1
532499	B10	13,5	112	25	16	15	78	M12x50	9	13	M12	M8	8	80	50	5,5

Subject to technical alterations.

No. 6209MZA

Adapter for height compensation

Tempered steel, plasma-nitrided.



Order no.	Size	H ±0.01	Weight [g]
558052	B10	20	753
558053	B20	30	2306

Application:

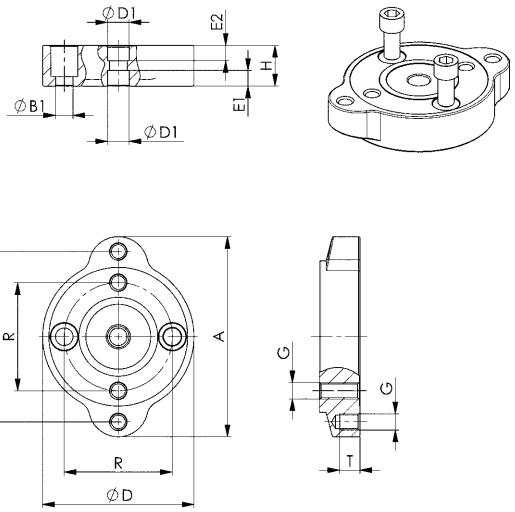
Adapter for installation of the height counterbalance element to an intermediate or base element.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Particularly suitable for levelling workpieces or clamping fixtures at the necessary machine heights in the machine tool for clamping these securely.

Note:

The adapter can be aligned axially on the intermediate or base element using the centring sleeve and then bolted on.
The fastening bolts are supplied as standard.
Order numbers of the centring sleeves:
- size B10: order no. 535732 and 430223
- size B20: order no. 78006



Dimensions:

Order no.	Size	A	dia. B1	dia. D	ØD1 F7	Screw DIN84 or ISO4762	E1	E2	G	R	R1	T
558052	B10	105	9	78	15	M8x30	5,0	13,00	M8	50	88	11
558053	B20	148	13	112	16	M12x25	11,5	11,25	M12	80	126	15

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6212MA-20-10

Adapter for clamping module, mechanical

Tempered steel, plasma-nitrided and burnished.



Order no.	Size	H ±0.01	Weight [Kg]
561993	B10	40	1,3

Application:

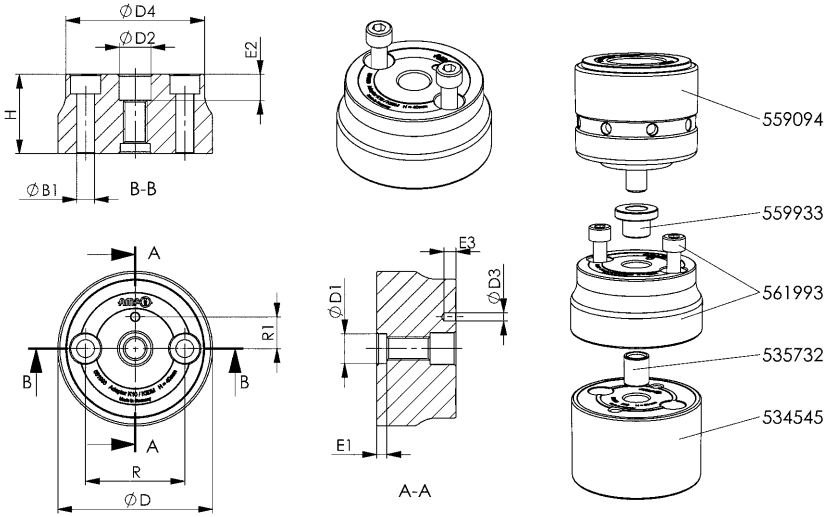
Adapter for installation of the mechanical clamping module 6212M size BM20 (559094) to an intermediate or base element size B10.

Advantage:

Simple, quick and flexible clamping of complex workpiece contours on the machine table. Particularly suitable for levelling workpieces or clamping fixtures at the necessary machining heights in the machine tool and clamping these securely.

Note:

The adapter can be aligned axially on the intermediate or base element using the centring sleeve and then bolted on.
The fastening bolts are supplied as standard.
Order numbers of the centring sleeves:
- size B10: order no. 535732



Dimensions:

Order no.	Size	dia. B1	dia. D	ØD1 F7	dia. D2 F7	dia. D3	dia. D4	E1	E2	E3	R	R1
561993	B10	9	78	15	16	4,2	70	5	13	6	50	16

CAD

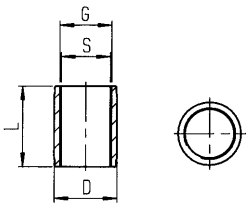
Subject to technical alterations.

No. 6363-**-005

Centring sleeve, cylindrical

Order no.	Size	dia. D	G	L -0.2	dia. S	Weight [g]
78006	12	16 +0,011/0	R1/4	20,5	12,5	9
78238	16	22 +0,015/+0,002	M18	23,0	16,5	25



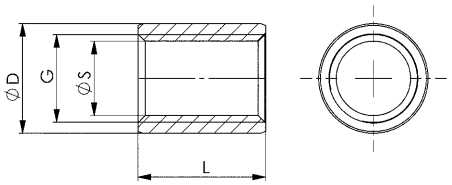


No. 6210-15-01

Centering sleeve Ø 15

Order no.	Size	dia. D	G	L -0.2	dia. S	Weight [g]
535732	15	15 +0,011/0	M12	17,4	10,1	12





CAD

No. 6210-XX

Centring pin

Order no.	dia. D	dia. D1	dia. D2	L	L1	Weight [g]
550198	22	15	8,5	20	14	28
559933	25	16	12,5	16	11	21
550197	32	16	12,5	18	11	36



Application:

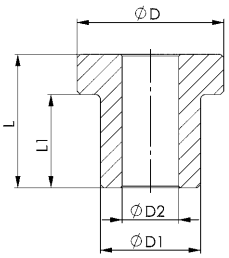
To position the double clamping modules on a clamping plate with clearance holes or a foot element from the „Modular height adapter“ AMF clamping system.

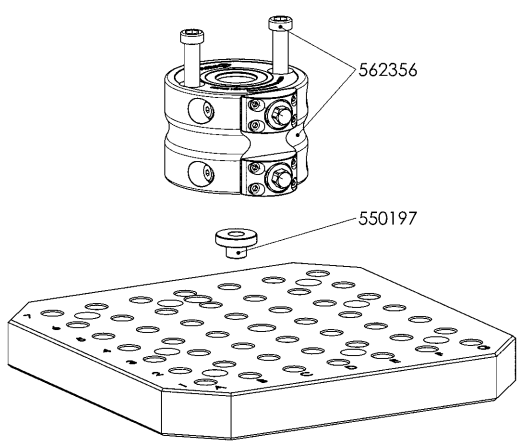
Advantage:

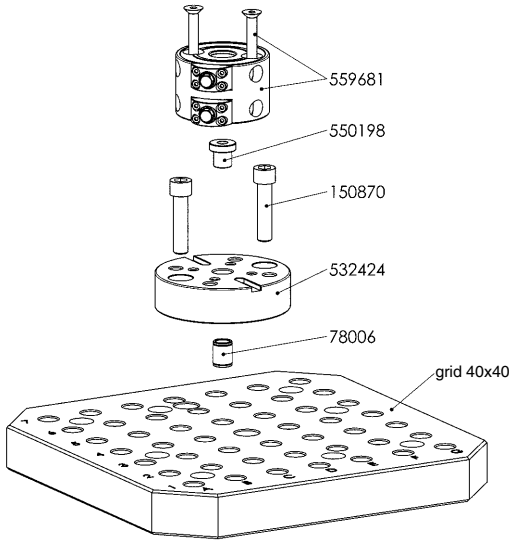
Highly-precise positioning of the double clamping module.

Note:

The centring pin is used when the double clamping module is not yet positioned with a pull-stud for T-slot and can be clamped.







CAD

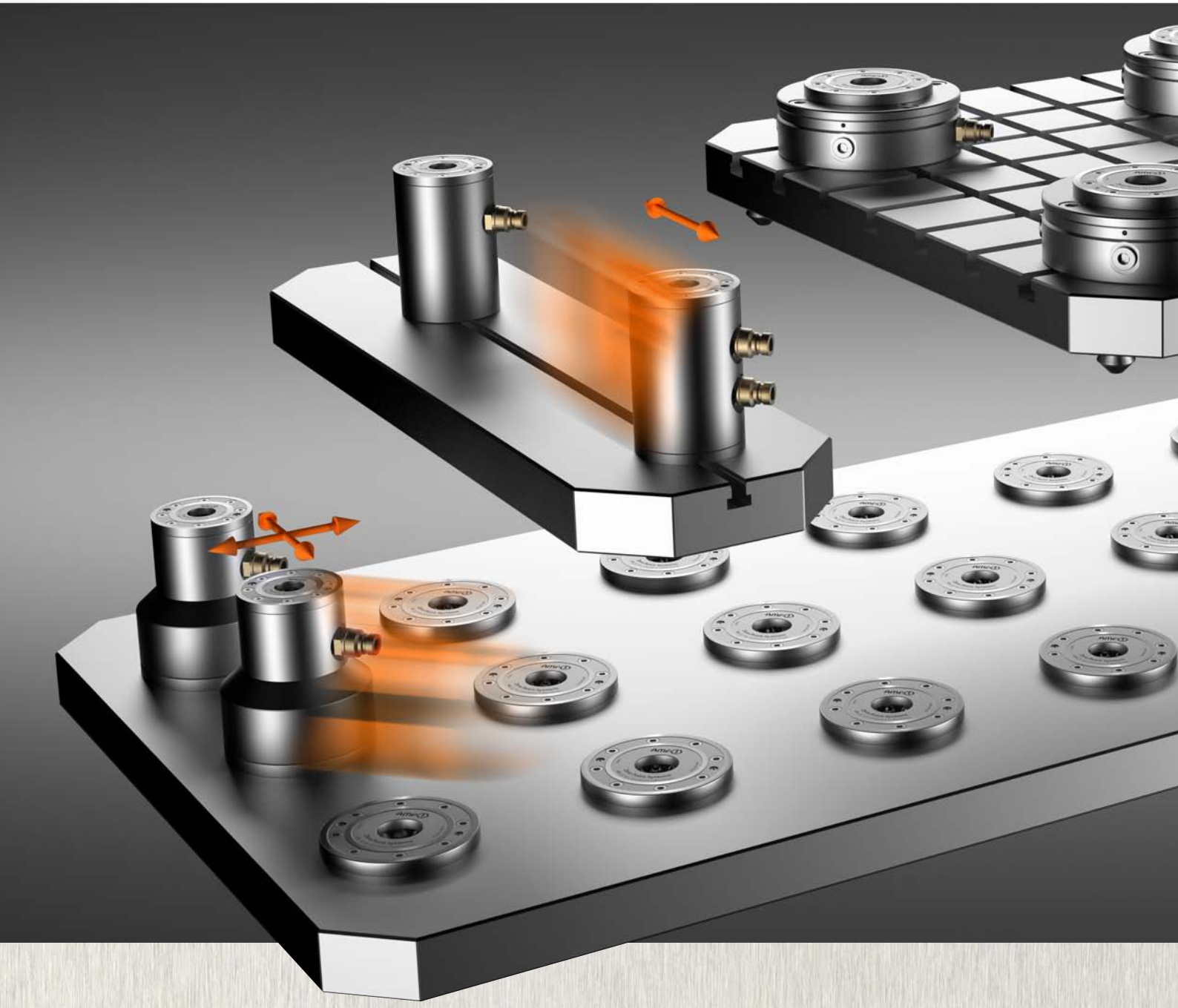
Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de


CAD

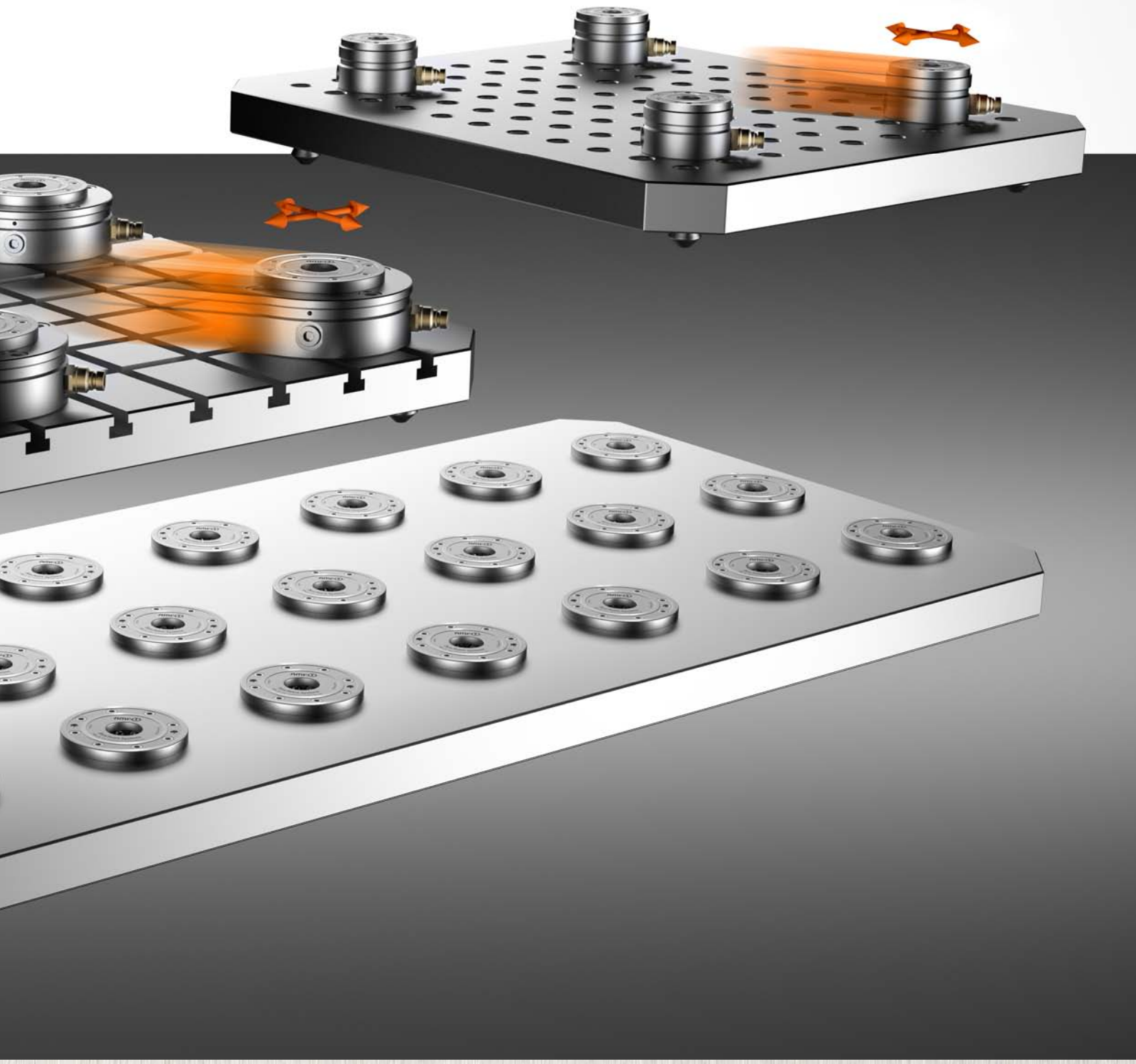
VARIABLE CENTRE DISTANCE -
THE SIMPLEST SOLUTION FOR FLEXIBLE MANUFACTURING

Looking for a simple, flexible and modular clamping solution that satisfies your requirements for a modern, cost-efficient and cost-optimised manufacturing process?
This is guaranteed by the immensely varied AMF zero point clamping system „Zero-Point".
The manufacture of prototypes, small batch series and testing and measuring fixtures used to be a challenging field of application. Flexibility was to some degree limited by a fixed depth gauge.
The variable depth gauge recently developed by AMF has eliminated these boundaries. A simple displacement of the clamping modules enables the depth gauges to be quickly adapted to your specific needs.
This additional flexibility drastically cuts your tooling costs and machine downtimes, not only for medium and large batch series, but also for prototypes and small batch series, as well as test devices.



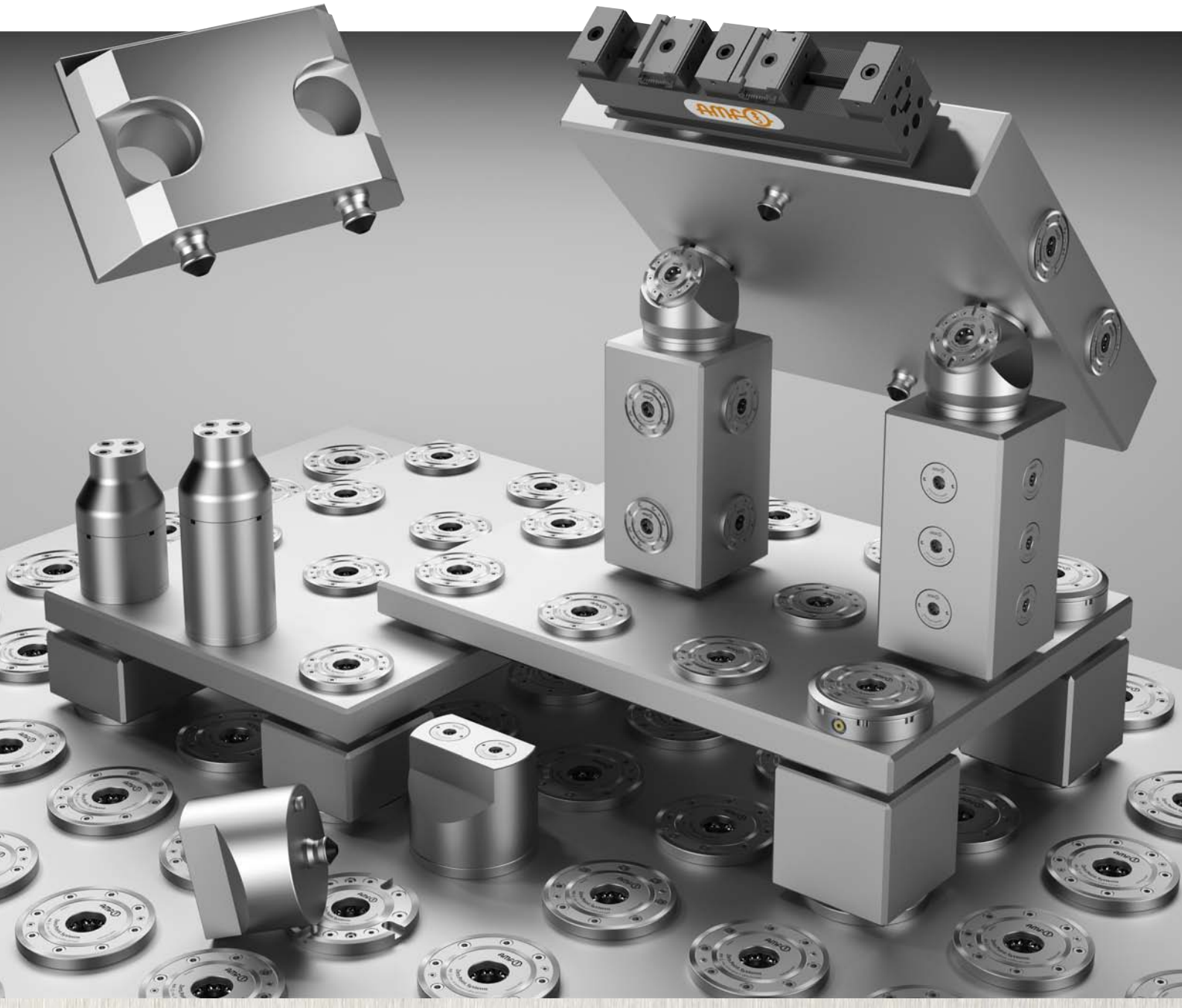
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

- Clamping brackets for direct workpiece clamping in simple 5-sided machining
- Variable depth gauge by easily displacing the clamping modules on a grooved or grid plate
- Easy to adapt various module sizes to suit the application at hand.
- Five standard thread sizes for the pull-studs in the workpiece to choose from - M5, M6, M8, M12, M16
- Use of threaded adapter sleeves enables the pull-studs to be mounted in any size of locating bores in the workpiece.
- Direct workpiece clamping can be realised by the simplest of means
- Prototypes, small batch series, test and measuring devices, installation devices can be clamped using the AMF-Zero-Point-System in a manner that fulfills your future needs.



FLEXIBLE SYSTEM - THE ZERO-POINT-SYSTEM ADAPTS PERFECTLY TO YOUR REQUIREMENTS

> Differing AMF clamping modules from Ø 22 to Ø 148 mm can be used in combination.
> Smallest depth gauges from 23 mm are realised simply, flexibly and quickly.
> Thanks to the innumerable possible combinations between differently sized clamping modules and pull studs, direct workpiece clamping is straightforward and specific.



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6203S4L-150

4-point clamping station

Main body: Aluminium, anodised.
Repeat accuracy < 0.02 mm.

Order no.	Size	Pull-in/locking force up to [N]	Holding force* [N]	Weight [g]
533034	SP150	4 x 235	4 x 6000	2400

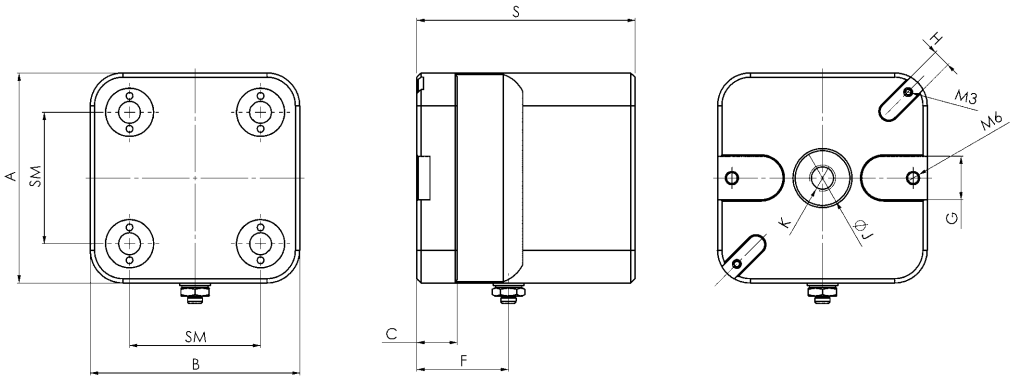


Design:

Pneumatic 4-point clamping station with air gun valve for quick opening and closing via air gun. The clamping station has two clamping slots on the side for fastening to the machine table. In addition, positioning slots for aligning on the machine table are made on the underside. The holder for a pull-stud is also provided in the 150 version.

Note:

* Please observe the installation instructions.



Dimensions:

Order no.	Size	A	B	C	F	G	H	dia. J	K	S	SM
533034	SP150	96	96	15	42	20	8	25	M12	100	60

CAD

No. 6203PS4-150

Interchangeable pallet

High-strength aluminium, anodised.

Order no.	Size	A	B	S	SM	Weight [g]
533059	150	98	98	20	60	530



Design:

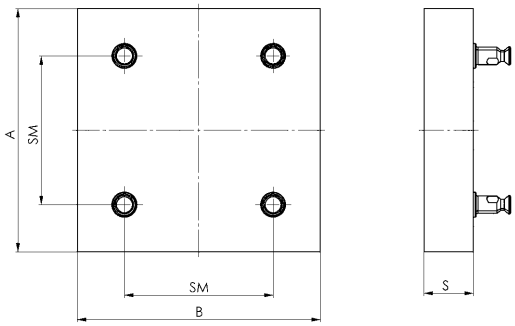
Interchangeable pallet for 4-point clamping station SP150 with 4 pull-studs.

Note:

On request, we can incorporate mounting holes according to your specifications in the change pallet.

On request:

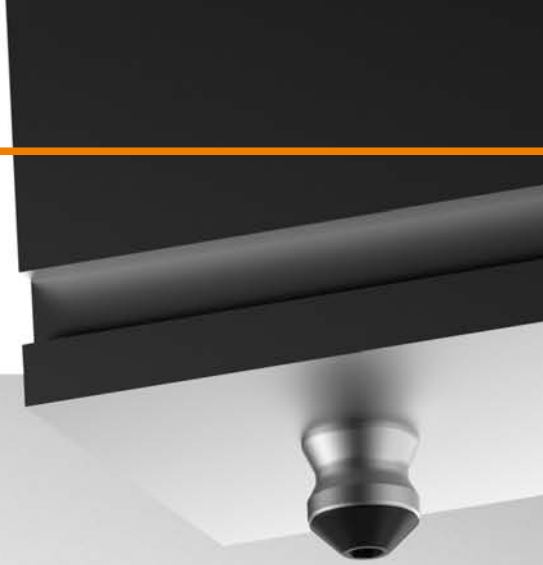
Other dimensions, pitch spacings and number of equipped pull-studs.



CAD

Subject to technical alterations.

REPRESENTS GOOD VALUE FROM THE GROUND UP
- THE KH10.2 CLAMPING MODULE



Zero-point clamping does not have to be expensive. With the KH10.2 clamping module we offer you the best technology at a favourable price.

The advantages speak for themselves:

> Outstanding price-performance ratio

> Drastically reduced tooling time

> Immediate improvement of productivity

> Repeat accuracy < 5um

> Stainless steel

> Form fit

> Fitting depth of only 22 mm!





6 COMPONENTS FOR PERFECT CLAMPING - 5 BAR COMPRESSED AIR FOR OPENING WITH THE AIR HYDRAULIC PUMP

1 Absolutely insensitive to lateral and pull forces that arise. Precision ground support surfaces made of hardened stainless steel for plane-parallel clamping ≤ 0.005 mm.

2 Hardened piston - the combination of form fit and self-locking results in reliable and constant clamping.

3 Precision balls for optimal power transmission as well as vibration-inhibiting and wear-resistant use.

4 Ball support made of stainless steel seals the clamping module against dirt and liquids.

5 Robust plate springs for maximum pull-in, closing and holding forces.

6 Module floor with integrated air jet function.

A The low installation depth of the clamping modules of 22 mm permits a height of the base plate of only 28 mm (without blow out, only 24 mm).

No. 6204S2HA-001

2-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427484	KH10.2	2 x 10	2 x 25	●	14

Design:

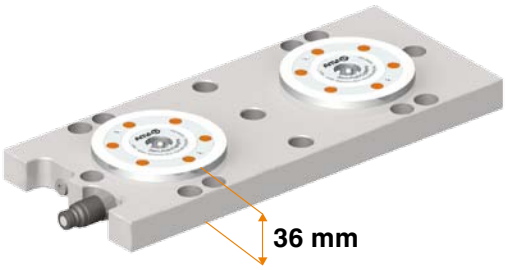
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

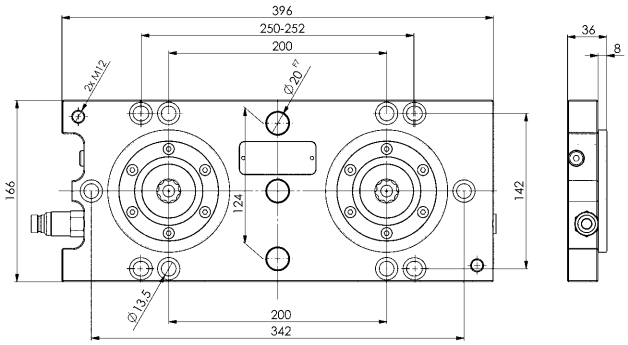
Advantage:

Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.





CAD

No. 6204S4HA-001

4-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427500	KH10.2	4 x 10	4 x 25	●	30

Design:

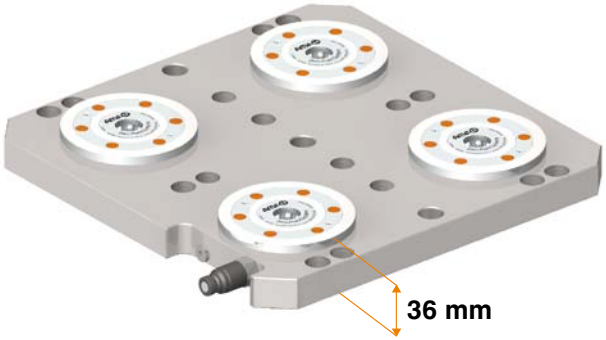
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

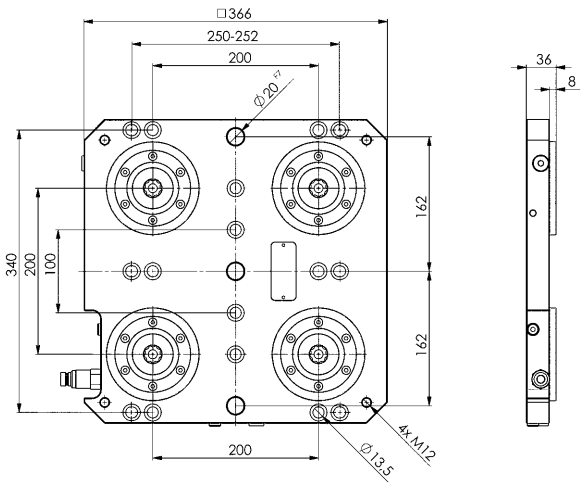
Advantage:

Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6204S6HA-001

6-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427526	KH10.2	6 x 10	6 x 25	●	46

Design:

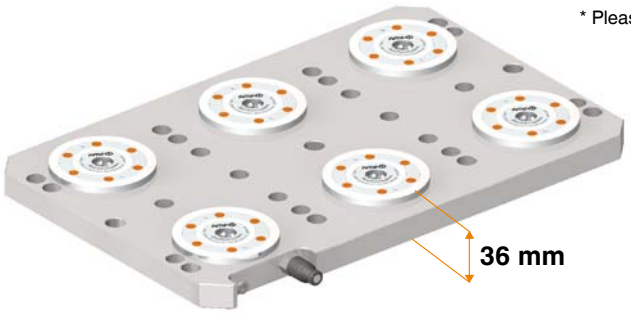
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Advantage:

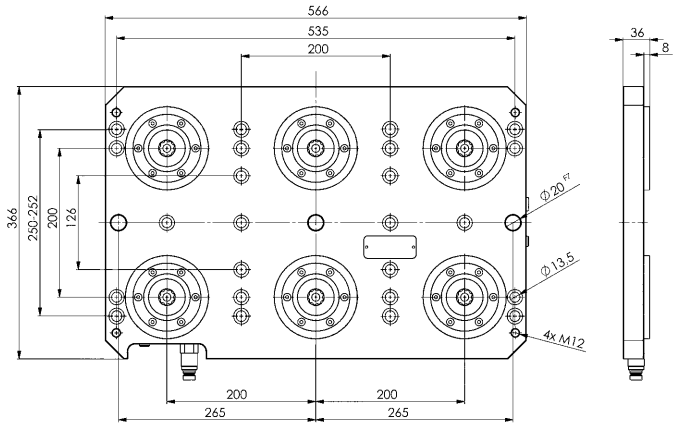
Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.



CAD



No. 6204S8HA-001

8-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427542	KH10.2	8 x 10	8 x 25	●	63

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63, 100 and 125 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Advantage:

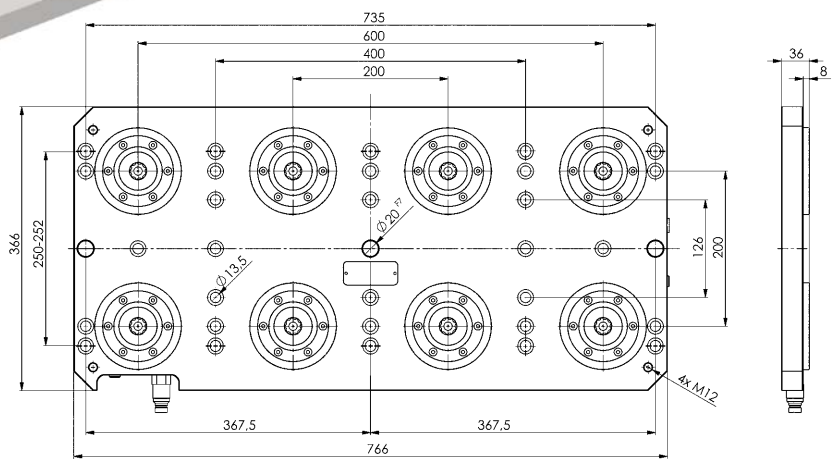
Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.



CAD



Subject to technical alterations.

No. 6204S4HA-002

4-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427492	KH10.2	4 x 10	4 x 25	●	37

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

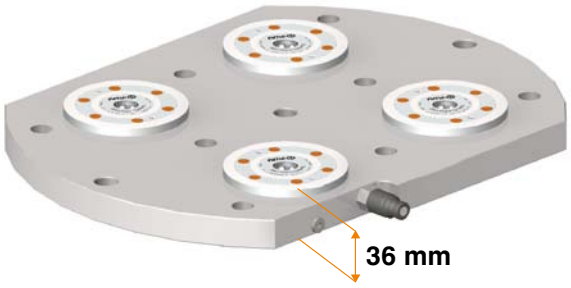
e.g. for DMG / DMU 50 EVO

Advantage:

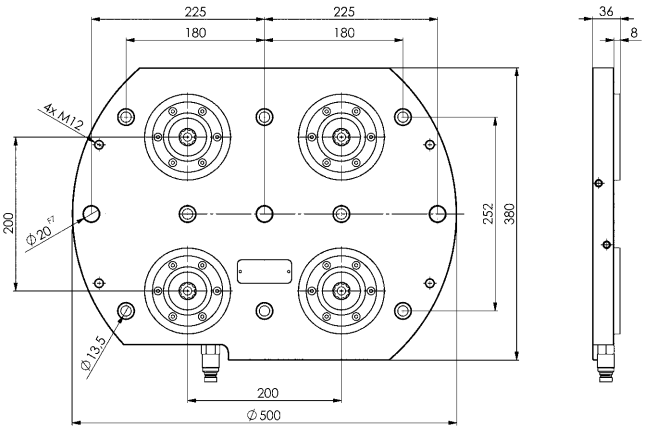
Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.



CAD



No. 6204S4HA-003

4-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427518	KH10.2	4 x 10	4 x 25	●	38

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 80 mm. Clamping is with M16 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 240 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

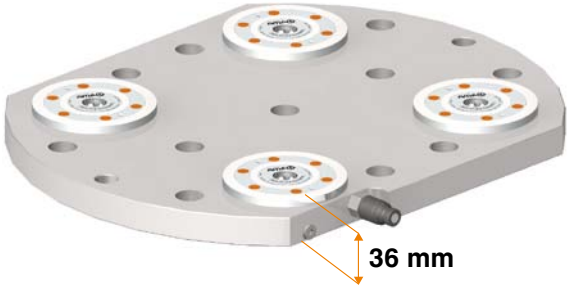
e.g. for Mazak Variaxis 500

Advantage:

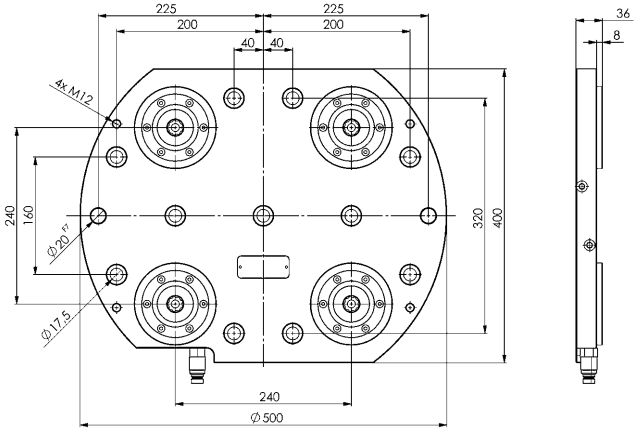
Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.



CAD



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6204S6HA-002

6-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427534	KH10.2	6 x 10	6 x 25	●	62

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

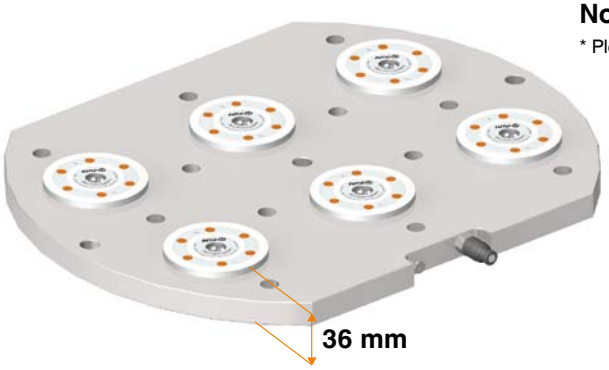
e.g. for DMG / DMU 50

Advantage:

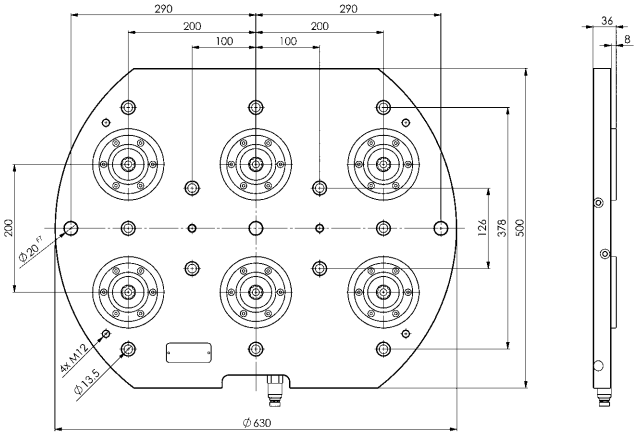
Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.



CAD



No. 6204S6HA-003

6-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427559	KH10.2	6 x 10	6 x 25	●	62

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 100 mm. Clamping is with M16 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

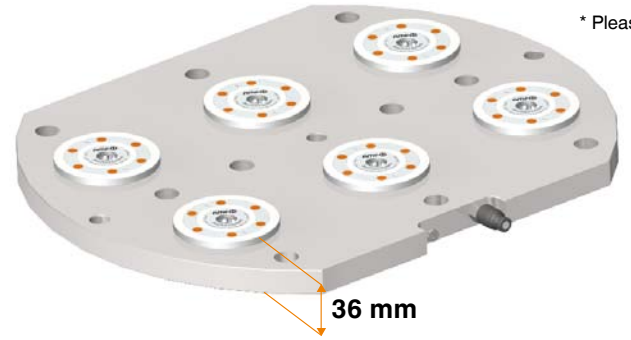
e.g. for Mazak Variaxis 630

Advantage:

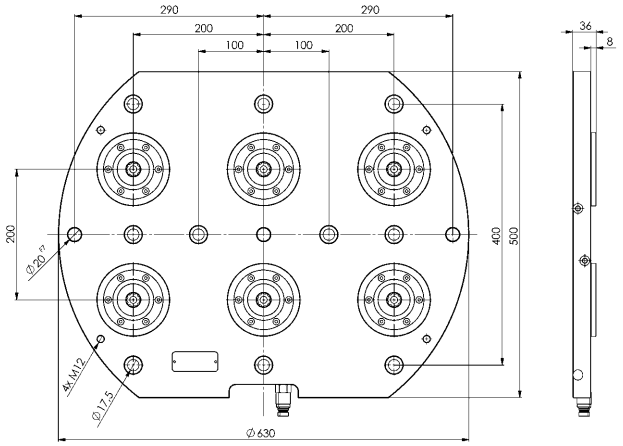
Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.



CAD



Subject to technical alterations.

No. 6204S6HA-004

6-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427567	KH10.2	6 x 10	6 x 25	●	62

Design:

Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 63 mm. Clamping is with M12 socket head screws. At least two fitting holes are attached for alignment.
The insertion dimension of the clamping modules is 200 mm. The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Application:

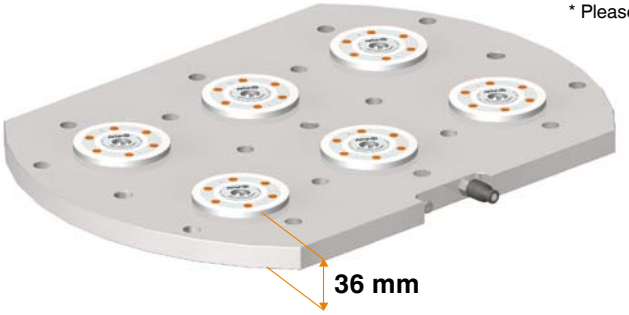
e.g. for DMG / DMU 70 EVO

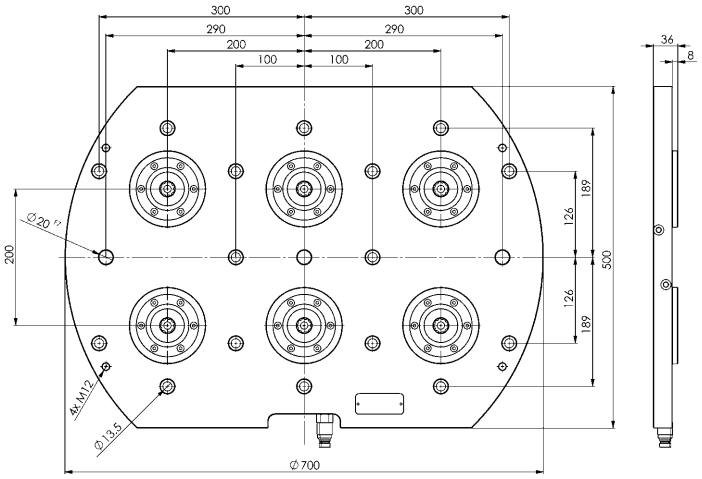
Advantage:

Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.





CAD

No. 6204K2HA-015

2-point clamping bracket

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427591	KH10.2	2 x 10	2 x 25	●	31

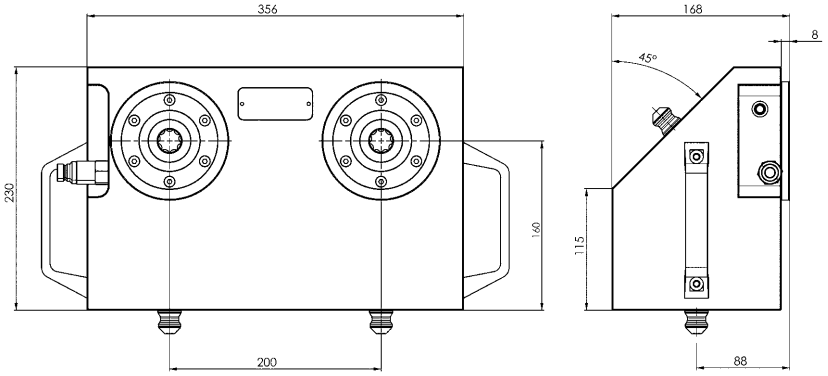
Design:

Hydraulic clamping bracket for set-up-time-optimised clamping on KH10.2 clamping stations. Pull-studs installed underneath.
The pitch spacing of the clamping modules is 200 mm. The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6204K1HA-001

Single clamping bracket

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	S [mm]	Weight [Kg]
428060	KH10.2	10	25	●	150	32
428086	KH10.2	10	25	●	200	38
428102	KH10.2	10	25	●	240	42

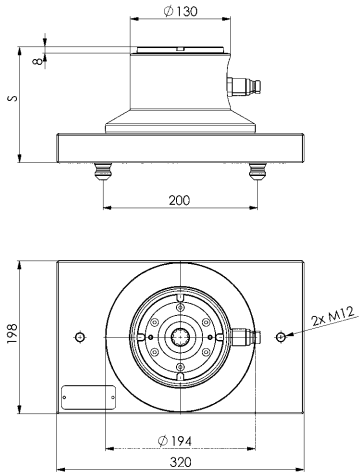
Design:

Hydraulic clamping bracket for set-up-time-optimised clamping on KH10.2 clamping stations. Installation clamping module KH10.2 with quadruple indexing. Pull-studs installed underneath. The pitch spacing is 200 mm. The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.





CAD

No. 6204K1HA-004

Single clamping bracket

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	S [mm]	Weight [Kg]
428128	KH10.2	10	25	●	150	45
428144	KH10.2	10	25	●	200	50
428169	KH10.2	10	25	●	240	54

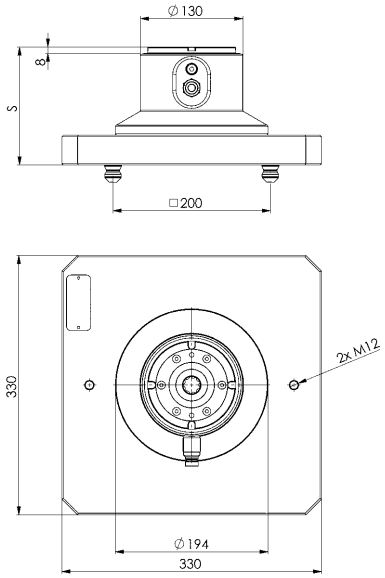
Design:

Hydraulic clamping bracket for set-up-time-optimised clamping on KH10.2 clamping stations. Installation clamping module KH10.2 with quadruple indexing. Pull-studs installed underneath. The pitch spacing is 200 mm. The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.





CAD

Subject to technical alterations.

No. 6204K2HA-011

2-point clamping bracket

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	S [mm]	Weight [Kg]
427864	KH10.2	2 x 10	2 x 25	●	150	31
427880	KH10.2	2 x 10	2 x 25	●	180	37

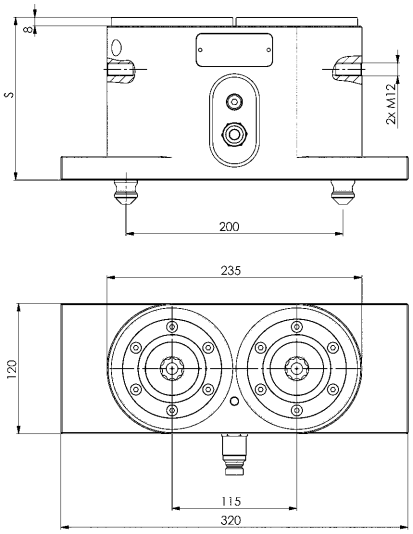
Design:

Hydraulic clamping bracket for set-up-time-optimised clamping on KH10.2 clamping stations. Pull-studs installed underneath.
The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.





No. 6204K2HA-013

2-point clamping bracket

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	S [mm]	Weight [Kg]
427906	KH10.2	2 x 10	2 x 25	●	190	57
427575	KH10.2	2 x 10	2 x 25	●	220	63

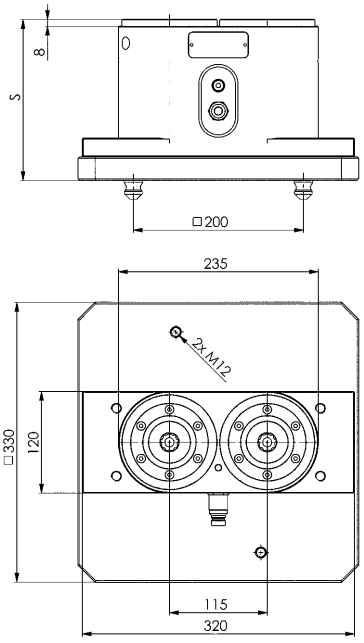
Design:

Hydraulic clamping bracket for set-up-time-optimised clamping on KH10.2 clamping stations. Pull-studs installed underneath.
The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.





Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6204K2HA-001

2-point clamping bracket

Hydraulic unlocking.
Pneumatic blow-out.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	S [mm]	Weight [Kg]
427666	KH10.2	2 x 10	2 x 25	●	70	18
427682	KH10.2	2 x 10	2 x 25	●	100	26
427708	KH10.2	2 x 10	2 x 25	●	120	31
427724	KH10.2	2 x 10	2 x 25	●	160	42
427740	KH10.2	2 x 10	2 x 25	●	200	54

Design:

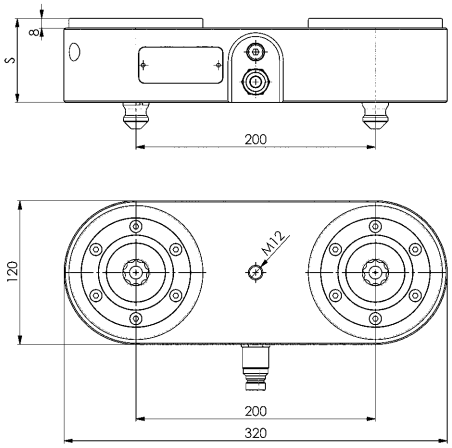
Hydraulic clamping bracket for set-up-time-optimised clamping on KH10.2 clamping stations. Pull-studs installed underneath.
The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.



CAD



No. 6204K2HA-006

2-point clamping bracket

Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	S [mm]	Weight [Kg]
427765	KH10.2	2 x 10	2 x 25	●	110	45
427781	KH10.2	2 x 10	2 x 25	●	140	53
427807	KH10.2	2 x 10	2 x 25	●	160	58
427823	KH10.2	2 x 10	2 x 25	●	200	69
427849	KH10.2	2 x 10	2 x 25	●	240	81

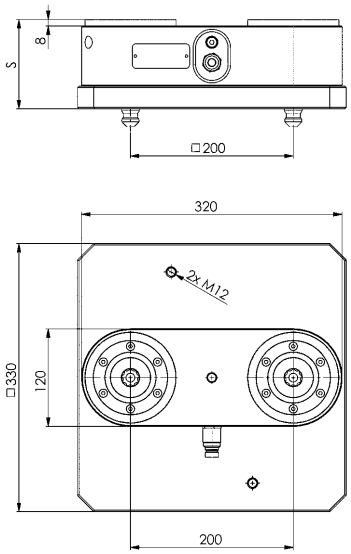
Design:

Hydraulic clamping bracket for set-up-time-optimised clamping on KH10.2 clamping stations. Pull-studs installed underneath.
The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.





Subject to technical alterations.

No. 6204S6HA-008

6-point clamping station

Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427625	KH10.2	6x10	6x25	●	55

Design:

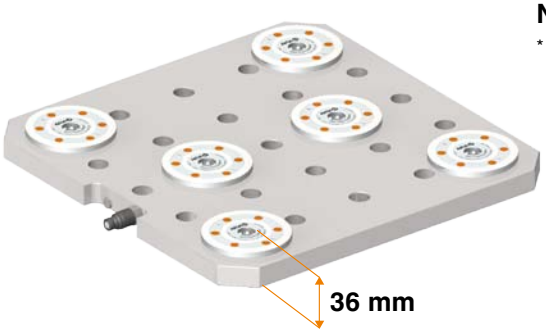
Hydraulic clamping station for optimised clamping times on machine tables with distance between slots of 100 mm. Clamping is with M16 socket head screws. At least two fitting holes are attached for alignment.
The quick coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

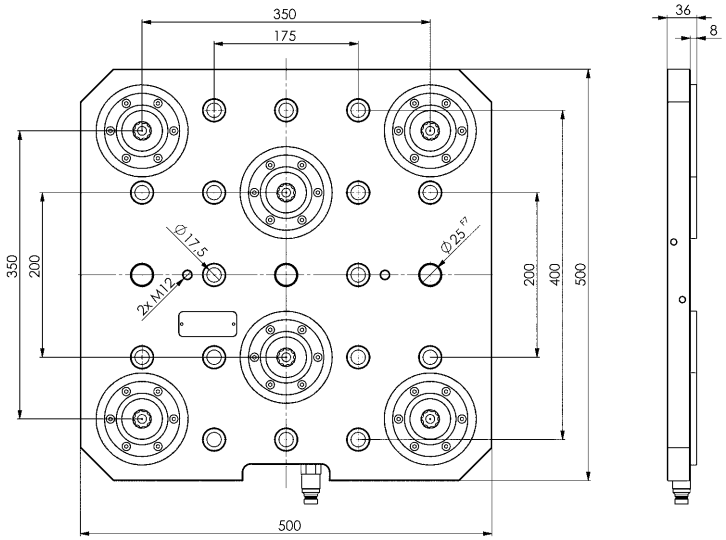
Advantage:

Low overall height of only 36 mm.

Note:

* Please observe the installation instructions.





CAD

No. 6204WU12HA-001

12-point clamping cube

Hydraulic unlocking.
Pneumatic blow-out.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Blow out	Weight [Kg]
427641	KH10.2	12x10	12x25	●	210

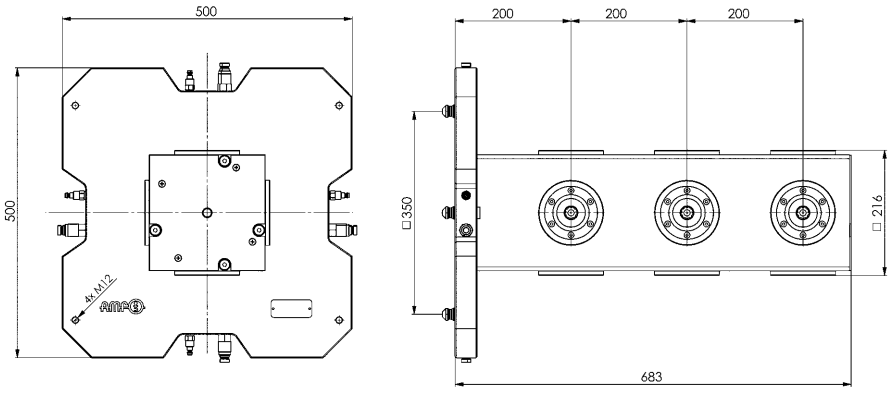
Design:

Hydraulic clamping cube for set-up-time-optimised clamping on clamping station 6204S6HA-008.
Fastening is with pull-studs installed underneath.
The pitch spacing of the clamping modules is 200 mm. The quick-coupling plug is pre-mounted, and the integrated blow-out function can be individually connected.

Note:

* Please observe the installation instructions.





Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



No. 6206S2L

2-point clamping station

Pneumatic unlocking.
Opening operating pressure:
KP10.3 min. 5 bar.
KP20.3 min. 4.5 bar.
Steel, unhardened.
Repeat accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
550249	**KP10.3**	2 x 10	2 x 25	13
550254	**KP20.3**	2 x 17	2 x 55	24

Design:

Pneumatic clamping station for setting time-optimised clamping on machine tables with groove spacing of 63, 100 and 125 mm. Fastening is via M12 socket head screws. At least two fitting bores are attached for alignment.
The insertion dimension of the clamping modules is 200 mm.
The pneumatic quick-coupler is premounted.

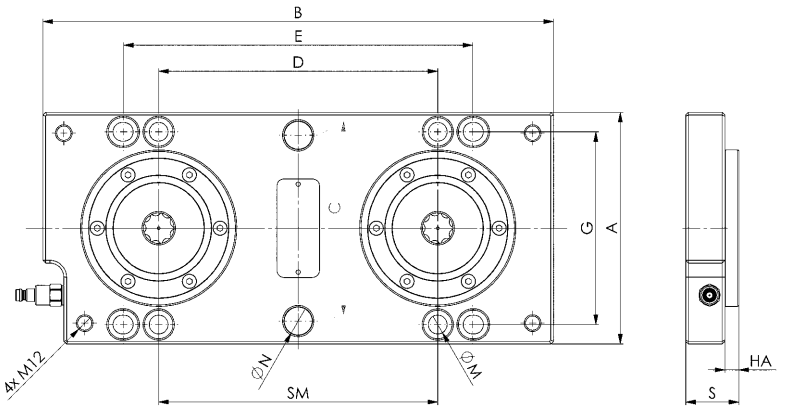
Advantage:

- Low overall height

Note:

* Please observe the installation instructions.





Dimensions:

Order no.	Size	A	B	C	D	E	G	HA	dia. N	dia. M	S	SM
550249	**KP10.3**	166	366	133	200	250 - 252	138	10	20	13,5	38	200
550254	**KP20.3**	196	366	160	200	250 - 252	165	15	20	13,5	53	200

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6206S4L

4-point clamping station

Pneumatic unlocking.
Opening operating pressure:
KP10.3 min. 5 bar.
KP20.3 min. 4.5 bar.
Steel, unhardened.
Repeat accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
550251	**KP10.3**	4 x 10	4 x 25	30
550255	**KP20.3**	4 x 17	4 x 55	51

Design:

Pneumatic clamping station for setting time-optimised clamping on machine tables with groove spacing of 63, 100 and 125 mm. Fastening is via M12 socket head screws. At least two fitting bores are attached for alignment.
The insertion dimension of the clamping modules is 200 mm.
The pneumatic quick-coupler is premounted.

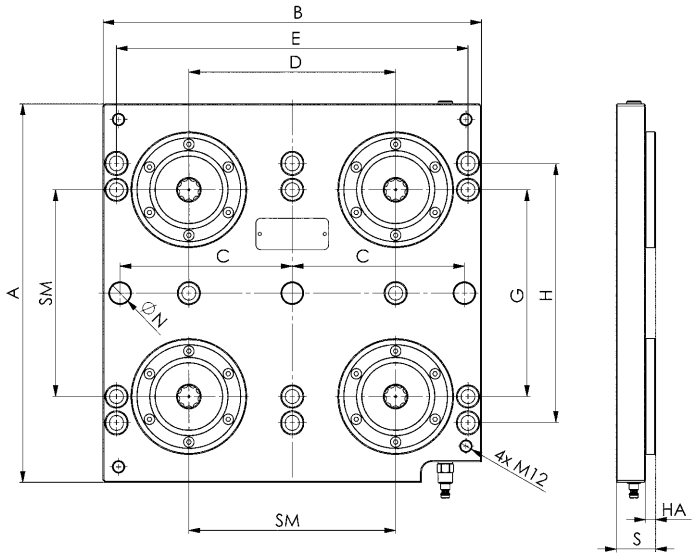
Advantage:

- Low overall height

Note:

* Please observe the installation instructions.





Dimensions:

Order no.	Size	A	B	C	D	E	G	H	HA	dia. N	dia. M	S	SM
550251	**KP10.3**	366	366	166,5	200	340	200	250 - 252	10	20	13,5	38	200
550255	**KP20.3**	399	399	183,5	200	370	200	250 - 252	15	20	13,5	53	200

CAD

Subject to technical alterations.

No. 6206S6L

6-point clamping station

Pneumatic unlocking.
Opening operating pressure:
KP10.3 min. 5 bar.
KP20.3 min. 4.5 bar.
Steel, unhardened.
Repeat accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
550252	**KP10.3**	6 x 10	6 x 25	46
550256	**KP20.3**	6 x 17	6 x 55	76

Design:

Pneumatic clamping station for setting time-optimised clamping on machine tables with groove spacing of 63, 100 and 125 mm. Fastening is via M12 socket head screws. At least two fitting bores are attached for alignment.
The insertion dimension of the clamping modules is 200 mm.
The pneumatic quick-coupler is premounted.

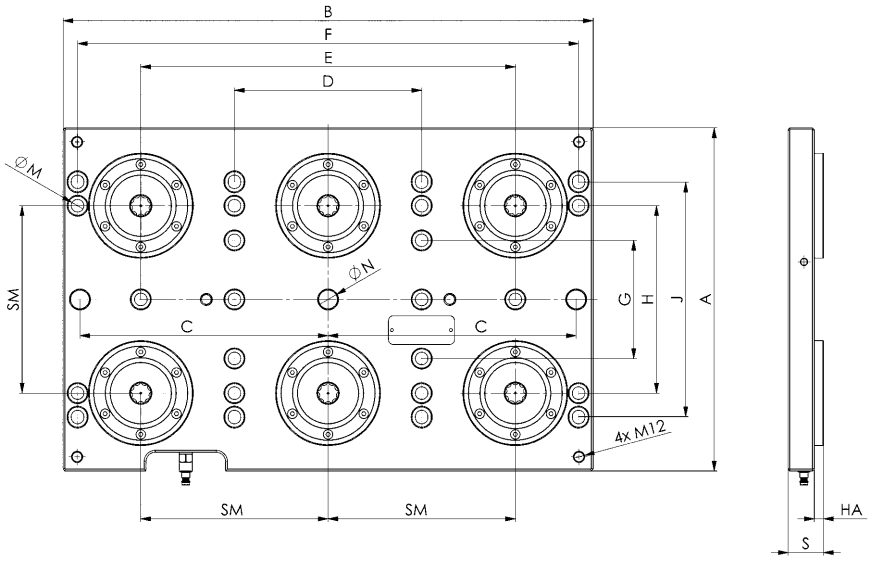
Advantage:

- Low overall height

Note:

* Please observe the installation instructions.





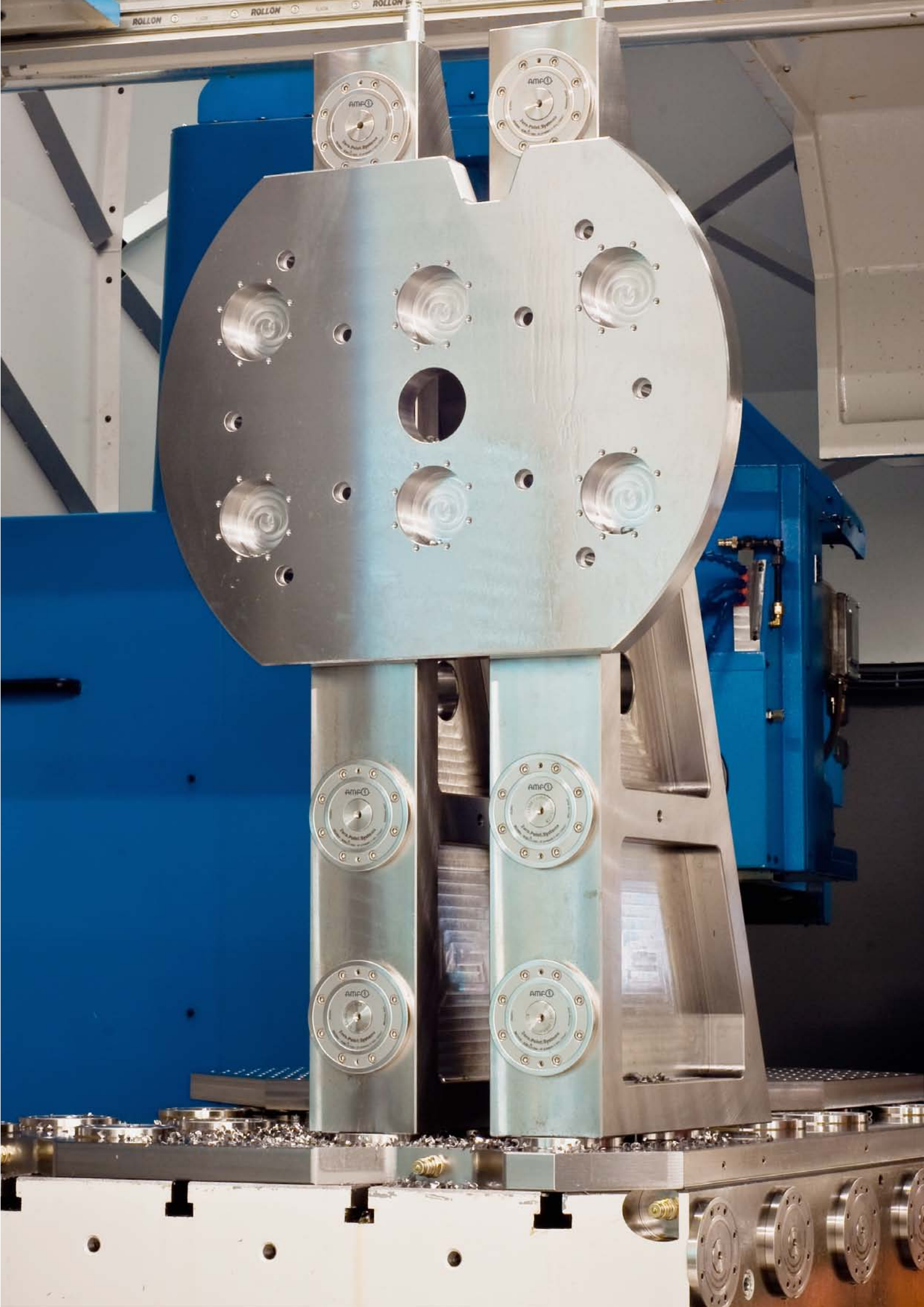
Dimensions:

Order no.	Size	A	B	C	D	E	F	G	H	HA	J	dia. N	dia. M	S	SM
550252	**KP10.3**	366	566	265	200	400	535	126	200	10	250 - 252	20	13,5	38	200
550256	**KP20.3**	396	596	265	200	400	565	126	200	15	250 - 252	20	13,5	53	200

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de


ROLLON
ROLLON
ROLLON
AMF
AMF
AMF
AMF
AMF
AMF

No. 6211S

4-point clamping station

K20: hydraulic unlocking.
K20.3: pneumatic unlocking.
Pneumatic blow-out.
repetition accuracy < 0.005 mm.

Size	pneumatic	hydraulic	speed max. [1/min]
KH20	-	●	2200
KP20.3	●	-	2200

Application:

Pneumatic or hydraulic clamping station for setting time-optimised clamping for milling-turning machining.

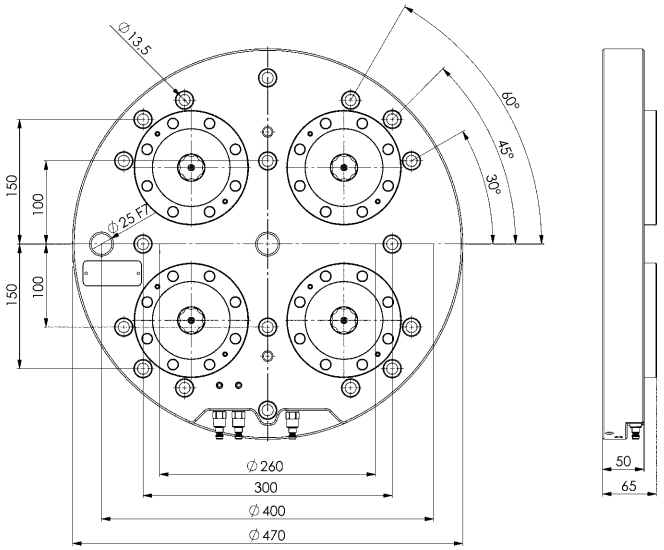
Note:

Fastening to the machine table is via socket head screws.

On request:

Further dimensions, different pitch circles and number of modules.





CAD

No. 6211P

Fixture plate

Steel, unhardened, suitable for 4-point clamping station

Size	pneumatic	hydraulic
20	-	●
20.3	●	-

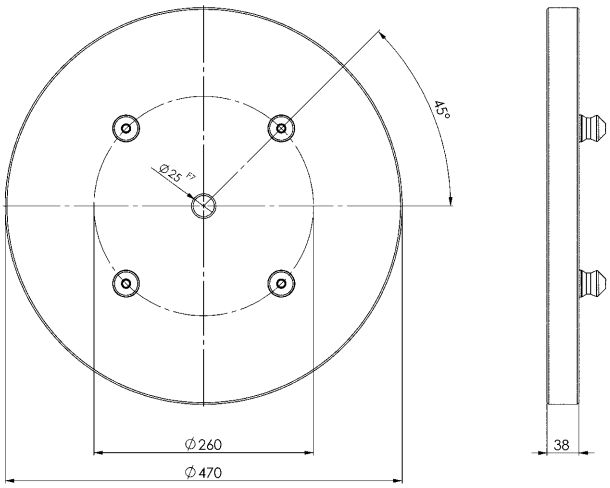
Note:

The interchangeable pallet is designed for milling-turning machining and is suitable for clamping stations with 4 clamping modules K20 and K20.3, which are arranged on the 260 mm pitch circle.

On request:

Additional dimensions, different pitch circles and number of pull-studs.





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

OUR ZERO-POINT SYSTEM FOR YOUR MILLING-TURNING MACHINING - QUICK, PRECISE, DURABLE, SIMPLY CONVINCING!

The benefits to you at a glance:

- Connection for opening the clamping station via the media duct in the machine table or a side connection for manual actuation.
- Opening pressure for unlocking the clamping modules just 4.5 bar.
- Only one pneumatic connection required to open the clamping modules.
- Locking via the self-locking and positive fit mechanism of the clamping modules.
- Cylindrical clamping nipple mount - hence high precision and durability.
- Great process reliability through integrated support control and direct clamping control.
- With integrated queries also suitable for automated loading.



No. 6370S2-001

2-point clamping station

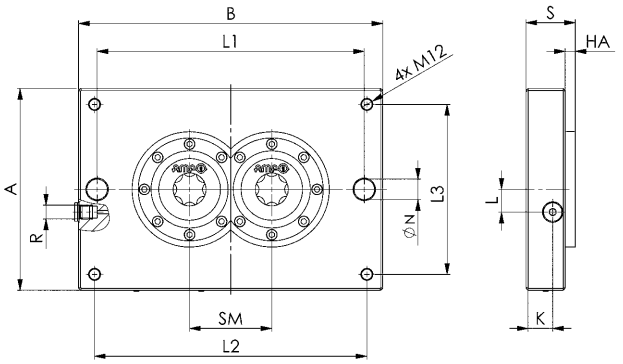
Hydraulic unlocking.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.



Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
303263	KH20	2 x 20	2 x 55	18
303271	KH40	2 x 40	2 x 105	33

Note:

On request, we can incorporate fastening bores in the base plate according to your requirements.
The correct quick-release coupling is available under the order no.:
- 427872 for sleeve
- 427856 for plug
* Please observe the installation instructions.



Dimensions:

Order no.	Size	A	B	HA	K	L	L1	L2	L3	dia. N	R	S	SM
303263	KH20	196	296	10	26	22	260	265	165	20	G1/4	48	80
303271	KH40	246	346	15	33	22	300	315	215	25	G1/4	62	110

CAD

No. 6370S2-002

2-point clamping station

Hydraulic unlocking.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
426726	KH10	2 x 10	2 x 25	7,5
303289	KH20	2 x 20	2 x 55	22,9
303297	KH40	2 x 40	2 x 105	59,8

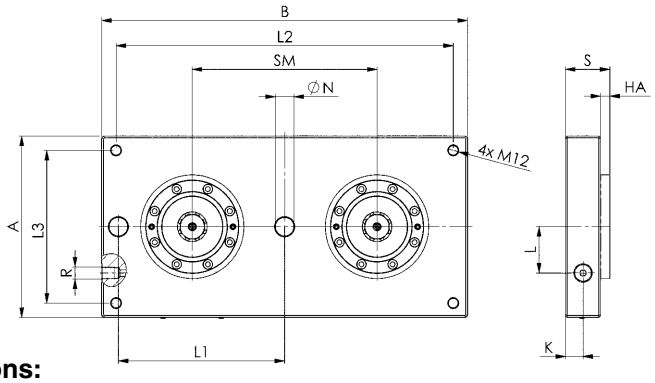
Note:

On request, we can incorporate fastening bores in the base plate according to your requirements.
The correct quick-release coupling is available under the order no.:
- 427872 for sleeve
- 427856 for plug
* Please observe the installation instructions.

On request:

Other dimensions, insertion dimensions and number of clamping nipples equipped.





Dimensions:

Order no.	Size	A	B	HA	K	L	L1	L2	L3	dia. N	R	S	SM
426726	KH10	146	240	7	15	35	100	210	116	20	G1/4	33	100
303289	KH20	196	396	10	19	50	180	365	165	20	G1/4	48	200
303297	KH40	296	546	15	24	65	250	515	266	25	G1/4	62	320

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370S4-001

4-point clamping station

Hydraulic unlocking.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

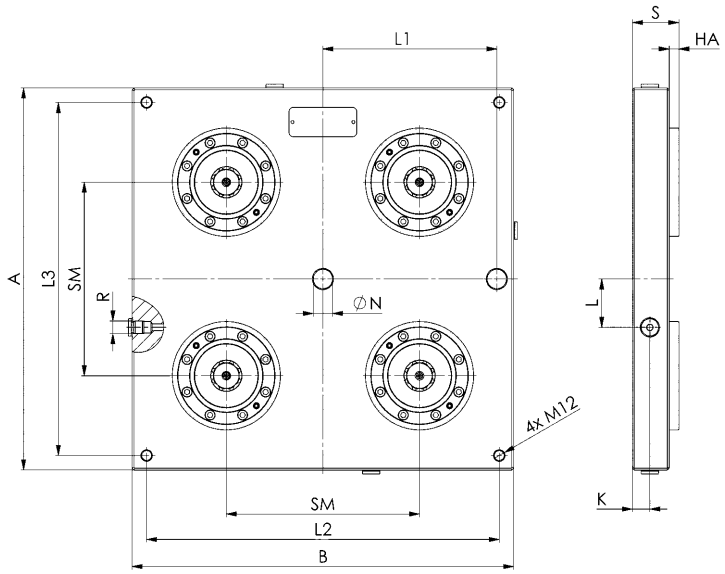
Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
426742	KH10	4 x 10	4 x 25	12,5
303321	KH20	4 x 20	4 x 55	46,5
303339	KH40	4 x 40	4 x 105	113,5

Note:

On request, we can incorporate fastening bores in the base plate according to your requirements.
The correct quick-release coupling is available under the order no.:
- 427872 for sleeve
- 427856 for plug

* Please observe the installation instructions.





Dimensions:

Order no.	Size	A	B	HA	K	L	L1	L2	L3	dia. N	R	S	SM
426742	KH10	240	240	7	12	85	100	220	202	20	G1/4	33	100
303321	KH20	395	395	10	18	50	180	365	365	20	G1/4	48	200
303339	KH40	546	546	15	24	95	250	516	516	25	G1/4	62	320

CAD

Subject to technical alterations.

No. 6370S6-001

6-point clamping station

Hydraulic unlocking.
Opening operating pressure: min. 50 bar - max. 60 bar.
Clamping modules' contact surface: Steel, stainless and hardened.
Base plate: Steel, unhardened.
Repetition accuracy < 0.005 mm.

Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
426734	KH10	6 x 10	6 x 25	17,5
424119	KH20	6 x 20	6 x 55	72,4
426759	KH40	6 x 40	6 x 105	178,5

Note:

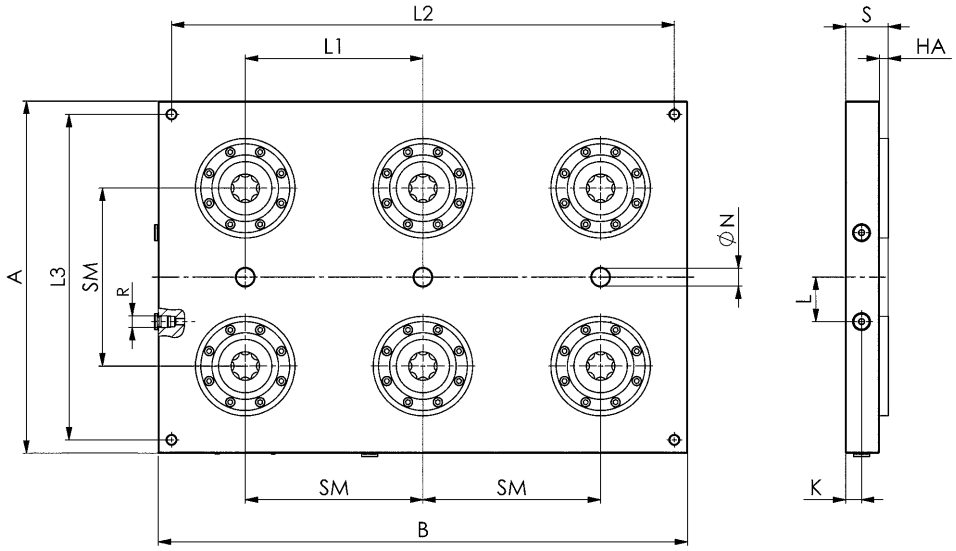
On request, we can incorporate fastening bores in the base plate according to your requirements.
The correct quick-release coupling is available under the order no.:
- 427872 for sleeve
- 427856 for plug

* Please observe the installation instructions.

On request:

Other dimensions, insertion dimensions and number of clamping nipples equipped.





Dimensions:

Order no.	Size	A	B	HA	K	L	L1	L2	L3	dia. N	R	S	SM
426734	KH10	240	340	7	15	84	100	310	210	20	G1/4	33	100
424119	KH20	396	596	10	18	50	200	566	366	20	G1/4	48	200
426759	KH40	546	846	15	24	95	320	815	515	20	G1/4	62	320

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6204P-S2

Fixture plate

Aluminium, suitable for 2-point clamping station KH10.2.

Order no.	Size	A	B	G	G1	G2	L	L1	S	SM	Weight [Kg]
429266	**10.2**	166	396	M12	M5	M8	90	120	30	200	6

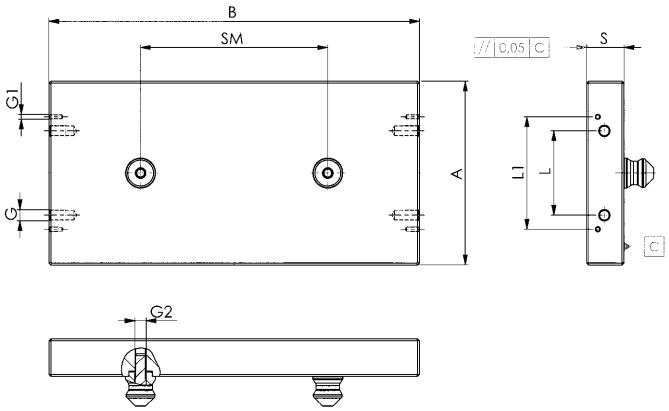
Note:

On request, we can incorporate mounting holes according to your specifications in the fixture plate.

On request:

Other dimensions, pitch spacings and number of equipped pull-studs.





CAD

No. 6204P-S4

Fixture plate

Aluminium, suitable for 4-point clamping station KH10.2.

Order no.	Size	A	B	G	G1	G2	L	L1	S	SM	Weight [Kg]
429282	**10.2**	366	366	M12	M5	M8	200	120	30	200	10

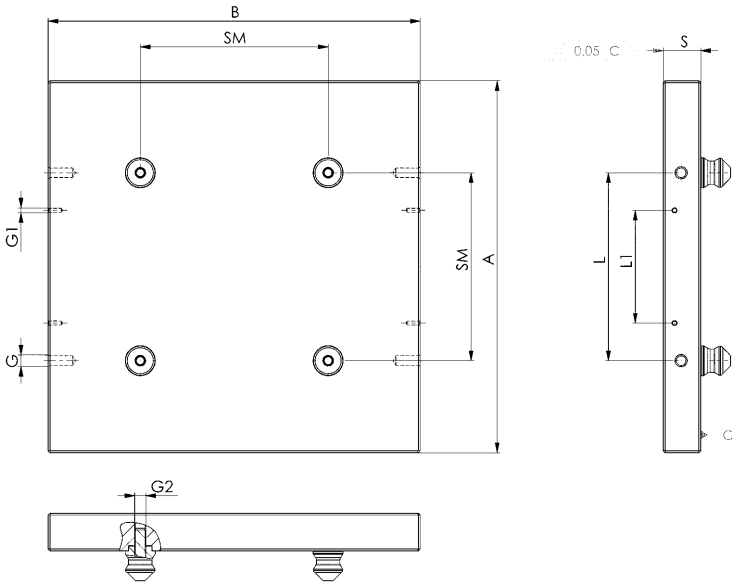
Note:

On request, we can incorporate mounting holes according to your specifications in the fixture plate.

On request:

Other dimensions, pitch spacings and number of equipped pull-studs.





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6204P-S6

Fixture plate

Aluminium, suitable for 6-point clamping station KH10.2.

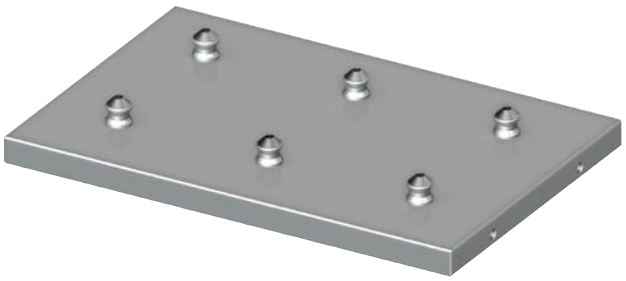
Order no.	Size	A	B	G	G2	L	S	SM	Weight [Kg]
429308	**10.2**	366	566	M12	M8	200	30	200	16

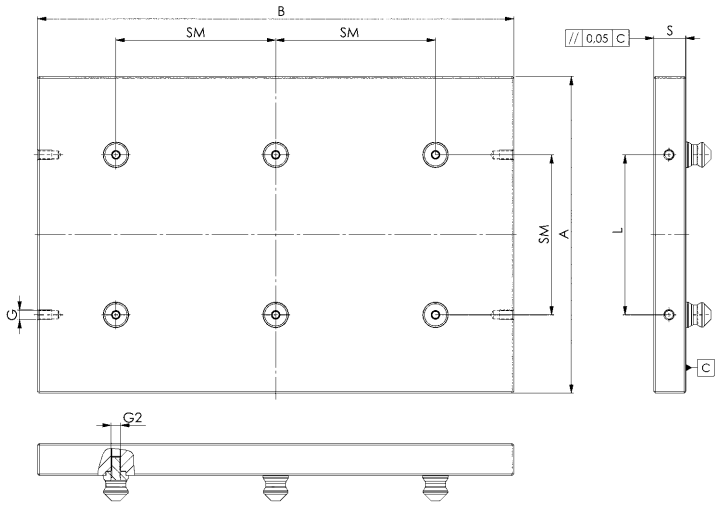
Note:

On request, we can incorporate mounting holes according to your specifications in the fixture plate.

On request:

Other dimensions, pitch spacings and number of equipped pull-studs.





CAD

No. 6204P-S8

Fixture plate

Aluminium, suitable for 8-point clamping station KH10.2.

Order no.	Size	A	B	G	G2	L	S	SM	Weight [Kg]
429324	**10.2**	366	770	M12	M8	200	30	200	22

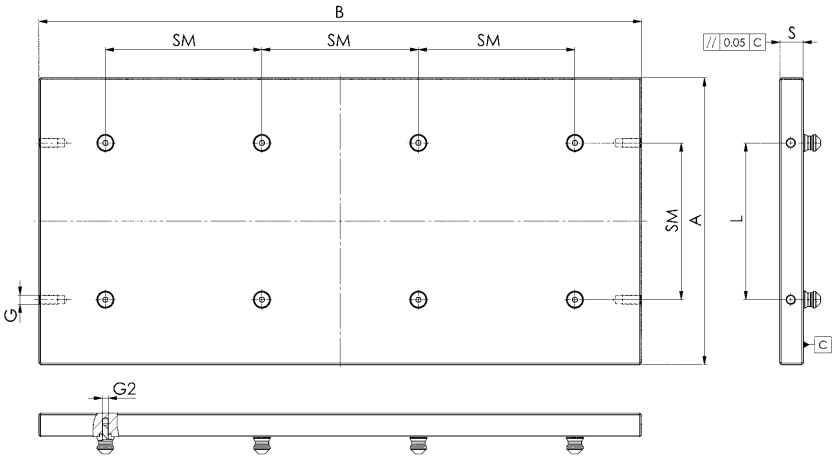
Note:

On request, we can incorporate mounting holes according to your specifications in the fixture plate.

On request:

Other dimensions, pitch spacings and number of equipped pull-studs.





CAD

Subject to technical alterations.

No. 6370P2

Fixture plate

Aluminium, suitable for double clamping station.

Order no.	Size	A	B	G	G1	G2	L	L1	S	SM	Weight [Kg]
426700	**10**	146	240	M12	M5	M8	90	120	30	100	2,5
425041	**20**	196	396	M12	M5	M12	90	120	40	200	6,0
426783	**40**	296	546	M12	-	M16	120	-	45	320	19,0

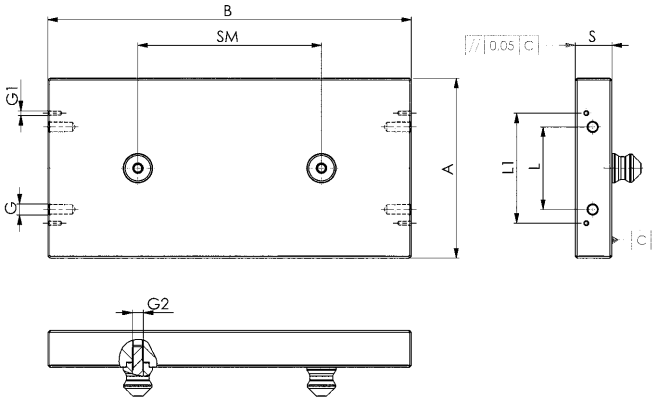
Note:

Fastening bores for handles are attached to the end faces of the interchangeable pallets. See dimensions table L1 and G1. We can incorporate additional fastening bores according to your specifications in the change pallet on request.

On request:

Other dimensions, pitch spacings and number of equipped pull-studs.





CAD

No. 6370P4

Fixture plate

Aluminium, suitable for quadruple clamping station.

Order no.	Size	A	B	G	G1	G2	L	L1	S	SM	Weight [Kg]
426767	**10**	240	240	M12	M5	M8	120	90	30	100	4,5
425033	**20**	396	396	M12	M5	M12	200	120	40	200	16,0
426809	**40**	546	546	M12	-	M16	320	-	45	320	35,0

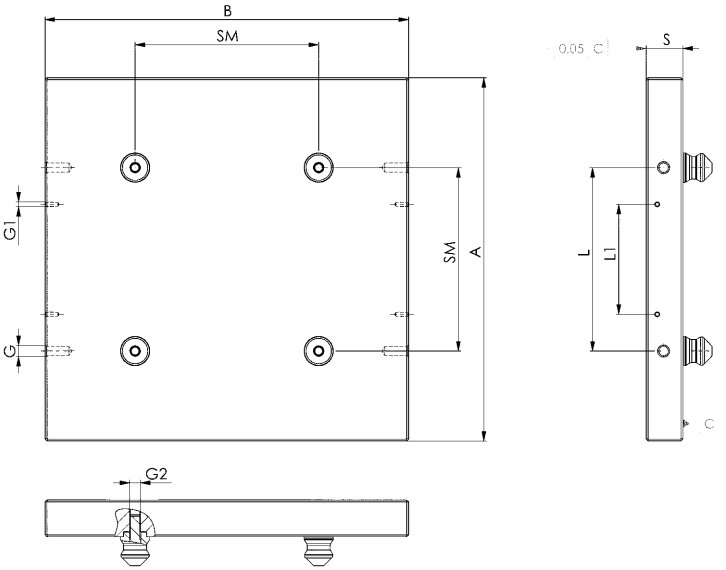
Note:

Fastening bores for handles are attached to the end faces of the interchangeable pallets. See dimensions table L1 and G1. We can incorporate additional fastening bores according to your specifications in the change pallet on request.

On request:

Other dimensions, pitch spacings and number of equipped pull-studs.





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370P6

Fixture plate

Aluminium, suitable for sextuple clamping station.

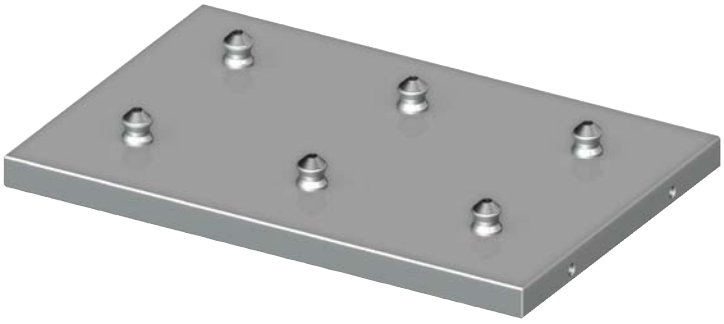
Order no.	Size	A	B	G	G2	L	S	SM	Weight [Kg]
426775	**10**	240	386	M10	M8	120	30	100	7,5
426791	**20**	396	596	M12	M12	200	40	200	25,0
426817	**40**	546	866	M12	M16	320	45	320	56,0

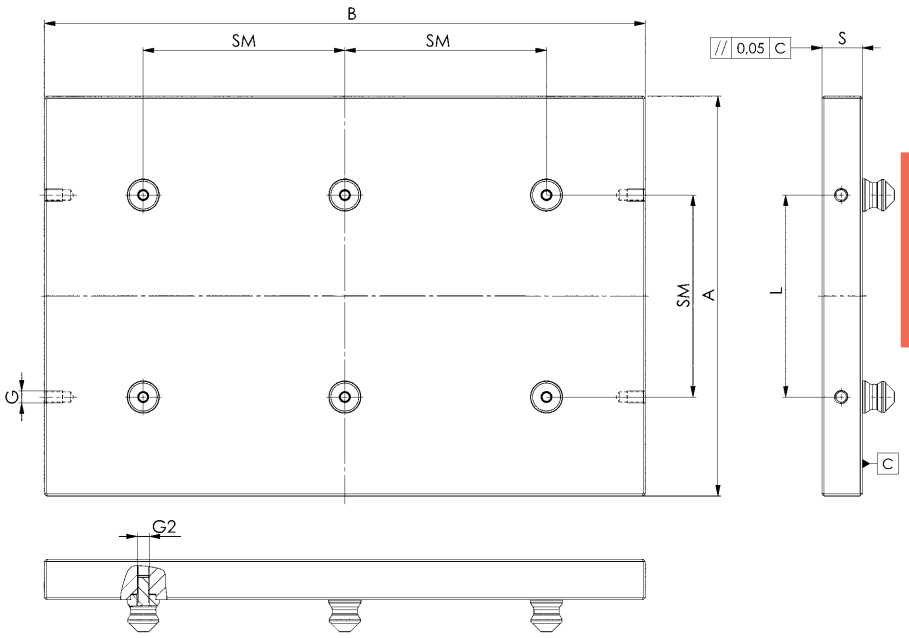
Note:

On request, we can incorporate mounting holes according to your specifications in the change pallet.

On request:

Other dimensions, pitch spacings and number of equipped pull-studs.





CAD

Subject to technical alterations.

CLASSIC CLAMPING SLEEVE ARRANGEMENT

This arrangement with two zero-point clamping sleeves always optimally positions the interchangeable pallet. The compensation pull-studs can be moved radially and can compensate for larger distance tolerances in all directions. An arrangement solely with zero-point adapter sleeves is also possible.

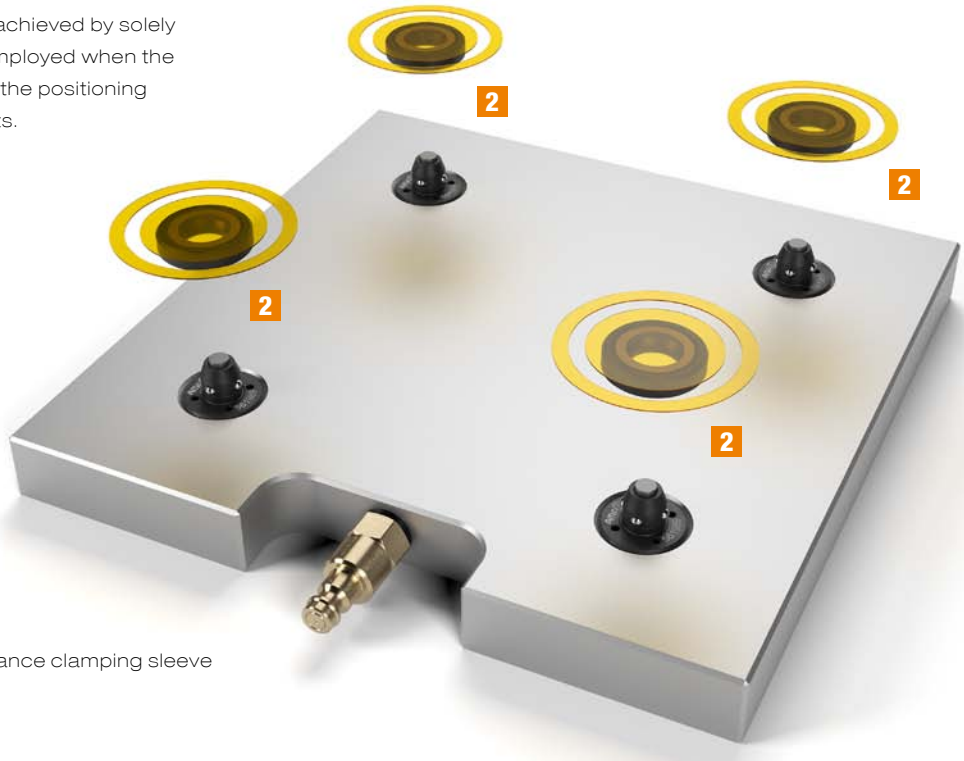


1 Zero-point clamping sleeve

2 Counterbalance clamping sleeve

OPTIONAL CLAMPING SLEEVE ARRANGEMENT

The greatest possible compensation can be achieved by solely arranging compensation pull-studs. This is employed when the repetition accuracy only plays a minor role or the positioning is carried out by additional alignment elements.



2 Counterbalance clamping sleeve

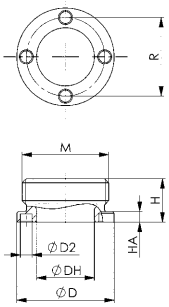
No. 6214ZN-250-01

Zero-point clamping sleeve

For screwing on.
Hardened.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





CAD

Order no.	Size	dia. D	dia. D2	ØDH	H	HA	M	R	Weight [g]
559092	250	18	2,1	10,7	7	1,95	M16 x 1	14,75	6

Application:

Zero point clamping sleeve suitable for pneumatic clamping module 6215RP-250 and 251 and mechanical clamping modules 6214RM-250 and 251. The clamping sleeve has an external thread and can, for example, be screwed directly into fixtures or workpieces.

Note:

The suitable installation tool is available under the order no. 559439.

On request:

- Installation diagrams

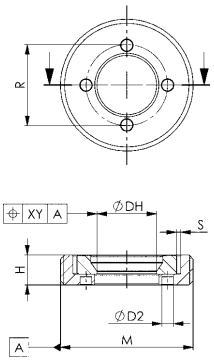
No. 6214ZN-250-02

Counterbalance clamping sleeve

For screwing on.
Hardened.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





CAD

Order no.	Size	XY counterbalance [mm]	dia. D2	ØDH	H	M	R	S	Weight [g]
559093	250	1,0	2,1	10,8	5,45	M24 x 1	14,75	0,75	13

Application:

The compensation pull-stud is supported by bearings so that it is radially mobile and is used when large distance tolerances between the clamping sleeves have to be compensated. The compensating clamp is suitable for pneumatic clamping modules 6215RP-250 and 251 and mechanical clamping modules 6214RM-250 and 251.
The compensating clamp sleeve has an external thread and can, for example, be screwed directly into fixtures or workpieces.

Note:

The clamping sleeve has only a holding function and does not absorb any lateral load.
The suitable installation tool is available under the order no. 559439.

On request:

- Installation diagrams

No. 6214ZN-250-03

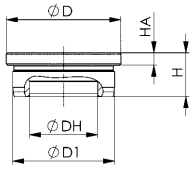
Zero-point clamping sleeve

For pressing in.
Hardened.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

NEW!





Order no.	Size	dia. D	dia. D1	ØDH	H	HA	Weight [g]
567135	250	18	16	10,7	6,9	1,95	6

Application:

Zero point clamping sleeve suitable for pneumatic clamping module 6215RP-250 and 251 and mechanical clamping modules 6214RM-250 and 251. The clamping sleeve has an external thread and can, for example, be screwed directly into fixtures or workpieces.

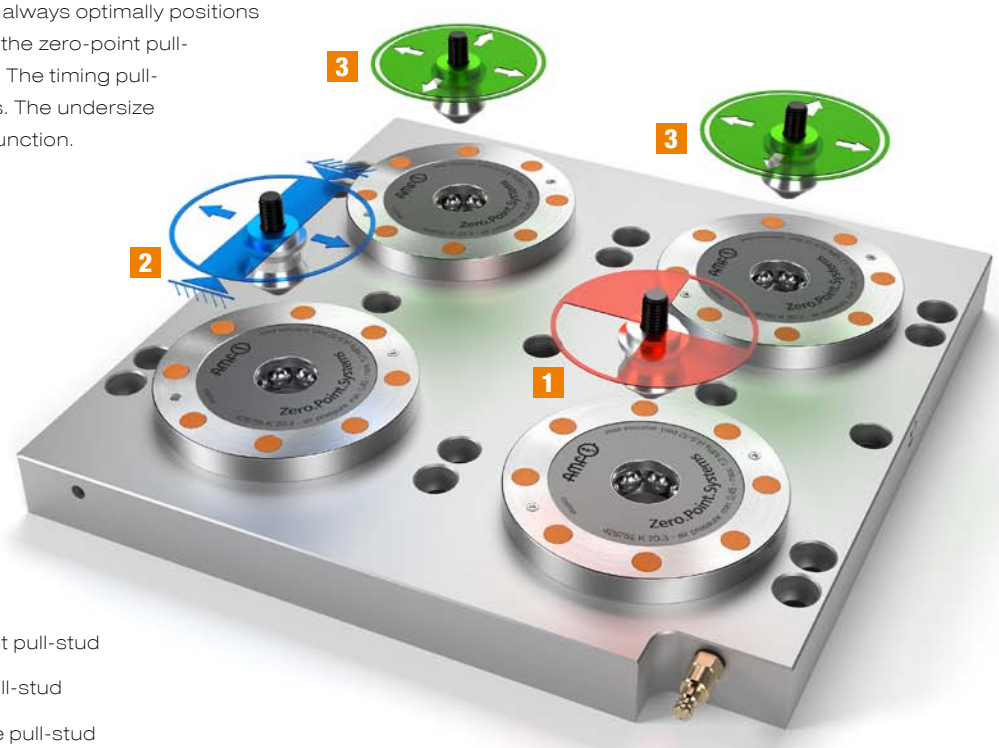
On request:

- Installation diagrams

Subject to technical alterations.

CLASSIC PULL-STUD ARRANGEMENT

This arrangement of the clamping modules always optimally positions the pallet to be changed. At the same time, the zero-point pull-stud always represents the reference point. The timing pull-stud serves to compensate for the free axis. The undersize pull-stud has only a clamping and holding function.



1 Zero-point pull-stud
2 Timing pull-stud
3 Undersize pull-stud

OPTIONAL PULL-STUD ARRANGEMENT

The exclusive use of timing pull-studs compensates for stronger temperature influences. The reference point always remains in the centre of the pallet. Of course, temperature influences from machine processing can generally be ignored since the heat generated is conducted away by the chips and coolant.



2 Timing pull-stud

No. 6203ZN-140

Pull-stud size 140

Hardened, for pneumatic clamping module no. 6203SP-140.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL

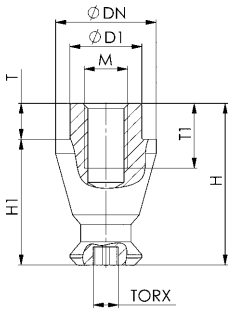
NEW!



Order no.	Size	dia. DN	dia. D1	H	H1	M	T	T1	TORX	Weight [g]
564840	**140**	7,00	5	11,2	8,7	M3	2,5	4,5	T8	2
564841	**140**	7,00	5	11,2	8,7	M3	2,5	4,5	T8	2
564842	**140**	6,96	5	11,2	8,7	M3	2,5	4,5	T8	2

Design:

Order no. 564840: zero-point pull-stud, Order no. 564841: timing pull-stud, Order no. 564842: undersize pull-stud.
Zero point and undersize pull-stud incl. threaded stud ISO 4026 M3x12-10.9 (galvanised).



No. 6203ZN-150

Pull-stud size 150

Hardened, for pneumatic clamping module no. 6203SP-150 and 6109SP-150.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL



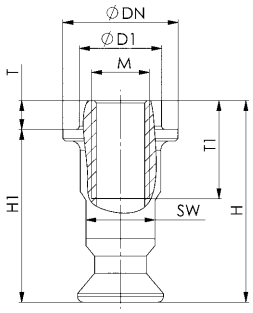
Order no.	Size	dia. DN	dia. D1	H	H1	M	T	T1	SW	Weight [g]
427302	**150**	10,0	7,14	17,5	15	M5	2,5	8,5	6	4
427328	**150**	10,0	7,14	17,5	15	M5	2,5	8,5	6	4
427344	**150**	9,95	7,14	17,5	15	M5	2,5	8,5	6	4

Design:

Order no. 427302: zero-point pull-stud, Order no. 427328: timing pull-stud,
Order no. 427344: undersize pull-stud.
Zero point, timing and undersize pull-stud incl. threaded stud ISO 4026 M5x20-10.9 (galvanised).

Note:

A suitable tool for aligning the slit pull-stud is available under the order no. 562804.



CAD

Subject to technical alterations.

No. 6370ZN-5

Pull-stud size 5 for M6 engagement screw

Hardened, for clamping modules size 5.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
306019	5	15,0	10	6	12,7	10,2	-	2,5	15
306035	5	15,0	10	6	12,7	10,2	-	2,5	15
306050	5	14,8	10	6	12,7	10,2	-	2,5	15
306076	5	14,8	-	-	-	-	M 6	-	12

Design:

order no. 306019: zero point pull-stud, order no. 306035: timing pull-stud,
order no. 306050: undersize pull-stud, order no. 306076: protection pull-stud

On request:

Protection pull-stud made of plastic.



CAD

No. 6370ZN-5

Pull-stud size 5 for M8 engagement screw

Hardened, for clamping modules size 5.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
562192	5	15,0	11	8	11,9	9,4	-	2,5	8
562193	5	15,0	11	8	11,9	9,4	-	2,5	8
562194	5	14,8	11	8	11,9	9,4	-	2,5	8
306076	5	14,8	-	-	-	-	M 6	-	12

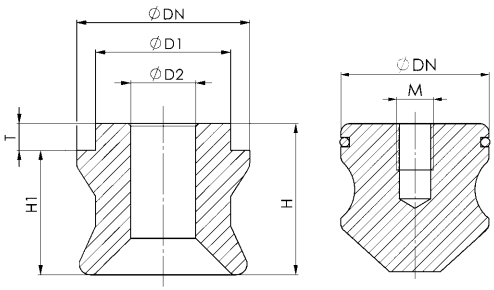
Design:

order no. 562192: zero point pull-stud, order no. 562193: timing pull-stud,
order no. 562194: undersize pull-stud, order no. 306076: protection pull-stud

On request:

Protection pull-stud made of plastic.





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZN-10

Pull-stud size 10 for M8 engagement screw

Hardened, for clamping modules size 10.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL



CAD

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
303610	10	22,0	15	8	19	16	-	3	30
303636	10	22,0	15	8	19	16	-	3	30
304519	10	21,8	15	8	19	16	-	3	30
304535	10	21,8	-	-	-	-	M 8	-	30

Design:

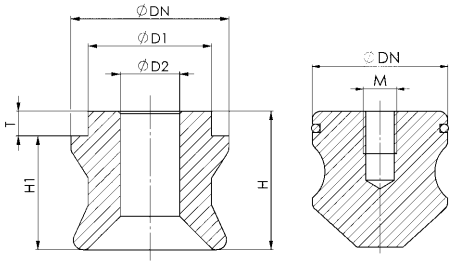
Order no. 303610: zero point pull-stud, order no. 303636: timing pull-stud,
order no. 304519: undersize pull-stud, order no. 304535: protection pull-stud

Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.



No. 6370ZNR-10

Pull-stud size 10 for M8 engagement screw with reduced fitting collar

Hardened, for clamping modules size 10.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL



CAD

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
562748	10	22,0	14,5	8	19	16	-	3	27
562750	10	22,0	14,5	8	19	16	-	3	27
562751	10	21,8	14,5	8	19	16	-	3	27
304535	10	21,8	-	-	-	-	M 8	-	30

Design:

Order no. 562748: zero point pull-stud, order no. 562750: timing pull-stud,
order no. 562751: undersize pull-stud, order no. 304535: protection pull-stud

Application:

For clamping in a fitting hole with a reduced diameter e.g. before heat treatment of a workpiece. After the boring out the hole, the respective standard pull-stud can be used.

Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.

No. 6370ZN-10

Pull-stud size 10 with colour coding for M8 engagement screw

Hardened, for clamping modules size 10.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL



CAD

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	T	Weight [g]
430280	10	22,0	15	8	19	16	3	30
430306	10	22,0	15	8	19	16	3	30

Design:

Extremely wear-resistant surface coating.
Order no. 430280: zero point pull-stud „Gold“, order no. 430306: timing pull-stud „Black“.

Application:

For simple, visual differentiation of the various pull-studs.

Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

Subject to technical alterations.

No. 6370ZN-10

Pull-stud size 10 for M10 engagement screw

Hardened, for clamping modules size 10.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
554936	10	22,0	15	10	19	16	-	3	27
554937	10	22,0	15	10	19	16	-	3	27
554938	10	21,8	15	10	19	16	-	3	27
304535	10	21,8	-	-	-	-	M 8	-	30

Design:

order no. 554936: zero point pull-stud, order no. 554937: timing pull-stud,
order no. 554938: undersize pull-stud, order no. 304535: protection pull-stud

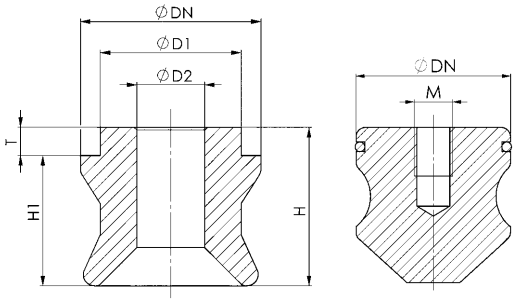
Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.





CAD

No. 6370ZNR-10

Pull-stud size 10 for M10 engagement screw with reduced fitting collar

Hardened, for clamping modules size 10.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
562755	10	22,0	14,5	10	19	16	-	3	27
562757	10	22,0	14,5	10	19	16	-	3	27
562759	10	21,8	14,5	10	19	16	-	3	27
304535	10	21,8	-	-	-	-	M 8	-	30

Design:

Order no. 562755: zero point pull-stud, order no. 562757: timing pull-stud,
order no. 562759: undersize pull-stud, order no. 304535: protection pull-stud

Application:

For clamping in a fitting hole with a reduced diameter e.g. before heat treatment of a workpiece. After the boring out the hole, the respective standard pull-stud can be used.

Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.



CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZN-20

Pull-stud size 20 for M12 engagement screw

Hardened, for clamping modules size 20.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
303149	20	32,0	25	12	28	23	-	5	110
303156	20	32,0	25	12	28	23	-	5	110
303164	20	31,7	25	12	28	23	-	5	110
303172	20	31,7	-	-	-	-	M 8	-	110



Design:

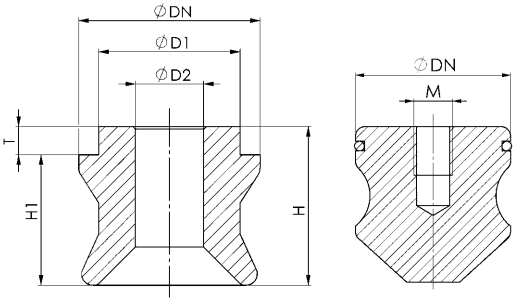
Order no. 303149: zero point pull-stud, order no. 303156: timing pull-stud,
order no. 303164: undersize pull-stud, order no. 303172: protection pull-stud

Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.



CAD

No. 6370ZNR-20

Pull-stud size 20 for M12 engagement screw with reduced fitting collar

Hardened, for clamping modules size 20.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
562761	20	32,0	24	12	28	23	-	5	110
562764	20	32,0	24	12	28	23	-	5	110
562766	20	31,7	24	12	28	23	-	5	110
303172	20	31,7	-	-	-	-	M 8	-	110



Design:

Order no. 562761: zero point pull-stud, order no. 562764: timing pull-stud,
order no. 562766: undersize pull-stud, order no. 303172: protection pull-stud

Application:

For clamping in a fitting hole with a reduced diameter e.g. before heat treatment of a workpiece. After the boring out the hole, the respective standard pull-stud can be used.

On request:

Protection pull-stud made of plastic.

CAD

No. 6370ZN-20

Pull-stud size 20 with colour coding for M12 engagement screw

Hardened, for clamping module size 20.

EDELSTAHL Rostfrei® INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	T	Weight [g]
430322	20	32,0	25	12	28	23	5	110
430348	20	32,0	25	12	28	23	5	110



Design:

Extremely wear-resistant surface coating.
Order no. 430322: zero point pull-stud „Gold“, order no. 430348: timing pull-stud „Black“.

Application:

For simple, visual differentiation of the various pull-studs.

Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

CAD

Subject to technical alterations.

No. 6370ZN-20

Pull-stud size 20 for M16 engagement screw

Hardened, for clamping modules size 20.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
554939	20	32,0	25	16	28	23	-	5	85
554940	20	32,0	25	16	28	23	-	5	85
554941	20	31,7	25	16	28	23	-	5	85
303172	20	31,7	-	-	-	-	M 8	-	110

Design:

Order no. 554939: zero point pull-stud, order no. 554940: timing pull-stud,
order no. 554941: undersize pull-stud, order no. 303172: protection pull-stud

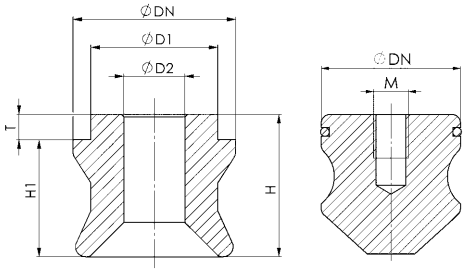
Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.





CAD

No. 6370ZNR-20

Pull-stud size 20 for M16 engagement screw with reduced fitting collar

Hardened, for clamping modules size 20.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
562768	20	32,0	24	16	28	23	-	5	83
562769	20	32,0	24	16	28	23	-	5	83
562771	20	31,7	24	16	28	23	-	5	83
303172	20	31,7	-	-	-	-	M 8	-	110

Design:

Order no. 562768: zero point pull-stud, order no. 562769: timing pull-stud,
order no. 562771: undersize pull-stud, order no. 303172: protection pull-stud

Application:

For clamping in a fitting hole with a reduced diameter e.g. before heat treatment of a workpiece. After the boring out the hole, the respective standard pull-stud can be used.

On request:

Protection pull-stud made of plastic.



CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZN-40

Pull-stud size 40 for M16 engagement screw

Hardened, for clamping modules size 40.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
303180	40	40,0	25	16	34	29	-	5	180
303198	40	40,0	25	16	34	29	-	5	180
303206	40	39,7	25	16	34	29	-	5	180
303214	40	39,7	-	-	-	-	M 8	-	180

Design:

Order no. 303180: zero point pull-stud, order no. 303198: timing pull-stud, order no. 303206: undersize pull-stud, order no. 303214: protection pull-stud

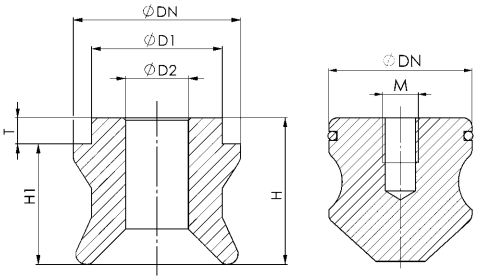
Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.





CAD

No. 6370ZN-40

Pull-stud size 40 for M18 engagement screw

Hardened, for clamping modules size 40.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D1	dia. D2	H	H1	M	T	Weight [g]
554942	40	40,0	30	18	34	29	-	5	170
554943	40	40,0	30	18	34	29	-	5	170
554944	40	39,7	30	18	34	29	-	5	170
303214	40	39,7	-	-	-	-	M 8	-	180

Design:

Order no. 554942: zero point pull-stud, order no. 554943: timing pull-stud, order no. 554944: undersize pull-stud, order no. 303214: protection pull-stud

Note:

The timing pull-stud has an additional alignment bore, which can optionally be used for simple installation.

On request:

Protection pull-stud made of plastic.



CAD

No. 6370ZNS-001

Engagement screw

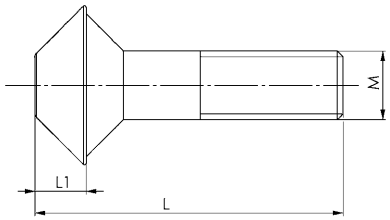
Strength class 12.9.

Order no.	Size	Holding force [kN]	L	L1	M	SW	TORX	Weight [g]
306092	5	8,5	25	3,4	M6	5	-	10
554926	5	13,0	29	3,4	M8	-	T30	13
303578	10	17,0	37	6,0	M8	6	-	25
554927	10	25,0	41	6,0	M10	-	T45	32
559120	20	25,0	54	9,0	M10	8	-	63
303222	20	43,0	54	9,0	M12	8	-	70
554928	20	55,0	63	9,5	M16	-	T60	125
303230	40	75,0	69	10,0	M16	14	-	130
554929	40	105,0	73	11,0	M18	-	T70	195

On request:

Engagement screws in various lengths and materials (e.g. STAINLESS STEEL).

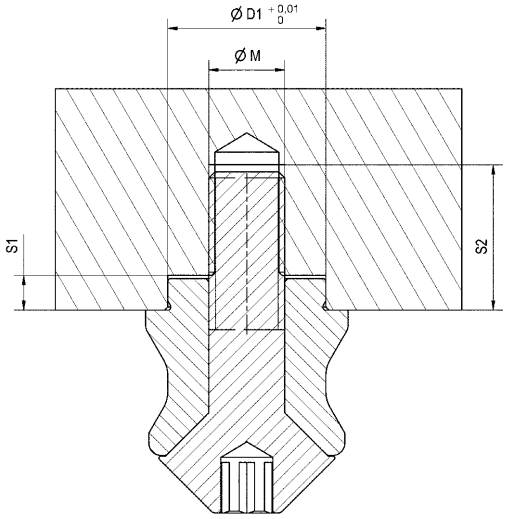




CAD

Subject to technical alterations.

Dimensions for machining pull-stud mountings



Size	ØD1	ØM	S1	S2	suitable pull-stud Order-no.	suitable engagement screw Order-no.
5	10,00	M6	2,8	12	306019 306035 306050	306092
5	11,00	M8	2,8	17	562192 562193 562194	554926
10	15,00	M8	3,5	16	303610 303636 304519 430280 430306	303578
10	15,00	M10	3,5	20	554936 554937 554938	554927
10	14,50	M8	3,5	16	562748 562750 562751	303578
10	14,50	M10	3,5	20	562755 562757 562759	554927
20	25,00	M10	5,5	23	303149 303156 303164 430322 430348	559120
20	25,00	M12	5,5	23		303222
20	25,00	M16	5,5	32	554939 554940 554941	554928
20	24,00	M12	5,5	23	562761 562764 562766	303222
20	24,00	M16	5,5	32	562768 562769 562771	554928
40	25,00	M16	5,5	30	303180 303198 303206	303230
40	30,00	M18	5,5	35	554942 554943 554944	554929

Figure:

Shown with pull-stud and engagement screw.



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZNF-10

Pull-stud size 10 for M8 engagement screw without fitting collar

Hardened, for clamping modules size 10.
Suitable for engagement screw 6370ZNSF.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D2	H	Weight [g]
562753	10	22	8	16	30

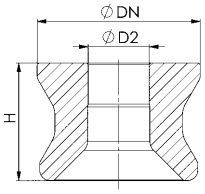
Design:

Order no. 562753: Zero-point pull-stud

Application:

For clamping workpieces in a threaded hole without a fitting collar.
Used only in conjunction with the construction kit system.





CAD

No. 6370ZNF-20

Pull-stud size 20 for M12 engagement screw without fitting collar

Hardened, for clamping modules size 20.
Suitable for engagement screw 6370ZNSF.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D2	H	Weight [g]
562767	20	32	12	23	85

Design:

Order no. 562767: Zero-point pull-stud

Application:

For clamping workpieces in a threaded hole without a fitting collar.
Used only in conjunction with the construction kit system.



CAD

No. 6370ZNSF

Engagement screw

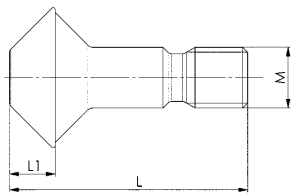
Strength class 12.9.
Suitable for pull-stud without fitting collar 6370ZNF.

Order no.	Size	Holding force [kN]	M	SW	L	L1	Weight [g]
562861	10	17,0	M8	6	34	6	20
562862	20	43,0	M12	8	47	9	61

On request:

Engagement screws in various lengths and materials (e.g. STAINLESS STEEL).





CAD

Subject to technical alterations.

No. 6370ZNM

Pull-stud nut

Strength class 10.
Suitable for pull-stud no. 6370ZN.

Order no.	Size	Holding force [kN]	M	SW	H	Weight [g]
429969	5	8,5	M6	10	6	3
429985	10	17,0	M8	14	8	8
430009	20	43,0	M12	21	14	26
430025	40	75,0	M16	28	17	50

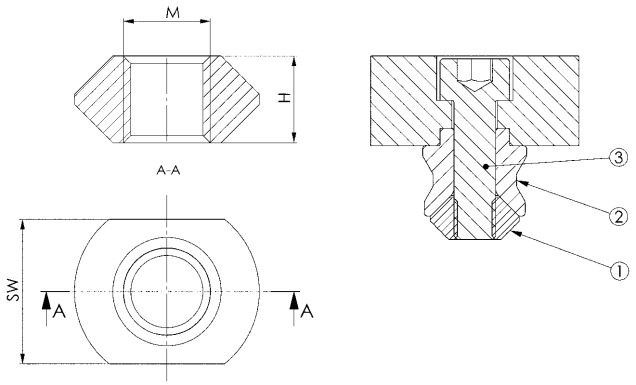
Application:

Pull-stud nut for fastening the pull-stud.

Note:

By gluing the pull-stud nut in the pull-stud with medium-strength adhesive, the nut is kept from turning when loosening the cylinder screw.
1 = Pull-stud nut
2 = Pull-stud
3 = Cylinder screw





CAD

No. 6370ZNS-002

Horizontal engagement screw

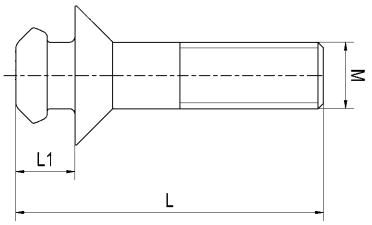
Strength class 12.9.

Order no.	Size	Holding force [kN]	L	L1	M	SW	Weight [g]
303248	20	20	56	10,5	M12	8	100
303255	40	45	73	13,0	M16	10	200

On request:

Horizontal engagement screws in various lengths and materials (e.g. STAINLESS STEEL).





CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZNSN

Compensation pull-stud

Hardened, for hydraulic and pneumatic clamping modules.

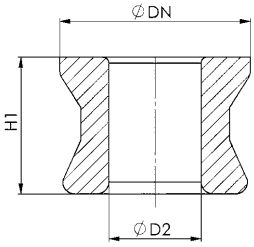
EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	dia. DN	dia. D2	H1	Weight [g]
340059	10	21,8	12,0	16	25
305912	20	31,8	15,5	23	80
426882	40	39,8	20,0	29	160

Note:

The compensation pull-stud is supported by bearings to make it radially mobile and is used when large distance and angle tolerances have to be compensated between the pull-stud holes.
The pull-stud only has a holding function and does not absorb a lateral load.





CAD

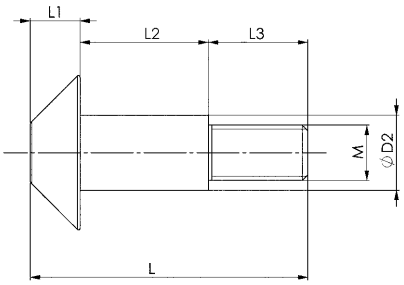
No. 6370ZNSSN

Engagement screw

Strength class 12.9.
Suitable for compensation pull-stud no. 6370ZNSN.

Order no.	Size	Holding force [kN]	dia. D2	L	L1	L2	L3	M	SW	Weight [g]
340034	10	10	11,0	34	6	16,1	11,9	M8	6	24
305938	20	20	13,5	50	9	23,1	17,9	M10	10	55
426908	40	30	17,0	59	10	29,1	19,9	M12	12	100





CAD

Subject to technical alterations.

No. 6370ZA

Protective shield

Not burnished, for engagement screw No. 6370ZNSA.

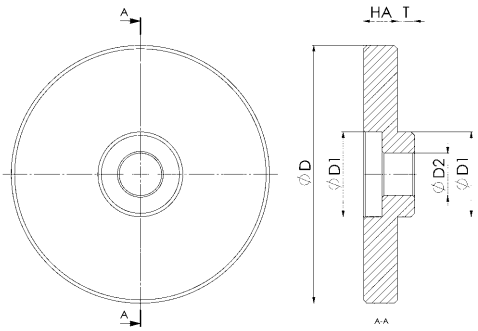
Order no.	Size	dia. D	dia. D1	dia. D2	HA	T	Weight [g]
422345	10	50	15	8,5	7	3	100
422360	20	76	25	12,5	10	5	340
422386	40	112	25	16,8	15	5	1130



CAD

Application:

The protective shield is used when through-holes must be set in the area of the module cover. As a result, the module cover is protected from damage.



No. 6370ZNSA

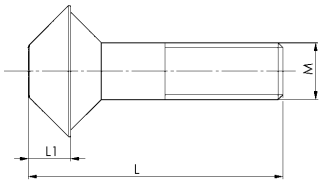
Engagement screw for protective shield

Strength class 12.9.

Order no.	Size	Holding force [kN]	L	L1	M	SW	Weight [g]
422402	10	17	44	6	M8	6	33
422428	20	43	64	9	M12	8	80
422444	40	75	84	10	M16	14	145



CAD



No. 6214RM-250-04

Actuating pin

Not hardened, for mechanical clamping modules 6214RM-250 and 6214RM-251.

EDELSTAHL Rostfrei INOX STAINLESS STEEL



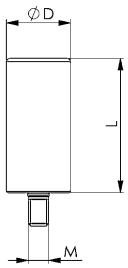
Order no.	Size	dia. D	L	M	Weight [g]
561391	250	9,5	20	M3	13

Application:

The extended actuating pin is used for higher interchangeable pallets.

Note:

The actuating pin in the 6214RM-250 and 6214RM-251 clamping modules can be replaced by the extended actuating pin.







CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZN-20-029

Puller

For pull-stud size 20.

Order no.	Size	Thread	Weight [g]
526517	20	M10	150



Design:

Aluminium puller is suitable for 20 pull-stud.

Application:

Pull-studs can be simply and quickly removed from the workpiece or fixture. For this purpose, the size 20 puller is mounted on a pin extractor and the pull-studs are pulled out without damaging the mounting bore.

No. 6370ZZ

Positioning pull-stud

Hardened.

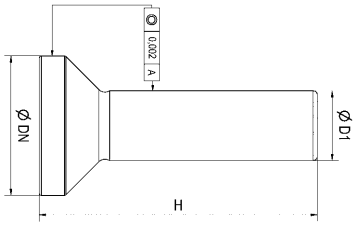
EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	for clamping modules	dia. D1	dia. DN	H	Weight [g]
306241	5	8	15	48	60
306167	10	12	22	48	85
306183	20 / 1000	16	32	64	225
306209	40	20	40	82	455



Application:

The positioning nipple makes all of the surface-mounted modules easier to align. It can be clamped directly in the machine spindle, thus achieving the desired gauges when the machine is traversed.



CAD

No. 6203ZNA-150

Alignment tool K02 for timing pull-stud

Suitable for order no. 427328.

Order no.	Size	Weight [g]
562804	150	100



Application:

The tool facilitates the alignment of the K02 timing pull-stud.

Subject to technical alterations.

No. 6203ZMW

Insertion tool

For sizes SP140 and SP150.

NEW!

Order no.	Size	SW	Weight [g]
564843	140	17	53
565395	150	19	70

Application:

Tool for installation of clamping modules 6203SP-140 and 6203SP-150 screw-in version.



No. 6214ZMW-250

Insertion tool

For sizes RP250/251 and RM250/251.

Order no.	Size	SW	Weight [g]
559439	250	12	22

Application:

Installation tool for clamping modules 6214RM-250, 6214RM-251, 6215RP-250 and 6215RP-251 and for clamping sleeves 6214ZN-250-01 and 6214ZN-250-02.



No. 6370ZMW-5

Insertion tool

For sizes KP5 and KH5 in the screw-in version.

NEW!

Order no.	Size	SW [mm]	Weight [g]
564855	5	17	190

Application:

Tool for installation of clamping modules 6103LA-5, 6370EARLA05 and 6370EARHA05 in the screw-in version.



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZAS

Cover ring for clamping modules

Material: Aluminium

Order no.	Size	dia. A	S	Weight [g]
552810	10	84	10	80
552811	10.2 / 10.3 / 20	118	11	160
552812	20.3	146	13	260
552813	40	156	13	290

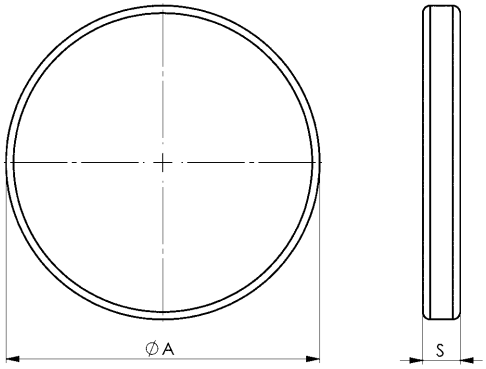


Design:

Cover and protective shield made of aluminium for ZPS clamping modules. These protect the contact surface of the clamping modules and are attached to the outside diameter by a pretensioned O-ring.

Application:

Cover and protective shields are used to protect the contact surface of the ZPS clamping modules from environmental influences.



CAD

No. 6370ZAR

Cover ring for clamping modules

Stainless steel, self-adhesive.

EDELSTAHL Rostfrei INOX STAINLESS STEEL

Order no.	Size	Weight [g]
550281	10.2	4
550282	10.3	4
550283	10	4
550284	20	5
550285	40	6

Design:

Stainless steel, one-side self-adhesive with removable film.
Selected sizes are suitable for installation and construction clamping modules.

Application:

Protective cover for clamping modules prevents build-up of dirt and chips.

Note:

Not suitable for clamping module with indexing, square clamping module and heavy-duty module.
It must be noted that the adhesive used has only limited suitable for the use of coolant lubricants.





CAD

Subject to technical alterations.

No. 6206ZS

Cover caps for clamping module

Material: Polyethylene

Order no.	Packaging unit [St]	Weight [g]
553995	8	3

Application:

Cover and protective caps for the mounting screws of the KP5.3 clamping modules.



No. 6204ZS-01

Cover caps for clamping module

Material: polyethylene

Order no.	Packaging unit [St]	Weight [g]
428664	10	4

Application:

Cover and protective caps for mounting screws of the KH10.2, KP10.3, KP20.3 clamping modules.



No. 6204ZS-02

Cover caps for clamping pallets

Material: polyethylene

Order no.	Size	Packaging unit [St]	Weight [g]
430165	M12	12	15
430181	M16	12	15

Application:

Cover and protective cap for cylinder and positioning boreholes in clamping stations.



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6376Z

Adapter set for pull-stud size 10

Supply scope:
- 1 Adapter sleeve
- 1 Positioning bush

Order no.	dia. D1	dia. D2	S1	H	Weight [g]
430207	25	15	5,5	19	23

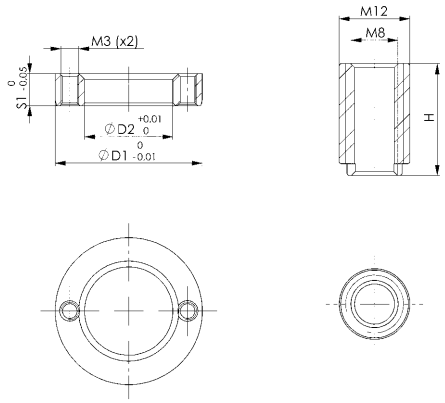
Design:

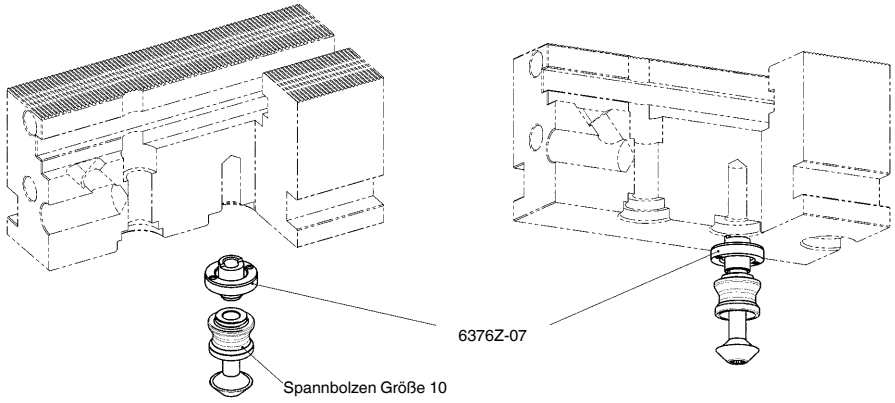
For blind hole thread and clamping rail, see article no. 6376G.
The threaded sleeve is produced from alloyed heat-treated steel, the adapter ring from case-hardened steel.

Application:

Adapter kit for reducing the locating bore from pull-stud size 20 to size 10.









Subject to technical alterations.

No. 6376Z

Adapter set for pull-stud size 10

Supply scope:
- 1 Cylinder head screw
- 1 Adapter sleeve
- 1 Positioning bush

Order no.	dia. D	dia. D1	dia. D2	dia. D3	H	S1	Weight [g]
430223	17,5	25	15	12,5	30	5,5	62

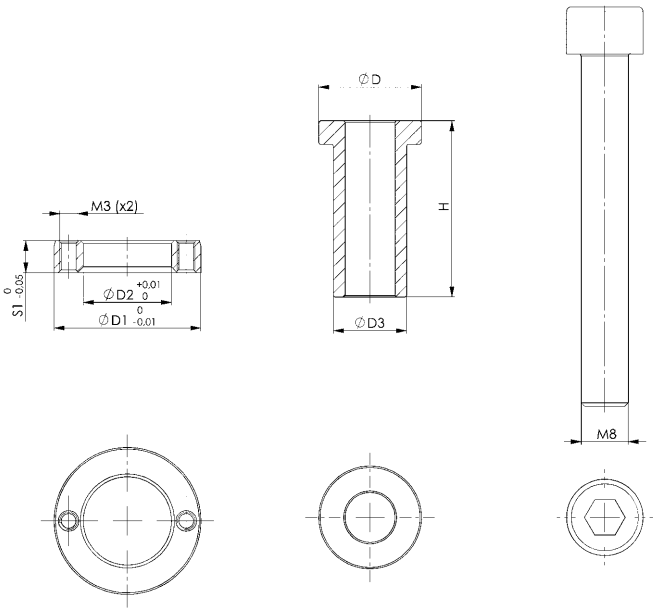
Design:

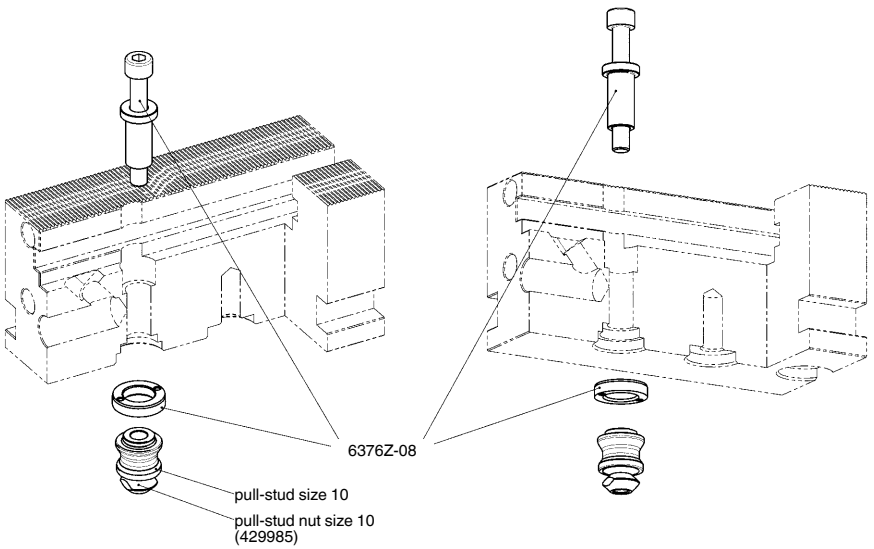
For through-bores in the clamping rail, see Item No. 6376G.
The threaded sleeve is produced from alloyed heat-treated steel, the adapter ring from case-hardened steel.
The fastening bolt conforms to strength class 10.9.

Application:

Adapter kit for reducing the locating bore from pull-stud size 20 to size 10.







Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

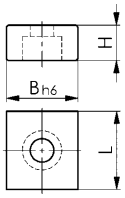
No. 6370ZI

Indexing T-nut

For clamping modules with indexing.
Case-hardened, burnished and ground, incl. fastening bolt.

Order no.	Size	B	H	L	Weight [g]
430264	10.2 / 10.3 / 20	8	8	10	6
550288	20.3	10	8	20	15





CAD

Application:

Indexing T-nut is used for the precise positioning of workpieces or fixtures on a clamping module with indexing function.

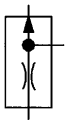
Note:

Order no. 430264 incl. M3 fastening bolt.
Order no. 550288 incl. M4 fastening bolt.

No. 6984-30

Support control, pneumatic

Order no.	Article no.	Stroke max. [mm]	Input pressure [bar]	Spring force min. [N]	Spring force max. [N]	Weight [g]
325217	6984-30	5	1 - 2	1,9	2,6	36





Design:

Housing from hardened and burnished steel. Pistons are tempered, nitrided and ground.
Compression spring from stainless steel.

Application:

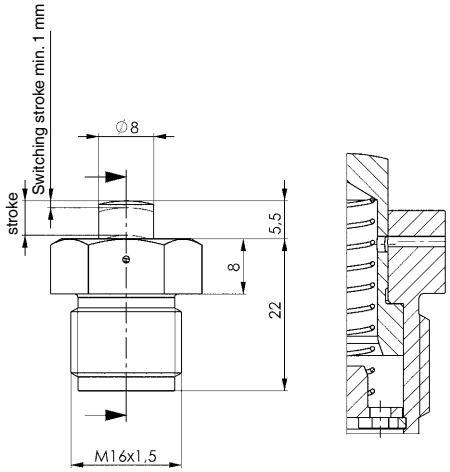
The support control is used in fixtures where a signal indicating a correctly supported workpiece is required to enable machining. Lightweight workpieces should be clamped before being pressurised with compressed air.

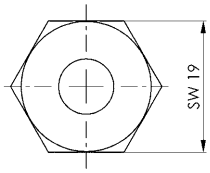
Features:

The support control works like a pneumatic back-pressure nozzle. The position is extended from its initial position by a pressure spring. Once applied, the air jet flows through the hollow piston and the radial discharge hole on the support control housing to outside. The discharge hole is sealed as soon as a workpiece is mounted and the piston is pushed downwards by min. 1 mm. The air flow backs up, the internal air pressure rises. The pressure value must be transferred to the control by an appropriate pressure signal converter. The system is relatively insensitive to fine chips.

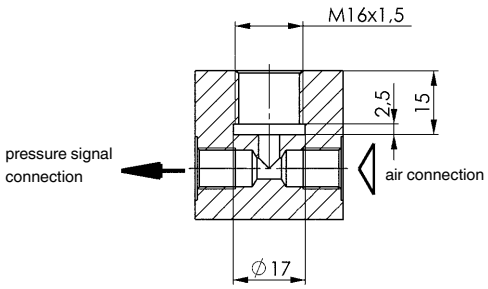
Note:

The pressure signal converter is not included in the supply scope.
Effective piston surface with closed nozzle = 0.95 cm^2
Piston force = piston surface x air pressure + spring force
Reduce the input pressure to 1 bar up to a maximum of 2 bar when the air duct is open, e.g. with a throttle check valve. When the air duct is closed, there is a dynamic pressure of approx. 3 bar.





Installation drawing



CAD

Subject to technical alterations.

No. 6370ZMMG

Coupling mechanism adapter

Suitable for installation clamping module nos. 6151HA / 6151L.

Order no.	Size	Nominal bore [NW]	A	A1	A2	B	HA	K	dia. N	dia. P	R	T	U	Weight [Kg]
424002	**20**	5	56	33	18	65	35	13	6 H7	9	G1/8	12	45	0,9
424184	**40**	5	56	33	18	65	45	13	6 H7	9	G1/8	12	45	1,0

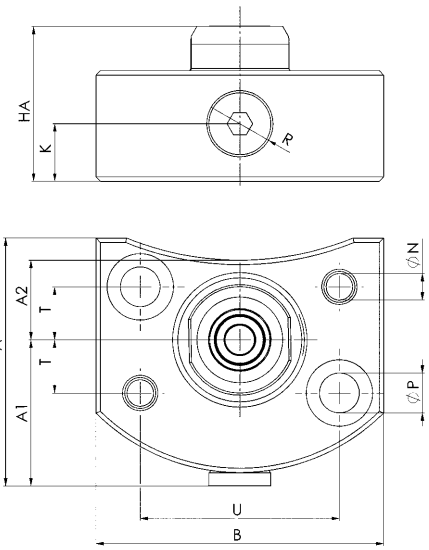


Application:

Couplings are used for loss-free transfer of liquid and gaseous media and are adjusted to the cover height of the installation clamping modules.

Note:

The coupling mechanism and nipple must be guided approx. 2-3 mm before contact with the axial sealing surfaces. The radial position tolerance (+/- 0.2mm) must not be exceeded. The couplings can only be coupled in a depressurised state.
The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula F [N] = 15.4 x p [bar] and must be taken into account.



CAD

No. 6370ZMM

Screw-in coupling mechanism

Max. operating pressure 400 bar.

Order no.	Size	Nominal bore [NW]	A	dia. B	C	G	K	dia. P	SW	Weight [g]
424267	**10**	5	M30x1,5	24	19	29,0	7	25	22	74
424200	**10.3 / 20**	5	M30x1,5	24	19	29,0	10	25	22	65
424226	**20.3 / 40**	5	M30x1,5	24	24	31,5	15	25	22	96

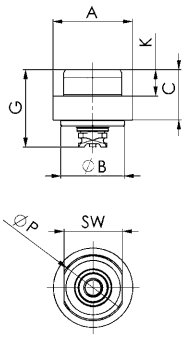


Application:

Couplings are used for loss-free transfer of liquid and gaseous media and are adjusted to the cover height of the installation clamping modules.

Note:

The coupling mechanism and nipple must be guided approx. 2-3 mm before contact with the axial sealing surfaces. The radial position tolerance (+/- 0.2 mm) must not be exceeded. The couplings can only be coupled in a depressurised state. The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula F [N] = 15.4 x p [bar] and must be taken into account.



CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZMNG

Coupling nipple adapter

Suitable for coupling mechanism no. 6370ZMMG / ZMM.

Order no.	Size	Nominal bore [NW]	dia. A	B	C	D	G	K	dia. P	T	U	Weight [g]
424242	**10.3 / 20 / 20.3 / 40**	5	35	35	60	20	47,5	38,5	5,5	20	40	320

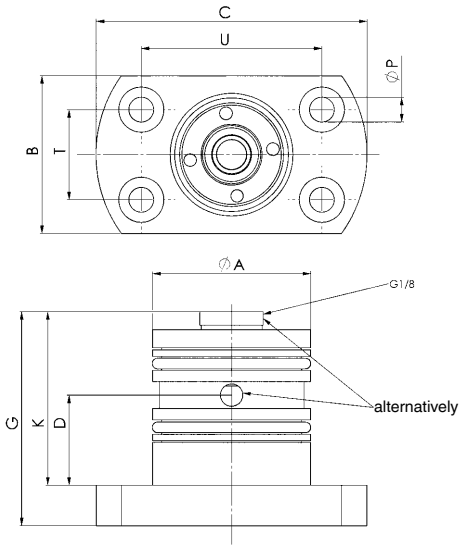


Application:

The coupling nipple adapter is the counterpart to the coupling mechanism and is used in the interchangeable pallet in which the pull-studs are also located. Couplings are used for loss-free transfer of liquid and gaseous media and are adjusted to the height of the installation clamping modules.

Note:

The mounting housings of the two parts must be guided approx. 2-3 mm before contact with the axial sealing surfaces. This function is taken over by the coupling nipple adapter through the centring function. The medium can be passed on at the top over the pipe connection or over the O-ring connection. The radial position tolerance (+/- 0.2 mm) must not be exceeded. The couplings can only be coupled in a depressurised state. The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula F [N] = 15.4 x p [bar] and must be taken into account.



CAD

No. 6370ZMN

Screw-in coupling nipple

Max. operating pressure 400 bar.

Order no.	Nominal bore [NW]	A	dia. B	G	dia. H	K	L	P	ØR	Weight [g]
430058	5	M24x1,5	20	27	13,5	14	4,5	18,5	4 x 2,8	56

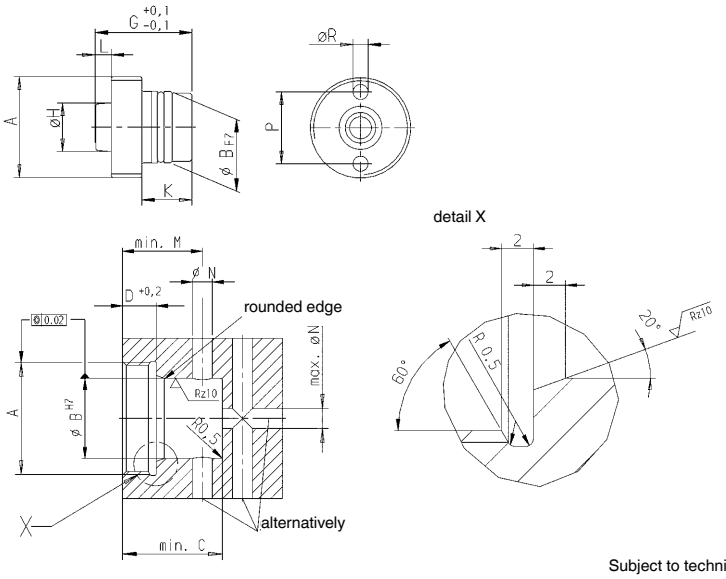


Application:

Couplings are used for the leakage-free connection of hydraulic oil supplies.

Note:

The coupling mechanism and nipple must be guided approx. 2-3 mm before contact with the axial sealing surfaces. The radial position tolerance (+/- 0.2 mm) must not be exceeded. The couplings can only be coupled in a depressurised state. The separating force due to hydraulic pressure between the coupling nipple and mechanism is given by the formula F [N] = 15.4 x p [bar] and must be taken into account.



CAD

Subject to technical alterations.

No. 6370ZD-004

Air-Hydraulic Pump

Max. operating pressure 60 bar.

Order no.	Pneum. pressure min. [bar]	Pneum. pressure max. [bar]	Oil capacity usable [cm³]	Flow rate max. [cm³/min]	Weight [Kg]
426569	4	6	1000	750	5,9



Design:

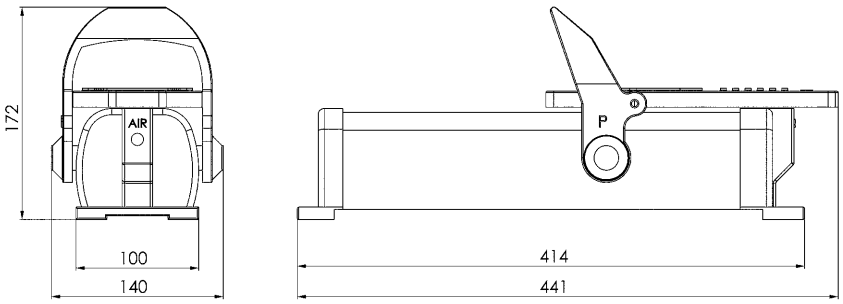
Compact, air-pressure-operated hydraulic intensification pump for single-acting circuits. The pump is fitted with an integrated safety valve that regulates the hydraulic output pressure. The safety valve is set in the factory to the max. operating pressure of 60 bar.
The extension element in the oil tank allows the pump to be adjusted horizontally and vertically.
Air connection thread: G1/4
Oil connection thread: G1/4

Application:

The air-hydraulic pump is used for opening for hydraulic clamping modules or hydraulic clamping stations.

Note:

The use of purified, lubricated compressed air is recommended for operation of the pump.



CAD

No. 6370ZD

Pressure intensifier

Max. operating pressure 100 bar.

Order no.	Oil capacity [cm³]	Flow rate [cm³/min]	Rato	max. no. of clamping cylinders	Weight [Kg]
554493	400	400	1 : 10	22 (Typ 20), 9 (Typ 40)	17,4



Design:

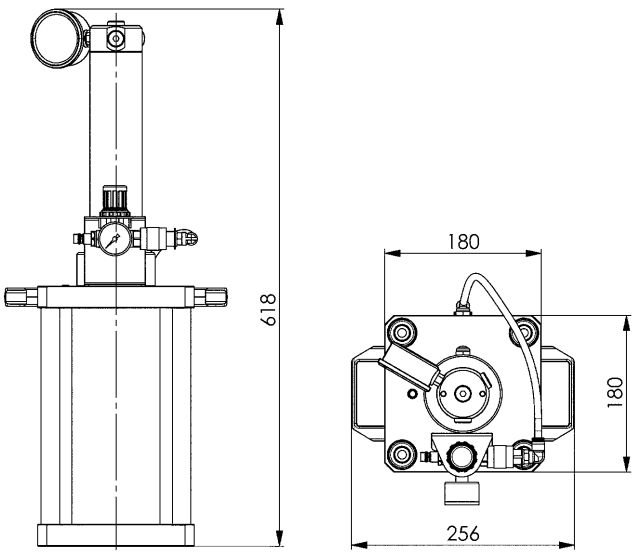
Compact, air-pressure-operated pressure intensifier for single-acting hydraulic circuits. With pneumatic control unit for the hydraulic output pressure, pressure gauge and fill level indicator.

Application:

The pressure intensifier is used for opening for hydraulic clamping modules or hydraulic clamping stations.

On request:

- Pressure intensifier with enlarged oil volume



CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZS-06-2000

Hose set, hydraulic

Max. operating pressure 100 bar.

Order no.	Length [m]	Weight [g]
430082	2	730

Design:

The connection set includes:
1x hydraulic connecting tube, length 2 m
2x straight screw pipe connections
2x straight screw-on fittings
1x T-screw-on fitting
1x pressure gauge 0-100 bar
1x straight female stud coupling
2x quick coupling sleeves
2x quick coupling plugs.

Application:

This set is used for the hydraulic connection of extension clamping modules or clamping stations for pressure generators such as pressure intensifiers or air-hydraulic pumps.





Subject to technical alterations.

No. 6370ZR

Pipe fittings, brass

for pipes external Ø 8 mm, internal Ø 4 mm.
Max. operating pressure 100 bar.

Application:

Fitttings for piping of surface-mounted clamping modules and flange versions.

Note:

* Article 429936:
Seamless hydraulic pipe, phosphate-coated and lubricated, ø 8x2 mm, length 2.0 m, made of steel (fully killed cast steel) in accordance with DIN 2391 C normalised, bright-annealed (NBK) cold-drawn.

Order no.	Fig. No.	Connection	Weight [g]
320986	1	G1/4	80
305409	1	G1/8	44
321000	2	G1/4	31
305417	2	G1/8	23
321026	3	G1/4	95
305425	3	G1/8	60
321042	4	-	37
321067	5	-	56
427963	6	G1/8	16
429019	6	G1/4	44
429936	7	*	475


1)

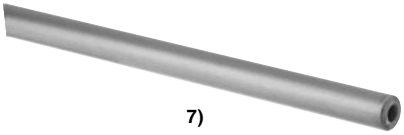

2)


3)


4)


5)


6)


7)

CAD

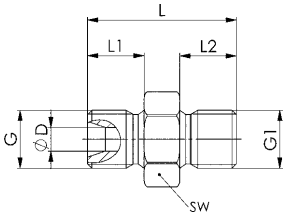
No. 6370ZRA

Adapter with external thread

Max. operating pressure 350 bar.

Order no.	dia. D	G	G1	L	L1	L2	SW	Weight [g]
558045	4	G1/8	G1/8	25	10	10	14	14
558050	4	G1/8	G1/4	28	10	11	19	22





Design:

Adapter with external thread in inches, made of steel, galvanised.

Application:

For adaptation of hydraulic connection components for zero-point clamping systems.

Note:

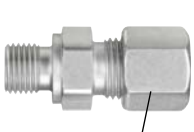
The Cu sealing rings are not supplied as standard and must be ordered separately.
Form A sealing ring Cu (copper):
G1/8: order no. 69815
G1/4: order no. 69823




CU seal
69823

427856


427872


321000



Subject to technical alterations.

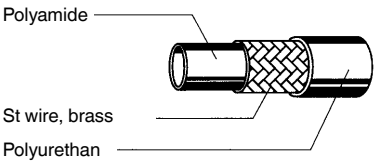
No. 6985R

High Pressure Hose

Max. operating pressure dyn. at +50°C 375 bar.

Order no.	Article no.	Bending radius min. [mm]	dia. D [mm]	dia. D1 [mm]	dia. D2 [mm]	L [mm]	Weight [g]
63198	6985R-300	30	9,8	4,8	8	300	65
63206	6985R-500	30	9,8	4,8	8	500	90
63214	6985R-800	30	9,8	4,8	8	800	120
63222	6985R-1250	30	9,8	4,8	8	1250	180
63230	6985R-2000	30	9,8	4,8	8	2000	265
63248	6985R-3000	30	9,8	4,8	8	3000	380





Design:

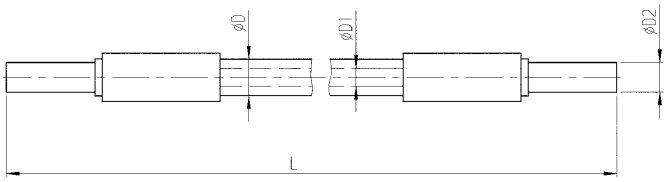
Steel fitting, galvanized and passivated. Hose of synthetic material with high tensile brassed steel-wire braid.

Application:

Insert hose and tighten with 1/4 turn maximum.

Note:

We recommend only using the 3-metre long high pressure hose for double-acting elements. These high pressure hoses can be used directly in pipe connections. The maximum service life must be 6 years but the maximum service life must not exceed 10 years. Date of manufacture (quarter/year) is printed on the hose. Serviceability must be assessed in accordance with established inspection criteria. See DIN 20066, section 5 for further details.





No. 6370ZS-08

Hydraulic tube

Max. operating pressure dyn. at +50°C 375 bar.

Order no.	Test pressure [bar]	Bending radius min. [mm]	dia. D	dia. D1	G	G1	L	SW	SW1	Weight [g]
558008	1200	20	5	2	G1/8	G1/4	1000	14	19	20

Design:

Steel fitting, galvanized and passivated. Hose of synthetic material with high tensile brassed steel-wire braid.

Application:

Connection and installation of hydraulic zero-point clamping systems under reduced space conditions or small bending radius.

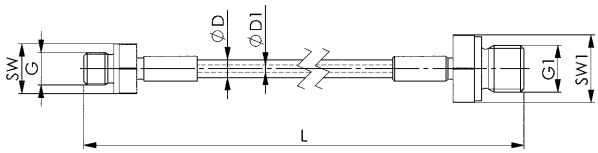
Note:

The period of use of a hydraulic hose, including any storage period, should not exceed six years. The serviceability must be assessed according to established inspection criteria. See DIN 20066, section 5 for further details.











No. 6370ZSK

Quick coupling „flat-face“ G1/8

Max. operating pressure 420 bar.

Order no.	Nominal bore [NW]	Nominal flow [l/min]	SW [mm]	Weight [g]
558043	4	3	17	38
558044	4	3	19	72

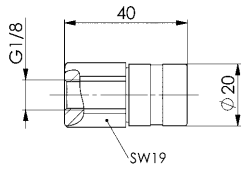


Application:

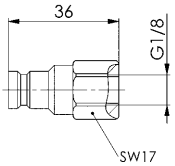
Since the clamping modules after blow-off of the opening pressure are mechanically locked, the hose is then uncoupled by means of the quick couplings. The advantage of this is that there are no interfering lines.

Note:

Flat-sealing quick coupling with internal thread G1/8.
Adapters from internal to external thread and copper sealing rings are not supplied as standard and must be ordered separately.
G1/8 to G1/8: Order no. 558045
G1/8 to G1/4: Order no. 558050
Copper sealing ring: Order no. 69815



558044 sleeve



558043 connector

CAD

No. 6370ZSK

Quick coupling „flat-face“ G1/4

Zinc-plated.
Max. operating pressure 300 bar.

Order no.	Nominal bore [NW]	Nominal flow [l/min]	SW [mm]	Weight [g]
427856	6	12	22	100
427872	6	12	22	170

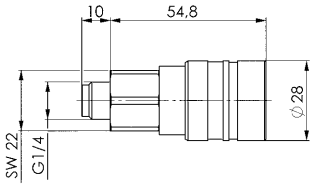


Application:

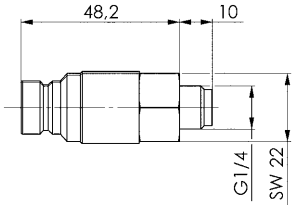
Since the clamping modules after blow-off of the opening pressure are mechanically locked, the hose is then uncoupled by means of the quick couplings. The advantage of this is that there are no interfering lines.

Note:

Flat-sealing quick coupling with internal thread G1/4. A threaded stud is supplied for external thread G1/4. A copper sealing ring is supplied as standard.



427872 sleeve



427856 connector

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZSK-11

Coupling connector

Brass.

NEW!



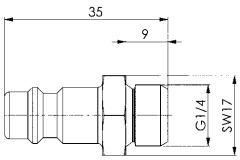
Order no.	Nominal bore [NW]	Nominal flow [l/min]	SW	Weight [g]
565059	7	1260	17	23

Application:

Coupling connectors are used for the pneumatic connection to pressure generators, e.g. the pressure intensifier and are suitable for coupler sockets, size 4 (NW7).

Note:

The sealing rings are not supplied as standard and must be ordered separately.
G1/4: Order no. 69823



No. 6988

Manifold

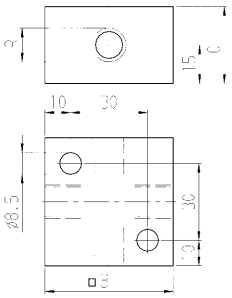
Order no.	Article no.	Operating pressure [bar]	NG	A	B	C	R	Oil connec-tions	Weight [g]
68825	6988-G1/4x4	400	6	-	50	30	G1/4	4	480
68817	6988-G1/4x6	400	6	200	50	30	G1/4	6	2025
560021	6988-G1/4x10	400	6	200	50	30	G1/4	10	1980

Design:

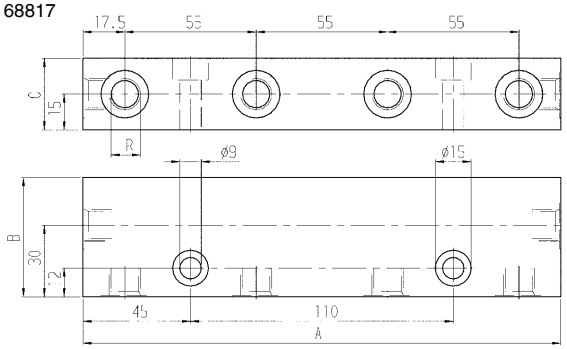
Housing from steel, burnished.



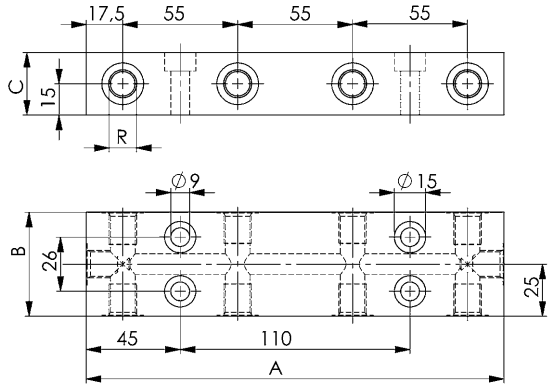
68825



68817



560021



CAD

Subject to technical alterations.

No. 6370ZVL-005

Pneumatic pressure booster

Order no.	Input pressure [bar]	Output pressure [bar]	Connection	Weight [Kg]
427088	2,5-8	4,5-10	G1/4	1,5



Design:

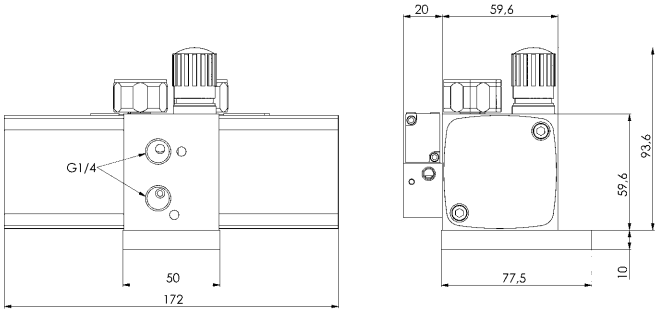
Pressure booster with possibility to adjust the pneumatic output pressure, incl. accessories such as pressure gauge kit, sound absorbers and flange mounting.

Application:

For strengthening the operating pressure with pneumatic clamping modules and compensation for pressure fluctuations in the supply line.

Note:

The pressure booster can be mounted in every installation position. For operation, filtered (40µm), unlubricated compressed air as per ISO 8573-1 is required. The pressure booster is suitable for ambient temperatures of +5 – +60 °C.
The accessories for the pressure booster still need to be installed.



No. 6370ZVL-004

Pneumatic pressure booster set

Order no.	Input pressure [bar]	Output pressure [bar]	Connection	Weight [Kg]
421396	2,5-8	4,5-10	G1/4	2,5

Design:

Pressure intensifier group with possibility to adjust the pneumatic output pressure, incl. manometer construction kit, sound absorbers, flange mounting, pressure control valve, manual direction valve, coupling plug, connections and plastic tube.

Application:

For strengthening the operating pressure with pneumatic clamping modules and compensation for pressure fluctuations in the supply line.

Note:

The pressure intensifier can be mounted in every installation position. For operation, filtered (40µm), unlubricated compressed air as per ISO 8573-1 is required. The pressure intensifier sub-assembly is suitable for ambient temperatures of +5 – +60 °C.



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZSK

Quick fitting coupling, pneumatic

Max. operating pressure 12 bar.

Order no.	Nominal bore [NW]	Nominal flow [l/min]	SW [mm]	Weight [g]
430041	4,2	563	14	23
430066	5,0	563	14	27



CAD

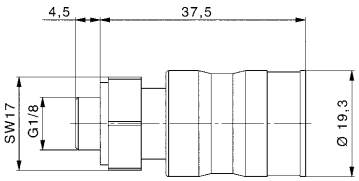
Application:

This pneumatic quick-release coupling is particularly suitable for use in the AMF zero-point clamping technology of the zero-point system.

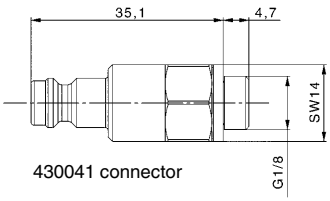
Note:

Sleeve with Order no. 430066:
Coupling valve with venting function and check valve. External thread G1/8.

Connector with Order no. 430041:
Dirt and shaving-repellent coupling connector with borehole for forced venting of the clamping station, fixture or zero-point clamping module. External thread G1/8.
Protective cap 6370ZSS-04 is supplied as standard. The sealing rings are not supplied as standard.



430066 sleeve



430041 connector

No. 6370ZSS-04

Protective cap

Material: TPS.
For 6370ZSK connectors
(quick coupling)

NEW!



Order no.	Packaging unit [St]	Weight [g]
563925	5	5

Application:

Protective cap for the connector on the pneumatic quick coupling with Order no. 430041.

Note:

To protect the connector from contamination.

No. 6370ZS-07

Hose, pneumatic

Polyurethane, outside calibrated.
Max. operating pressure 10 bar.



CAD

Order no.	Hose dia. [mm]	Length [m]	Weight [g]
430140	8	3	100

Application:

Hoses are used for the pneumatic connection of extension clamping modules or clamping stations.

No. 6370ZR-02

Push-in fittings, pneumatic

Max. operating pressure 12 bar.
For hose diameter 8 mm.


1)


2)

CAD

Order no.	Fig. No.	Connection	Weight [g]
421479	1	G1/8	14
421453	1	G1/4	16
430108	2	G1/8	19
430124	2	G1/4	27

Application:

Screwed connections are used for the pneumatic connection of extension clamping modules or clamping stations.

Subject to technical alterations.

No. 6370ZSV-01

T-plug connection, pneumatic

Max. operating pressure 14 bar.

NEW!



Order no.	Hose dia. [mm]	Weight [g]
567201	8	16

Application:

T-connectors are used to connect the pneumatic hoses.

No. 6370ZVL-007

Footrest valve, pneumatic

Max. operating pressure 10 bar.



Order no.	Air connection	Weight [g]
477570	G1/4	610

Application:

For controlling pneumatic clamping modules.

Note:

manual Footrest valve
valve function: 3/2 closed, monostable, latching

No. 6370ZSK-08

Air gun valve, pneumatic

Max. operating pressure 10 bar.



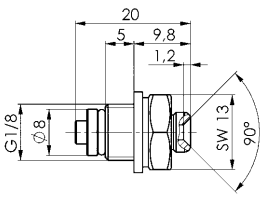
Order no.	Nominal bore [NW]	Nominal flow [l/min]	SW	Weight [g]
533075	2,5	240	13	10

Design:

Pneumatic air gun with integrated non-return valve.

Application:

For simple and quick opening of the pneumatic zero point clamping plates. When the air gun is positioned on the valve, the air pressure is released and then held by the non-return valve. Venting is effected by briefly and manually pushing the valve, which then resets under spring force.



CAD

Subject to technical alterations.

No. 6370ZF

Special grease for zero-point clamping modules

Order no.	Suitable for ambient temperature (°C) [°C]	Weight [g]
426494	0-80	250



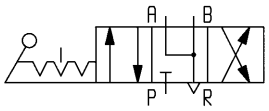
Application:

Special grease for maintenance work on zero-point clamping modules.

No. 6370ZVL

Manual directional valve

Max. operating pressure 12 bar.



Order no.	Type	Air connection	Weight [g]
305383	4/3	G1/4	250



Application:

For controlling pneumatic clamping modules.

Note:

4/3 manual directional valve opened in the centre position. G1/4 connections laterally.

No. 6916-11

Shut-off valve

max. operating pressure 500 bar.

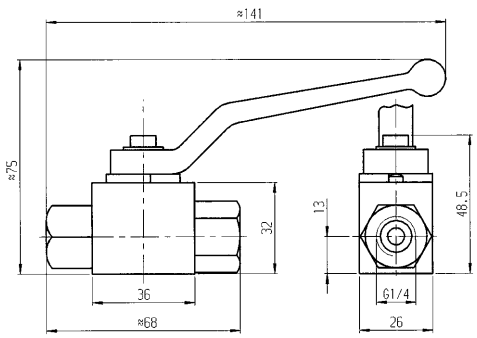




Order no.	Article no.	Oilflow bore DN (dia.)	Ambient temp. [°C]	Weight [g]
65326	6916-11	Ø 6	-20 - +100	350

Design:

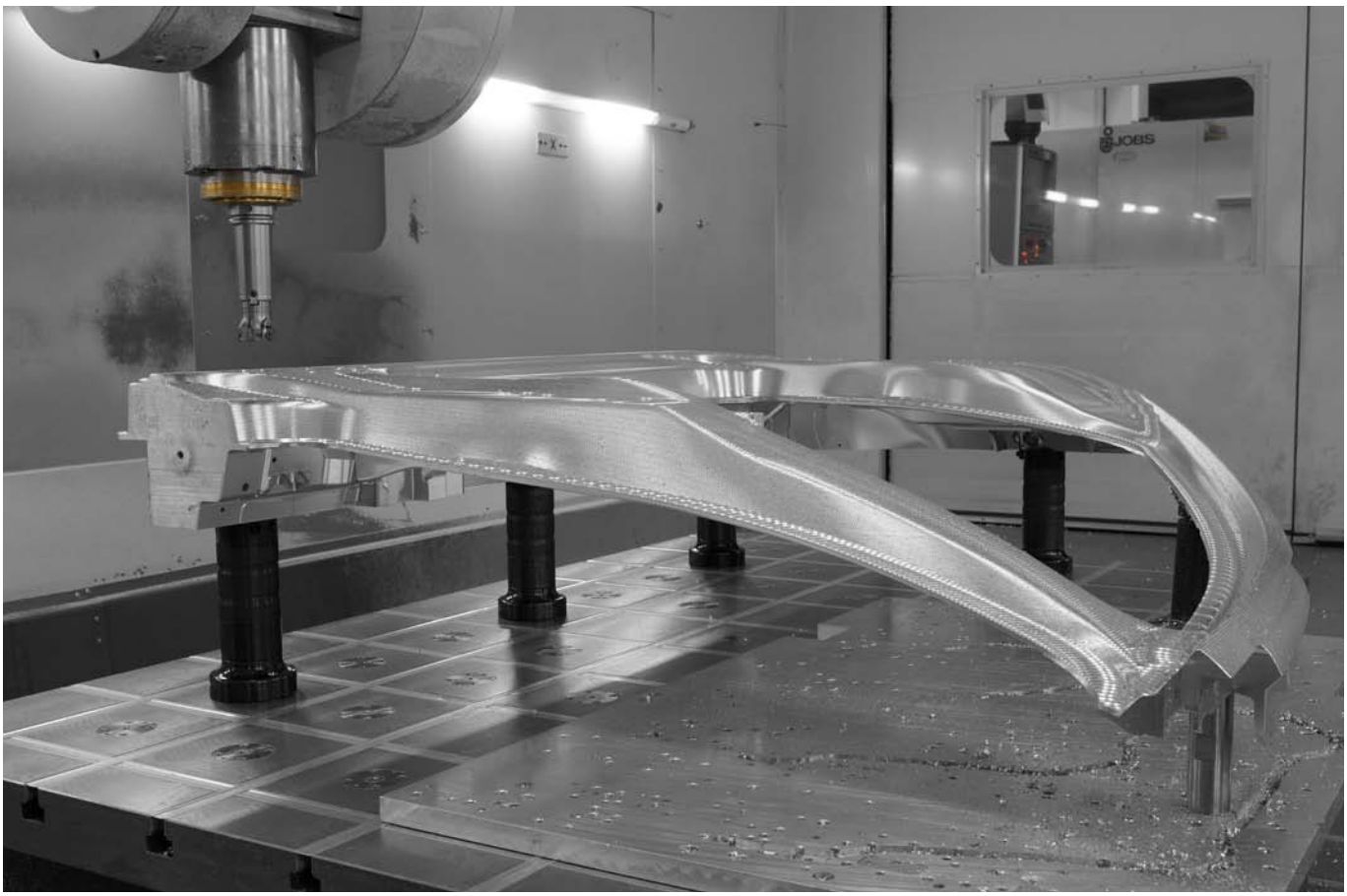
Housing and functioning components made of steel. Seal of shaft made of NBR.



Subject to technical alterations.



Direct clamping of the workpiece for large aluminium components. Zero-point clamping modules in the work table in conjunction with attachment and intermediate elements of the modular zero-point clamping system enable flexible clamping to be achieved.

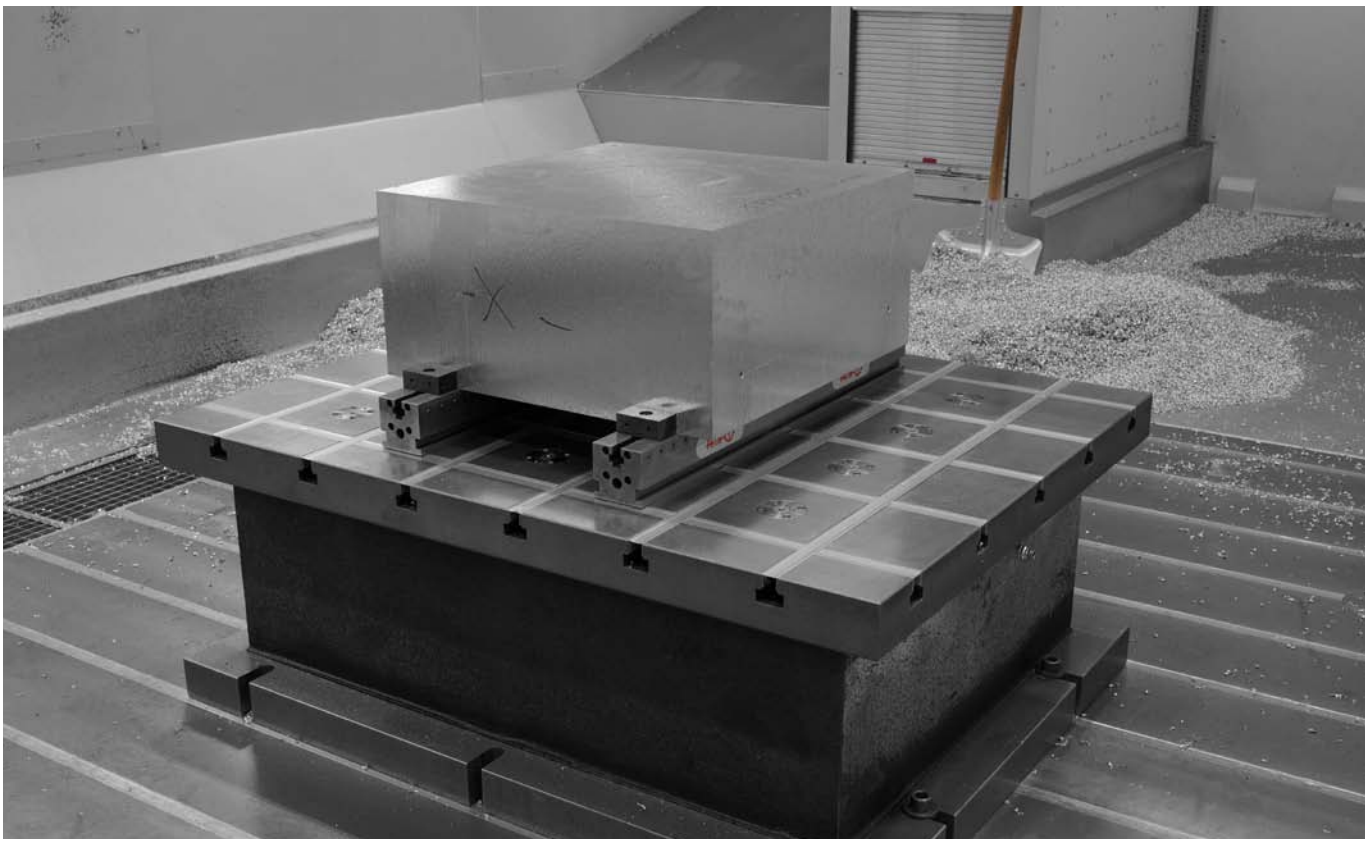


Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



Minimize set-up times with AMF zero-point clamping technology: the workpiece is clamped in just a few simple steps for five-sided machining.



The AMF zero-point clamping system provides the greatest possible flexibility.
The AMF multiple clamping system can be clamped simply using zero-point clamping technology and can then be integrated in the production process.

Subject to technical alterations.

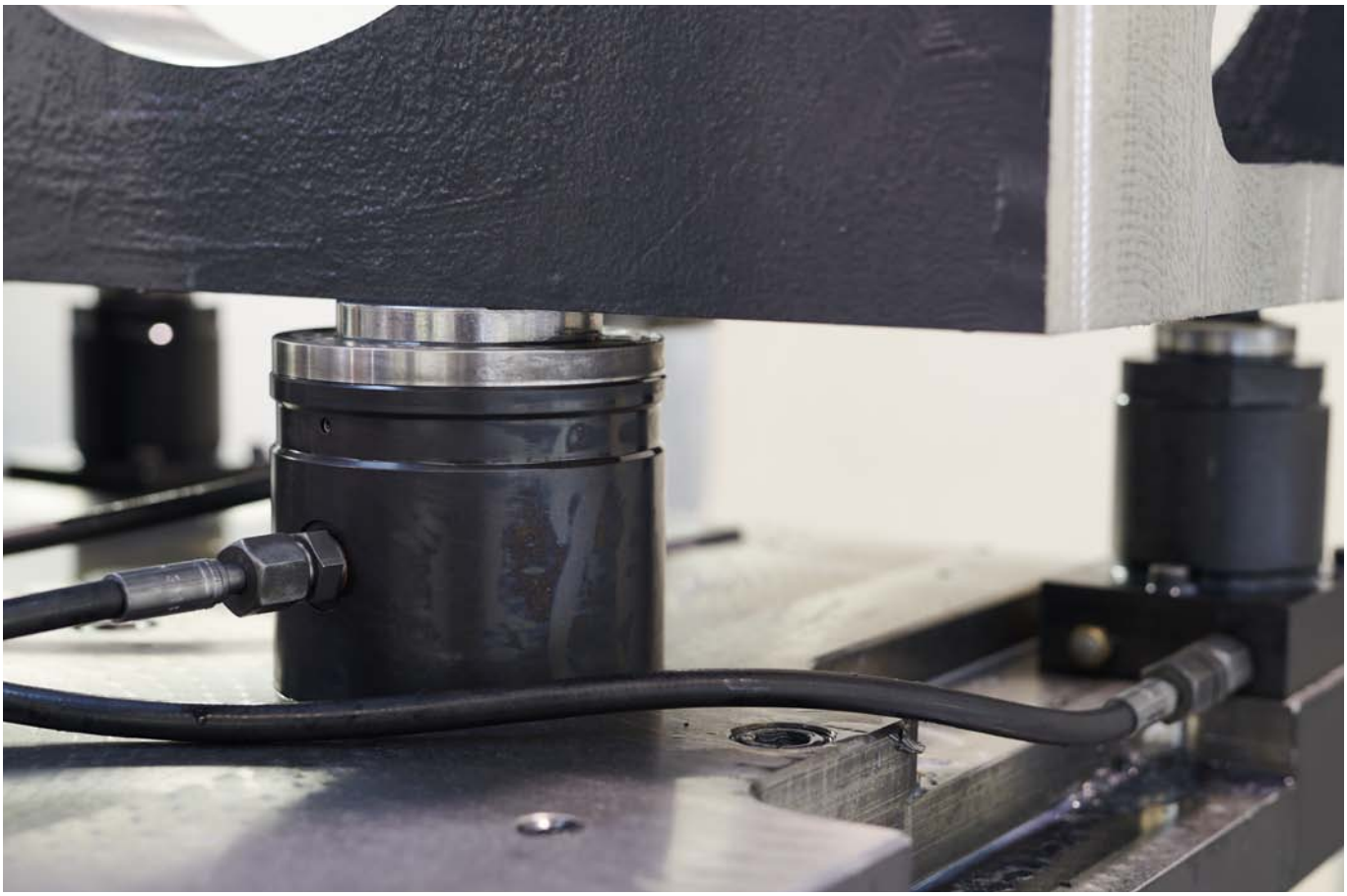


The zero point clamping towers are flexibly adapted to the respective workpiece by simply repositioning them.
Colour coding ensures safe, repeatable clamping.



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



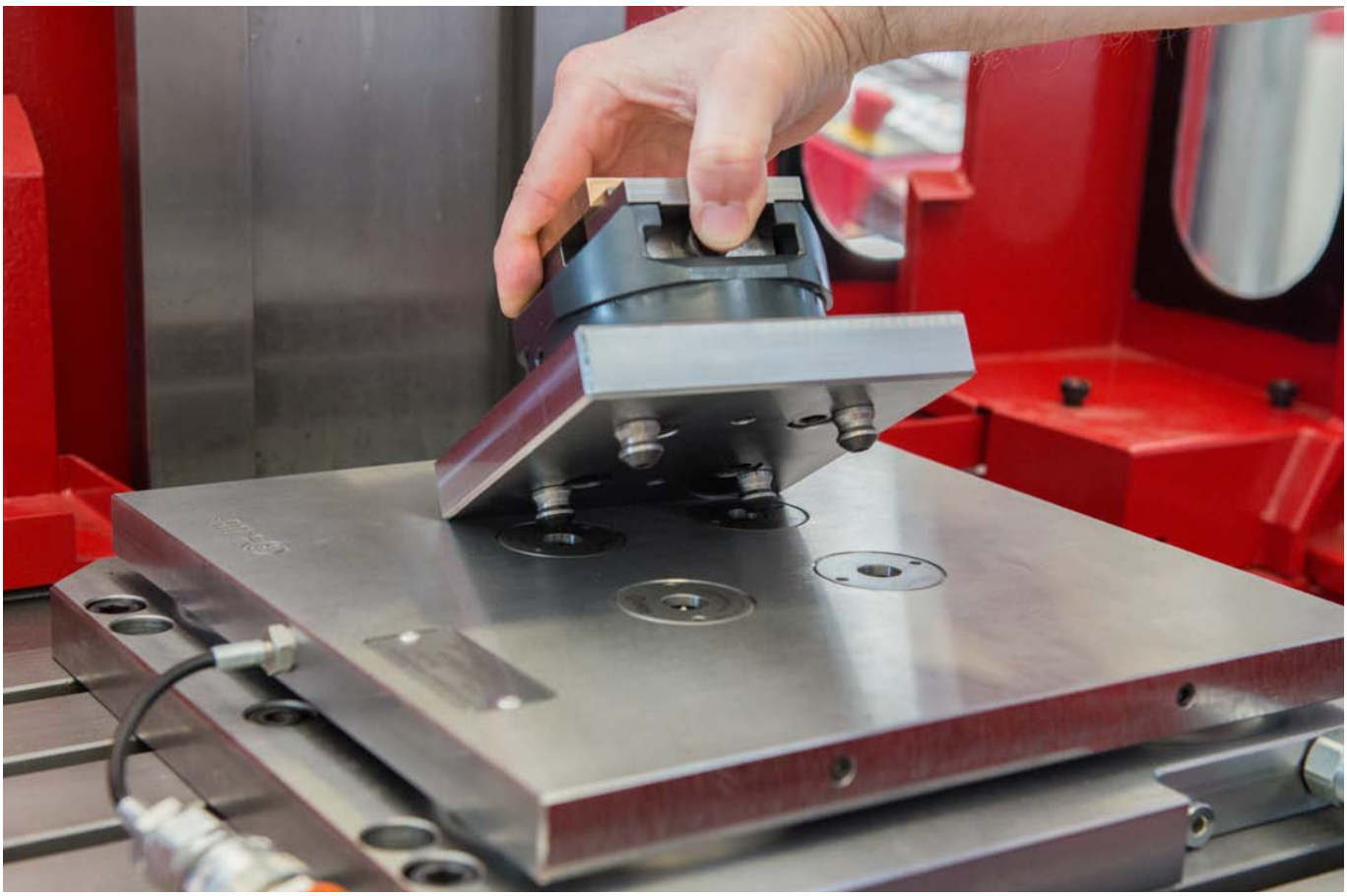
The zero point clamping modules fix and clamp the components directly, without distortion and accessible all around for five-sided machining.



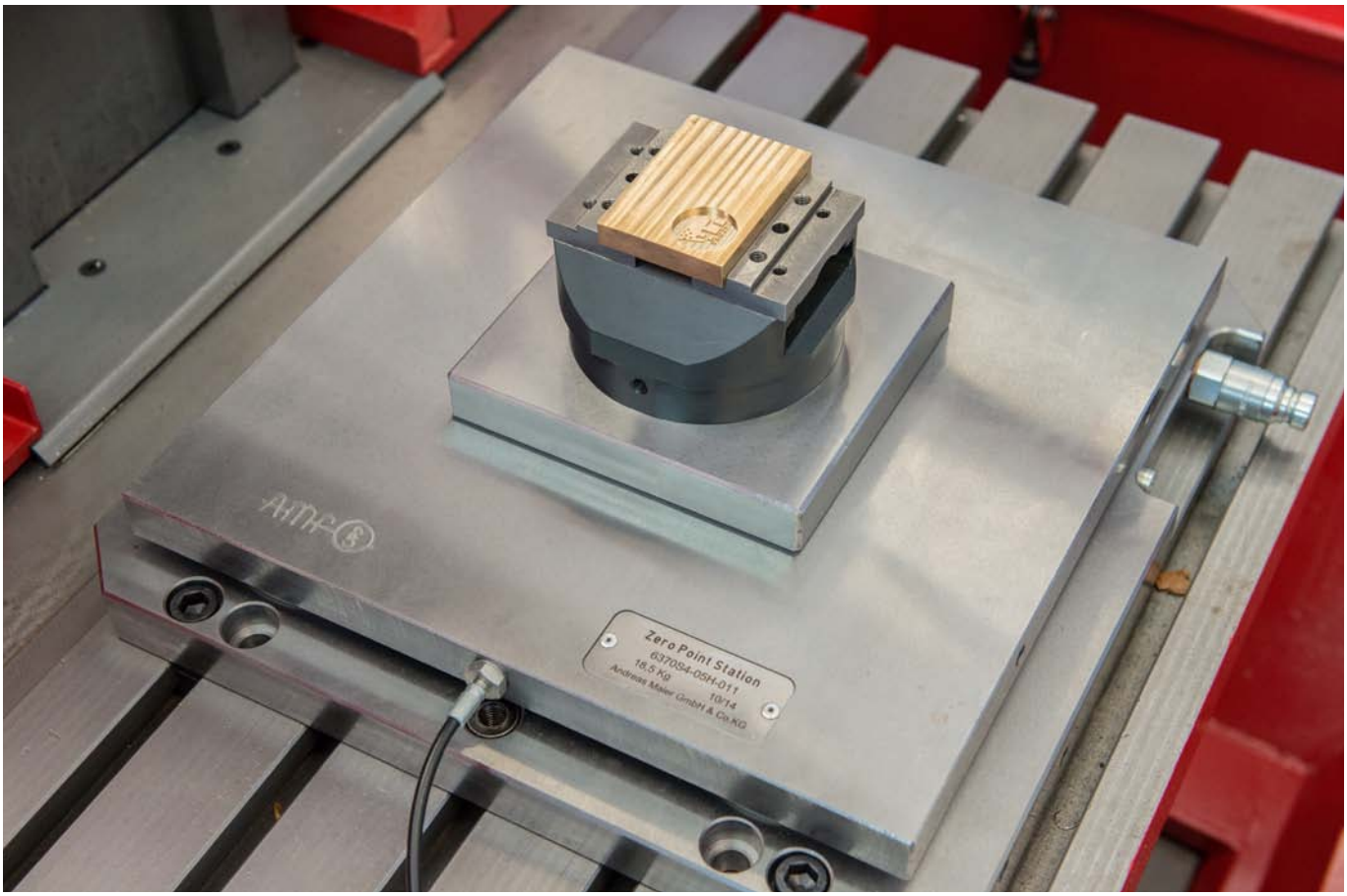
Lifting tables equipped with zero-point clamping technology for deburring the workpieces.
As a result, the complete manufacturing process has been seamlessly optimised with the AMF Zero-Point-System.



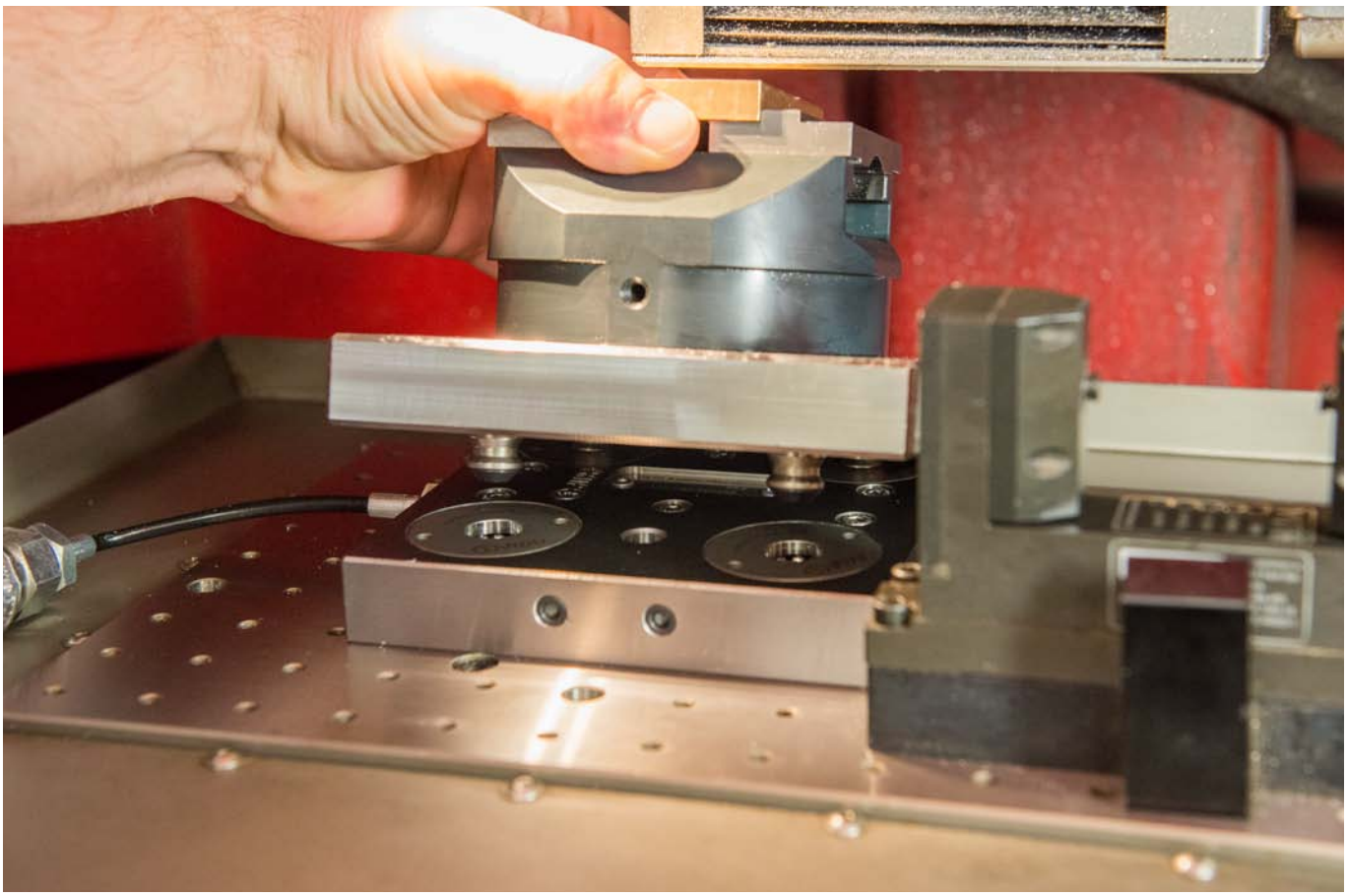
Use of various sizes of standard clamping modules in one application.



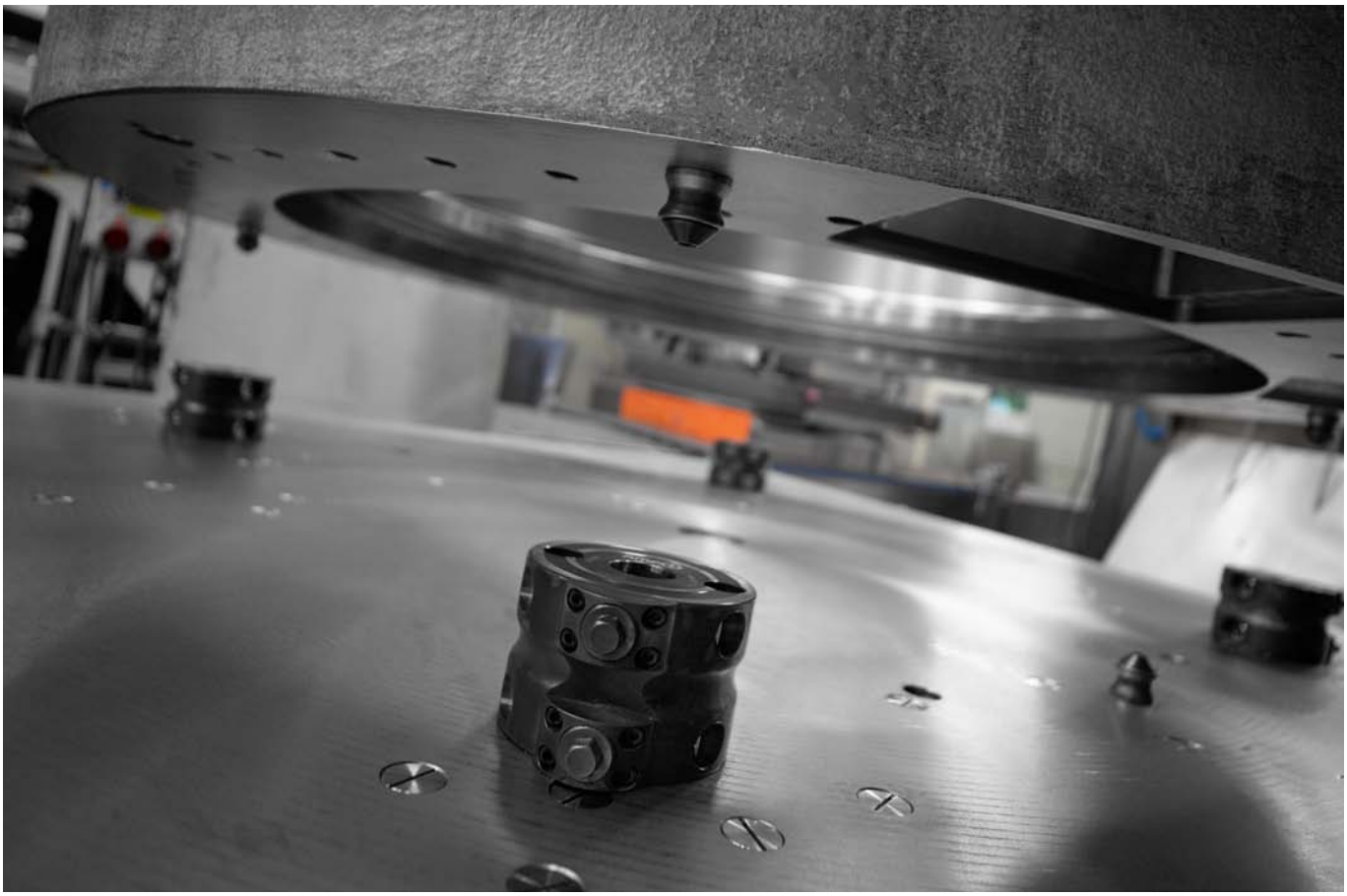
Subject to technical alterations.



The AMF zero-point system is the standard interface here between various machines.
This means that the workpiece can be clamped on the different machine tables in such a way that optimises set-up time regardless of the size.



Subject to technical alterations.



Direct clamping of component by means of mechanical, double clamping modules.



Subject to technical alterations.



Optimisation of set-up times in small-series production by means of variable, direct clamping of the component.
The double clamping modules can be adapted quickly to the different components simply by repositioning.



Subject to technical alterations.

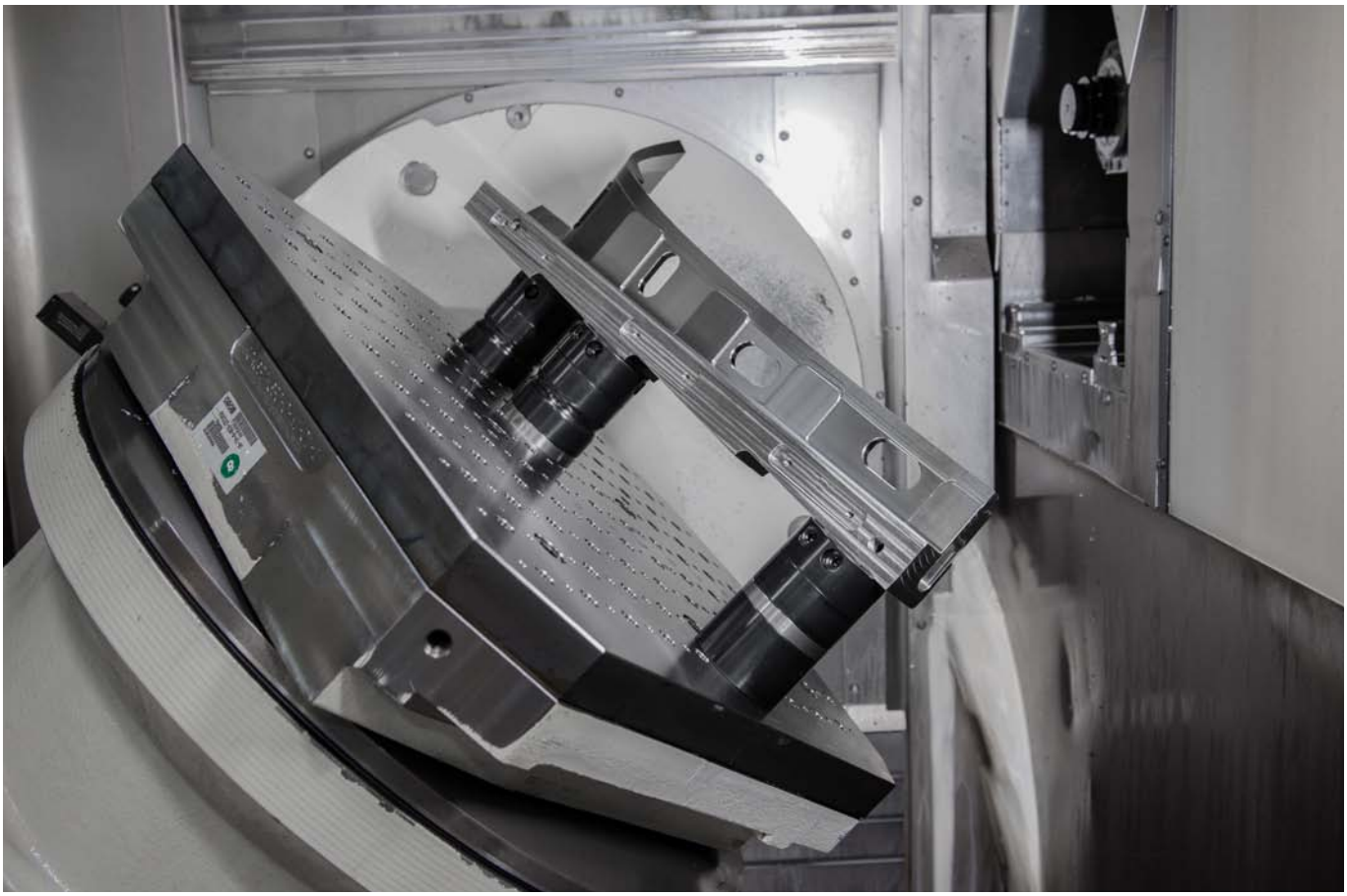


Modular mechanical zero-point clamping system in tool and mould making.
The different clamping heights required can be easily adjusted using the standardized construction kit system.

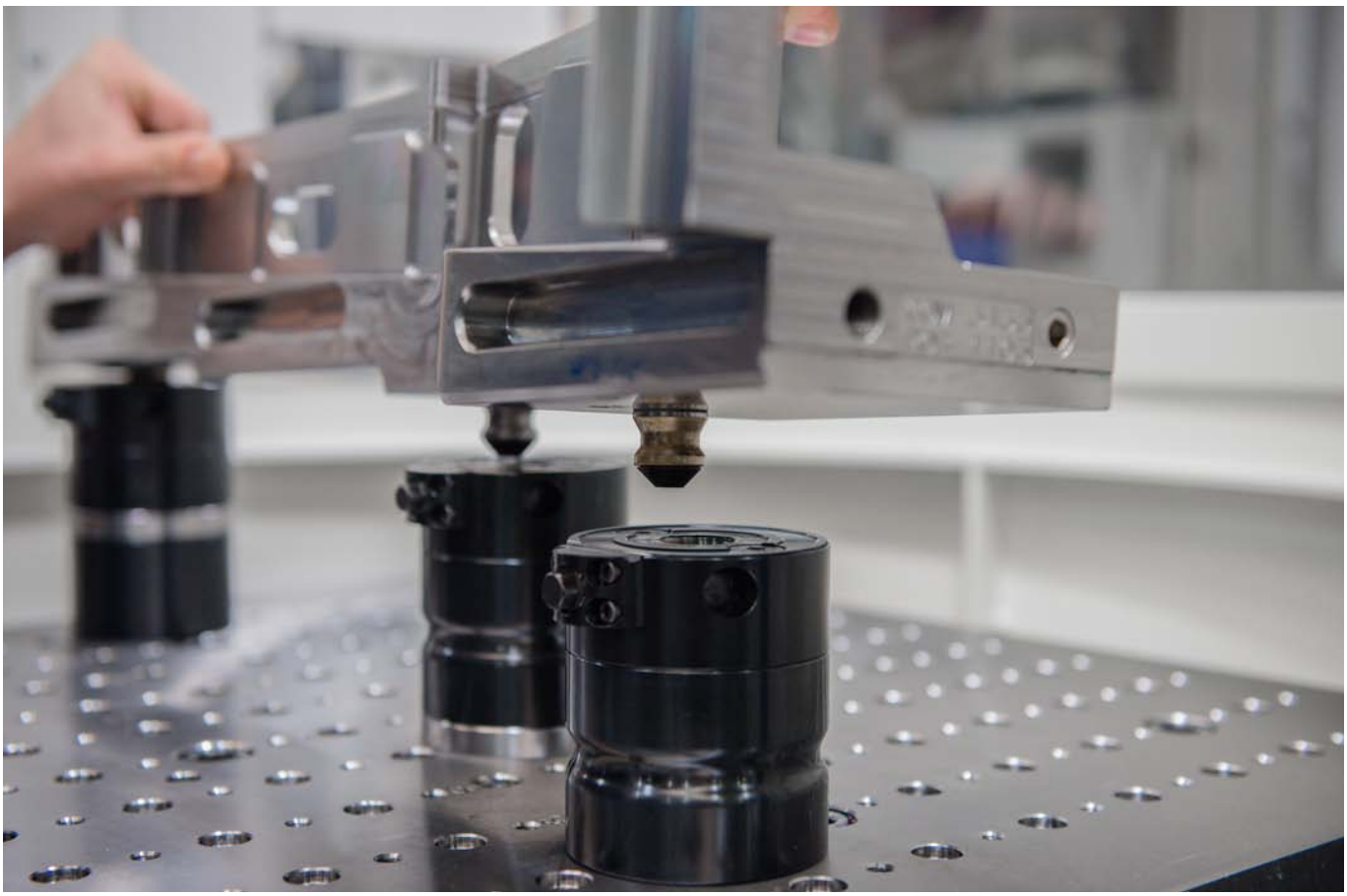


Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



Simple 5-sided machining of workpieces with a complex outer contour. The clamping pillars can be built up with repeatable accuracy by positioning on the perforated grid plate. This enables fast planning and creation of the NC programs.



Subject to technical alterations.

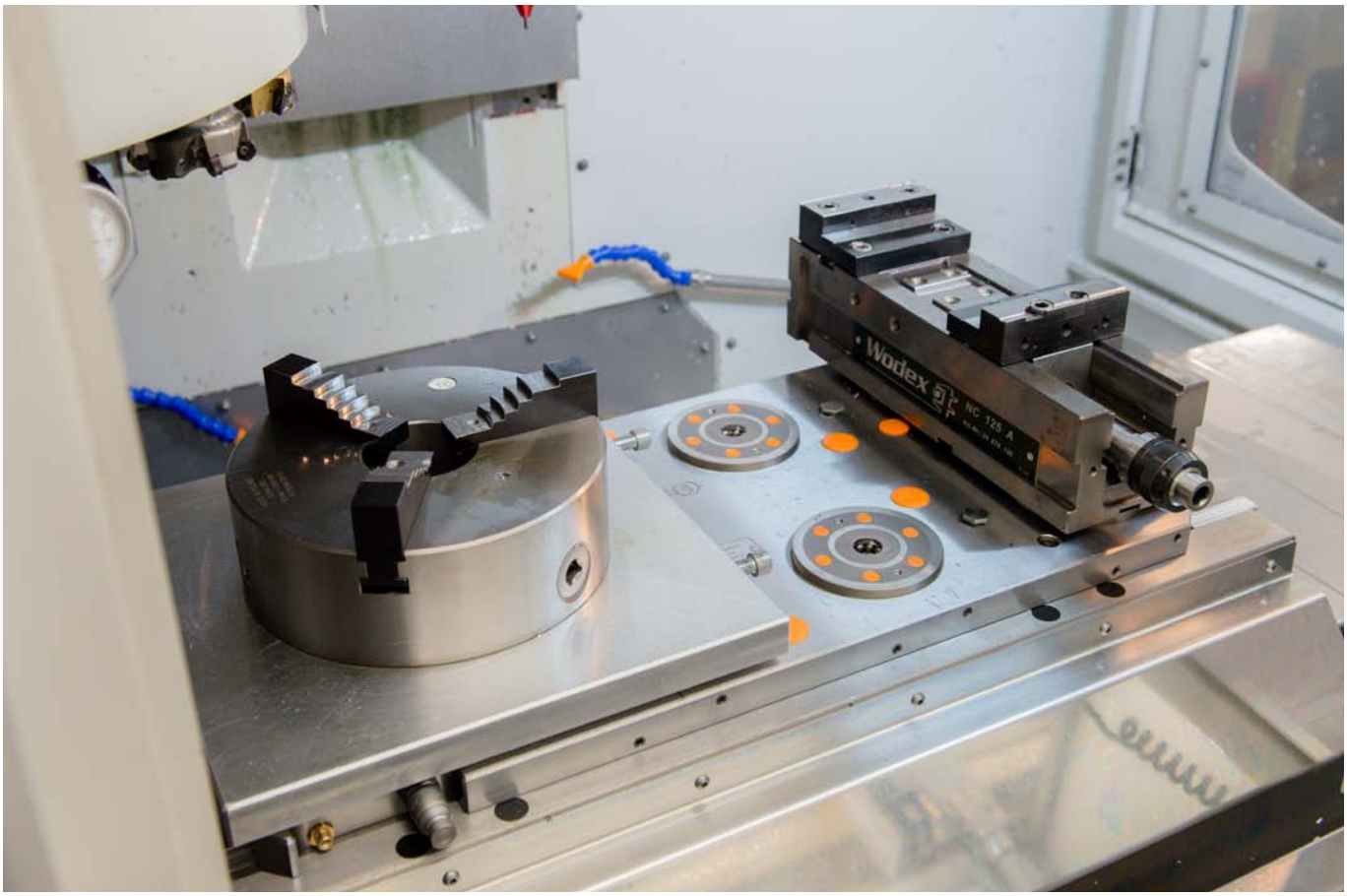


Easy alignment of multiple vices when machining long workpieces.



AMF multiple clamping system in conjunction with the AMF zero-point system.

Subject to technical alterations.



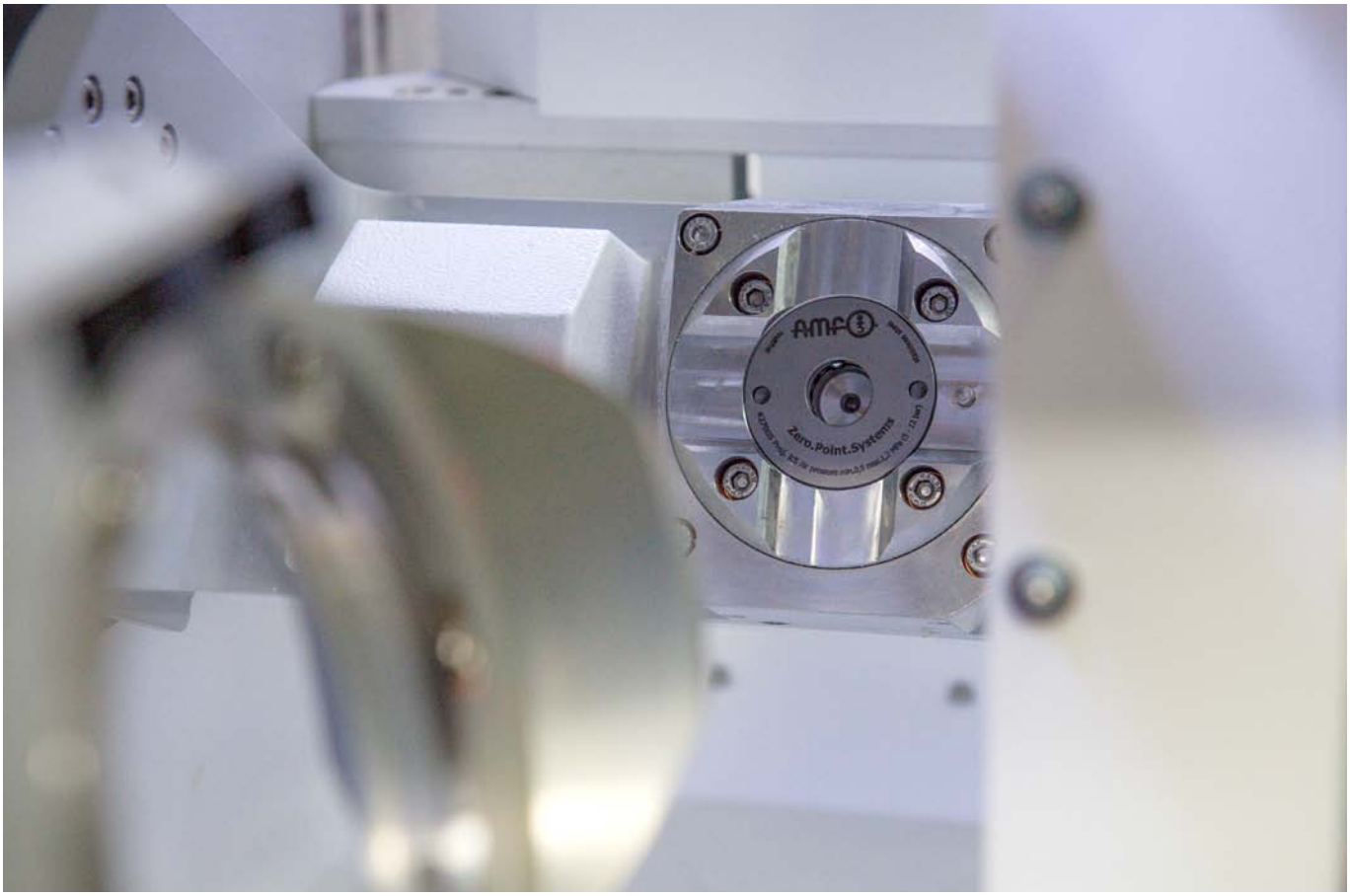
8-point clamping station for mounting different standard clamping equipment or direct clamping of the workpiece.



Subject to technical alterations.

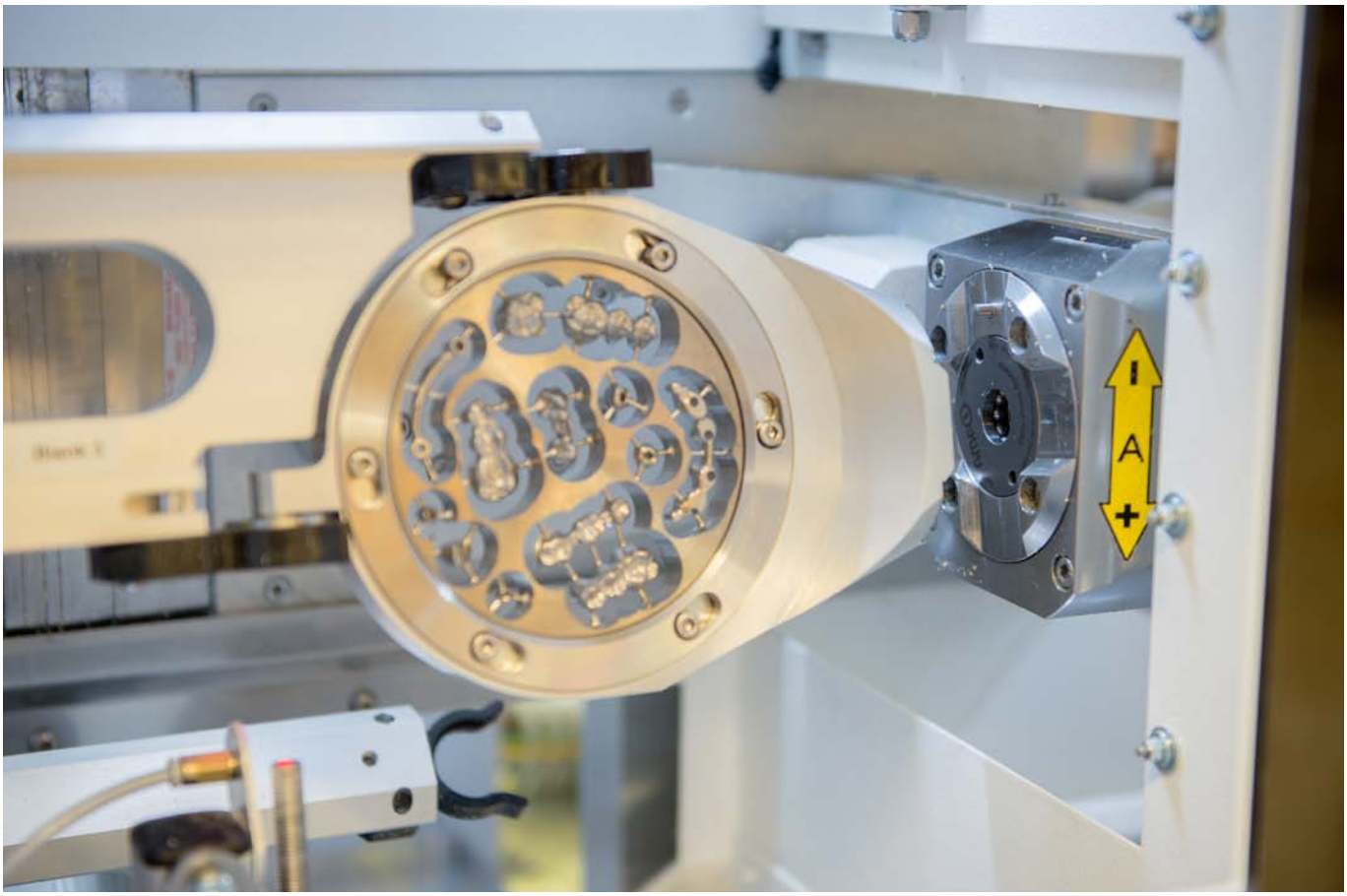


Fully automatic loading and clamping of circular blanks during the production of dental implants.



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



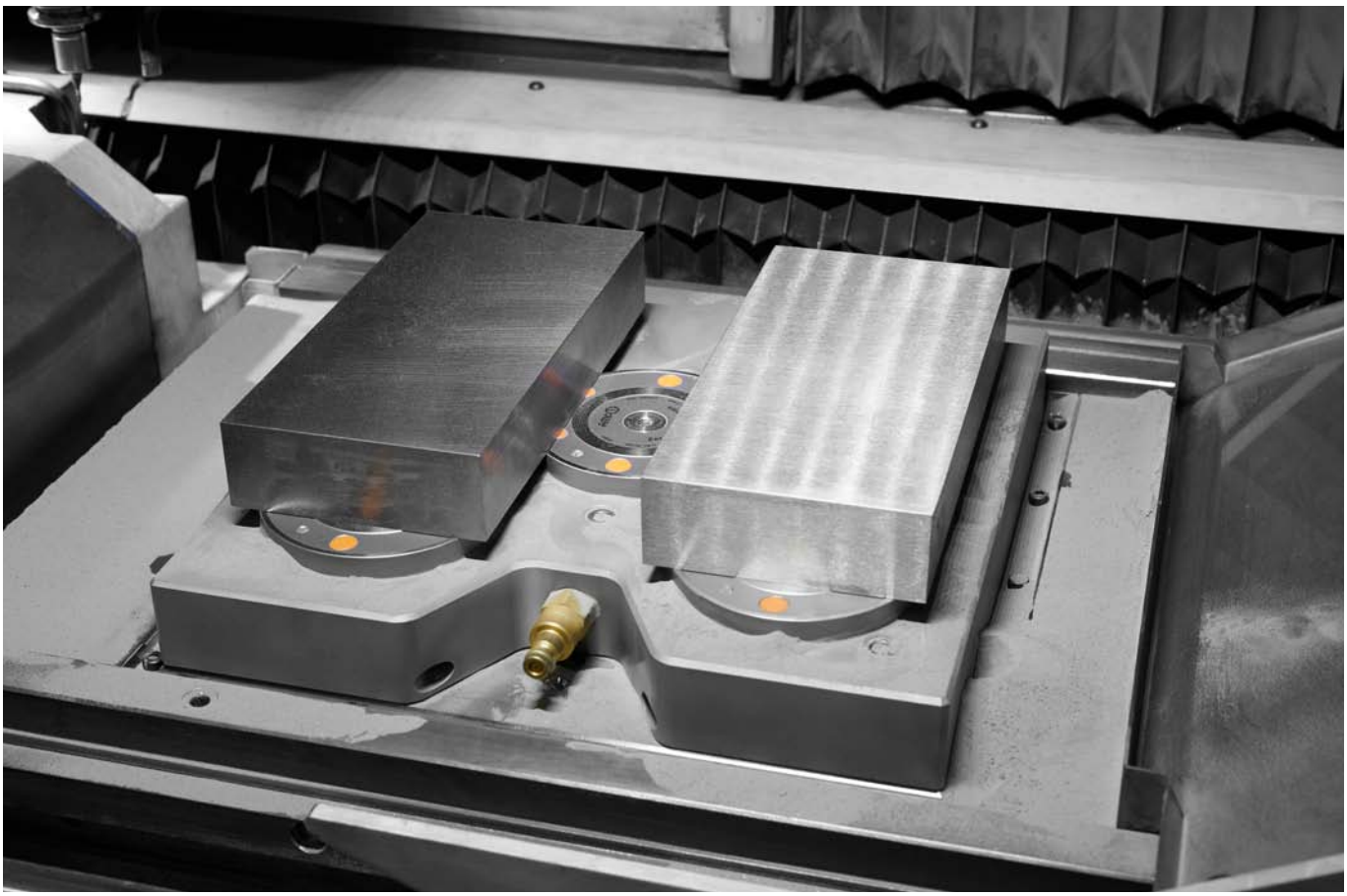
Our zero-point system is the factory standard interface here between the machine table and blank carrier.



Subject to technical alterations.



AMF-Zero-Point-Systems in additive manufacturing.
The 5-point clamping station enables the substrate plate to be changed quickly on the hybrid machine (SLS / HSM).



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



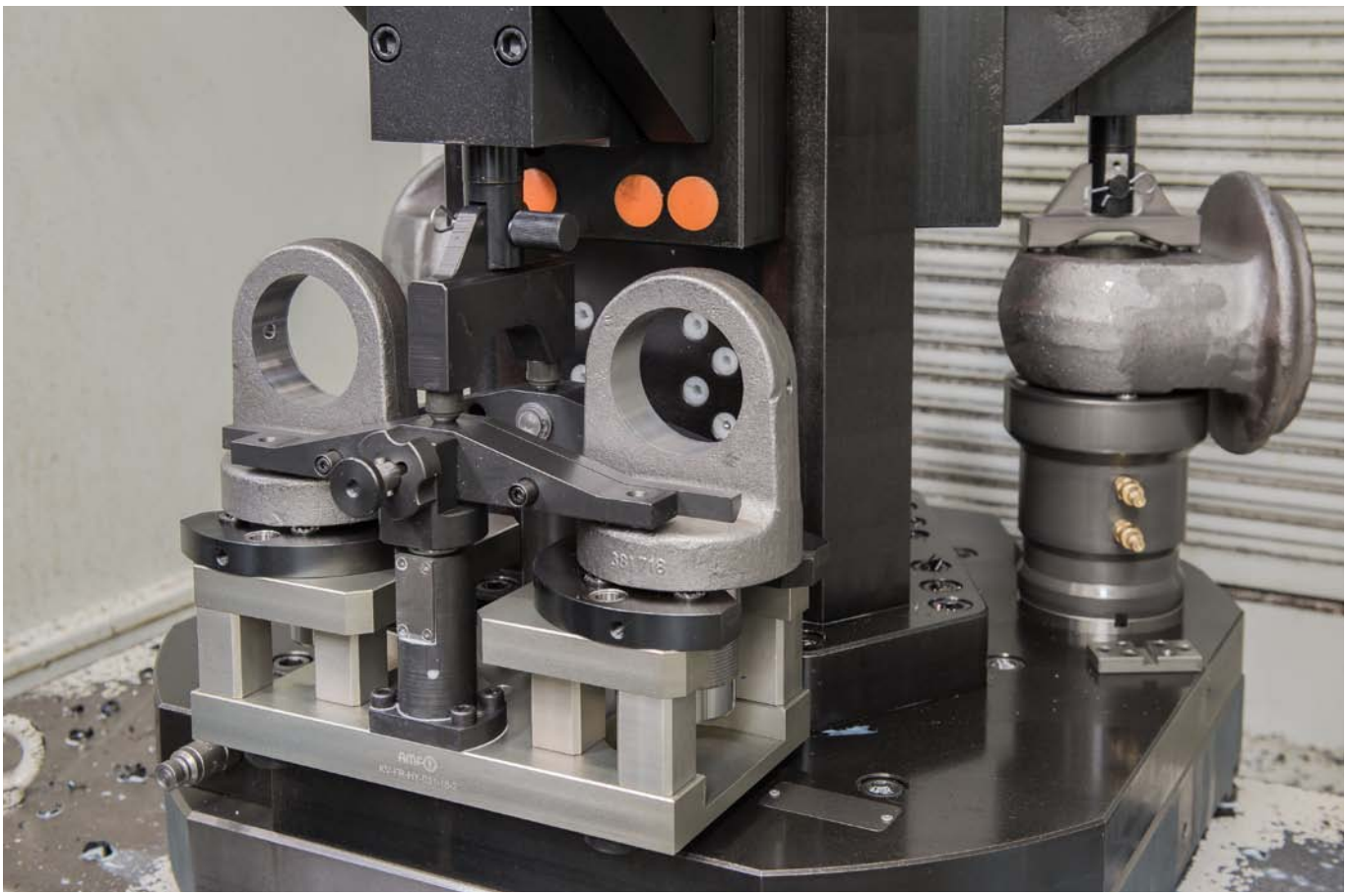
The AMF zero-point clamping modules are specially designed for use in additive manufacturing and the associated high temperature influences. They are completely sealed and therefore insensitive to the influences of the metal powder.



Subject to technical alterations.

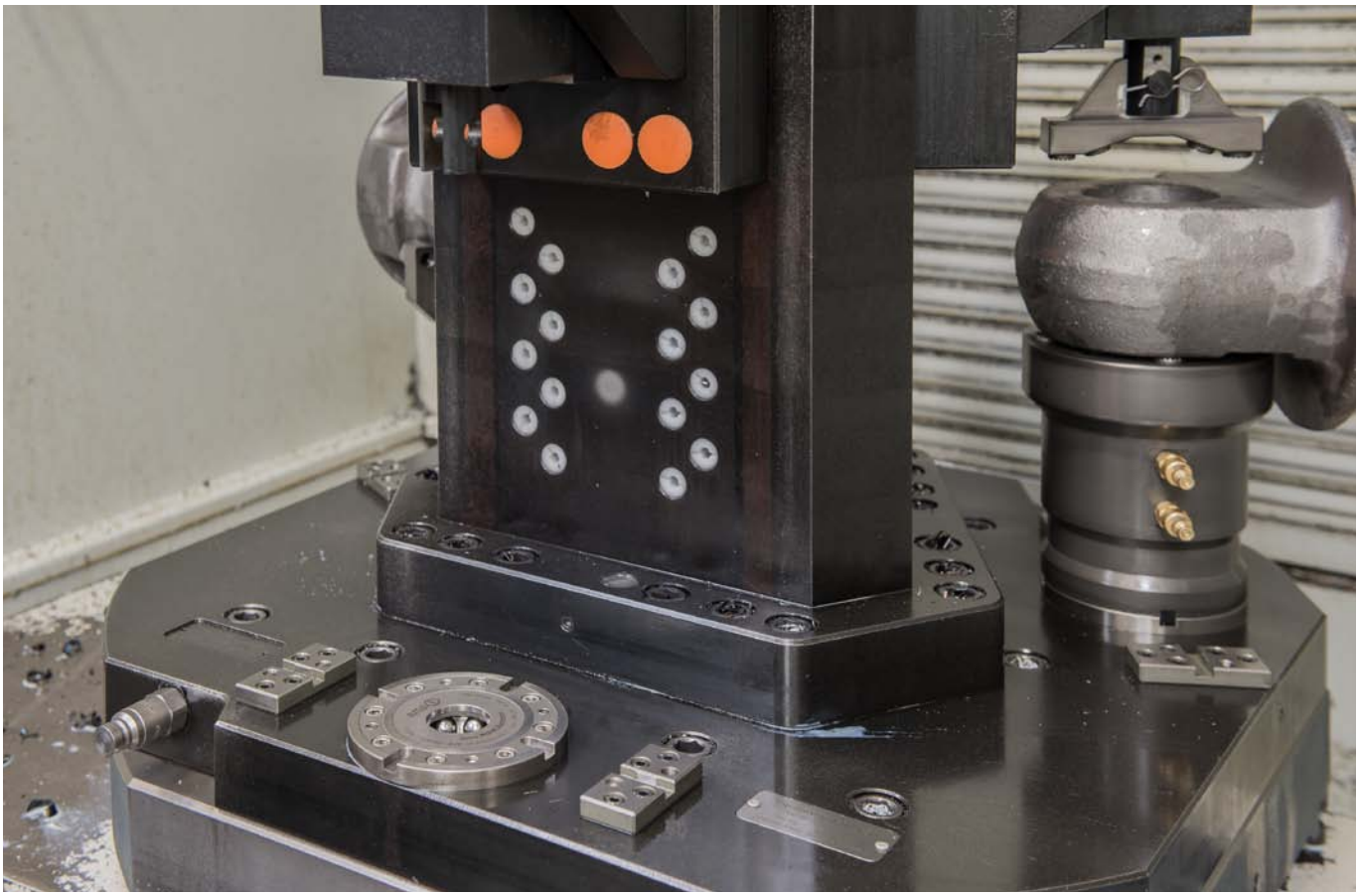


This complete clamping solution combines multiple clamp types in one clamping fixture.
(modular clamping system, hydraulic clamping system as well as zero-point clamping technology).



Subject to technical alterations.

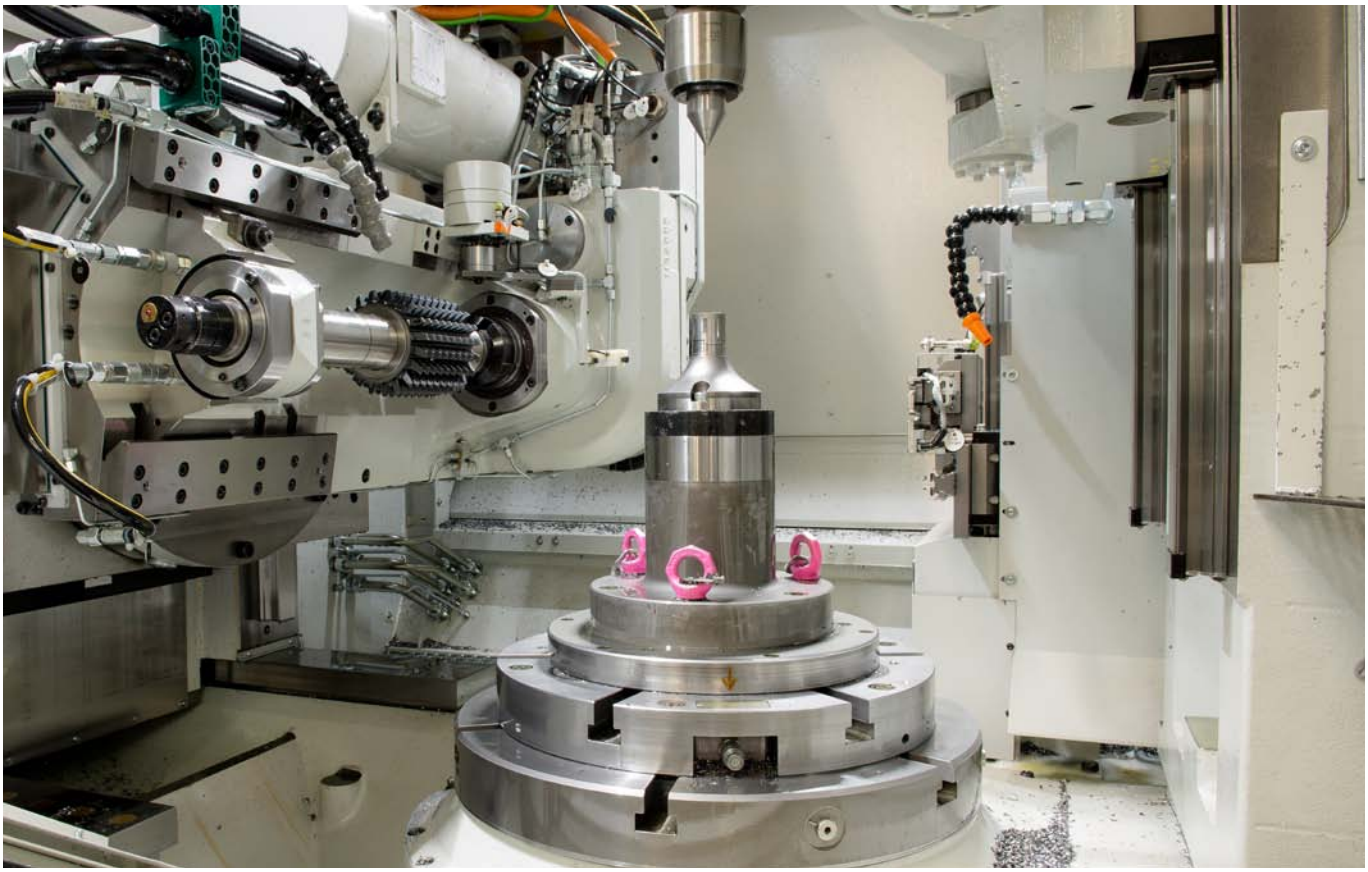
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



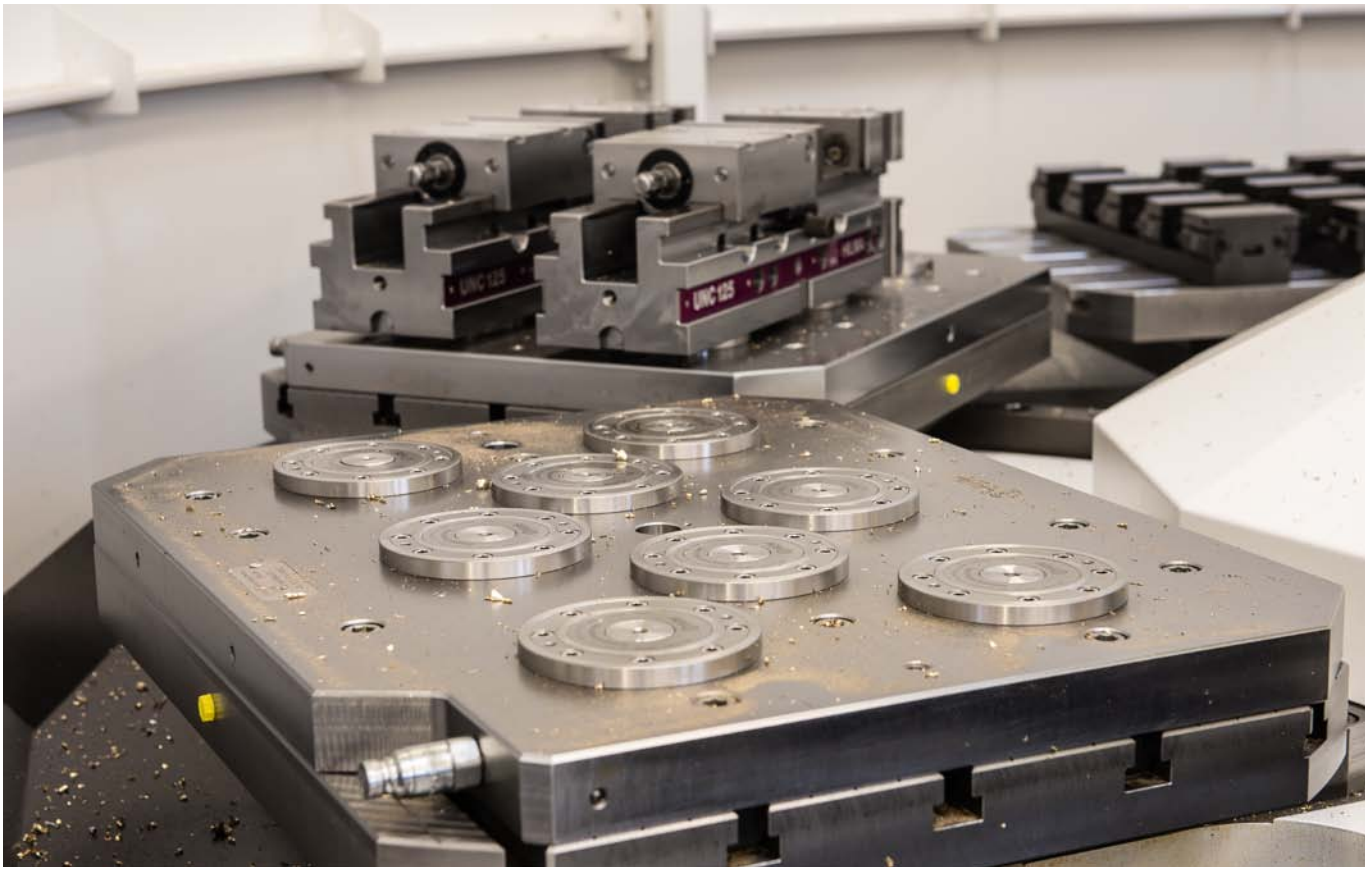
This combination enables the customer to clamp different components within a fixture concept and to further expand them for new parts.



Subject to technical alterations.



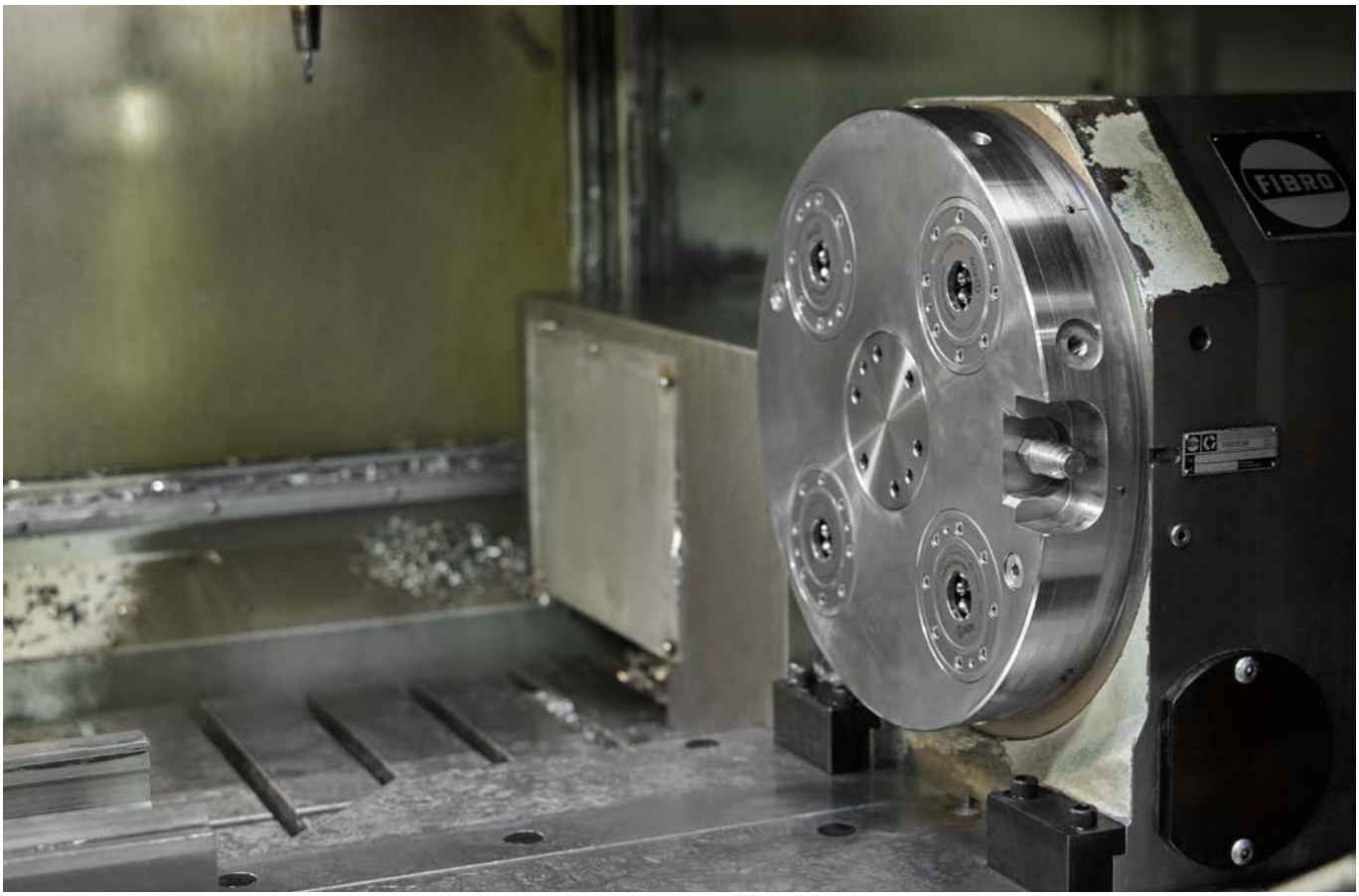
Zero-point clamping technology in use on an interlocking milling machine.
Reliable fit in the case of high lateral forces and long lever ratios.



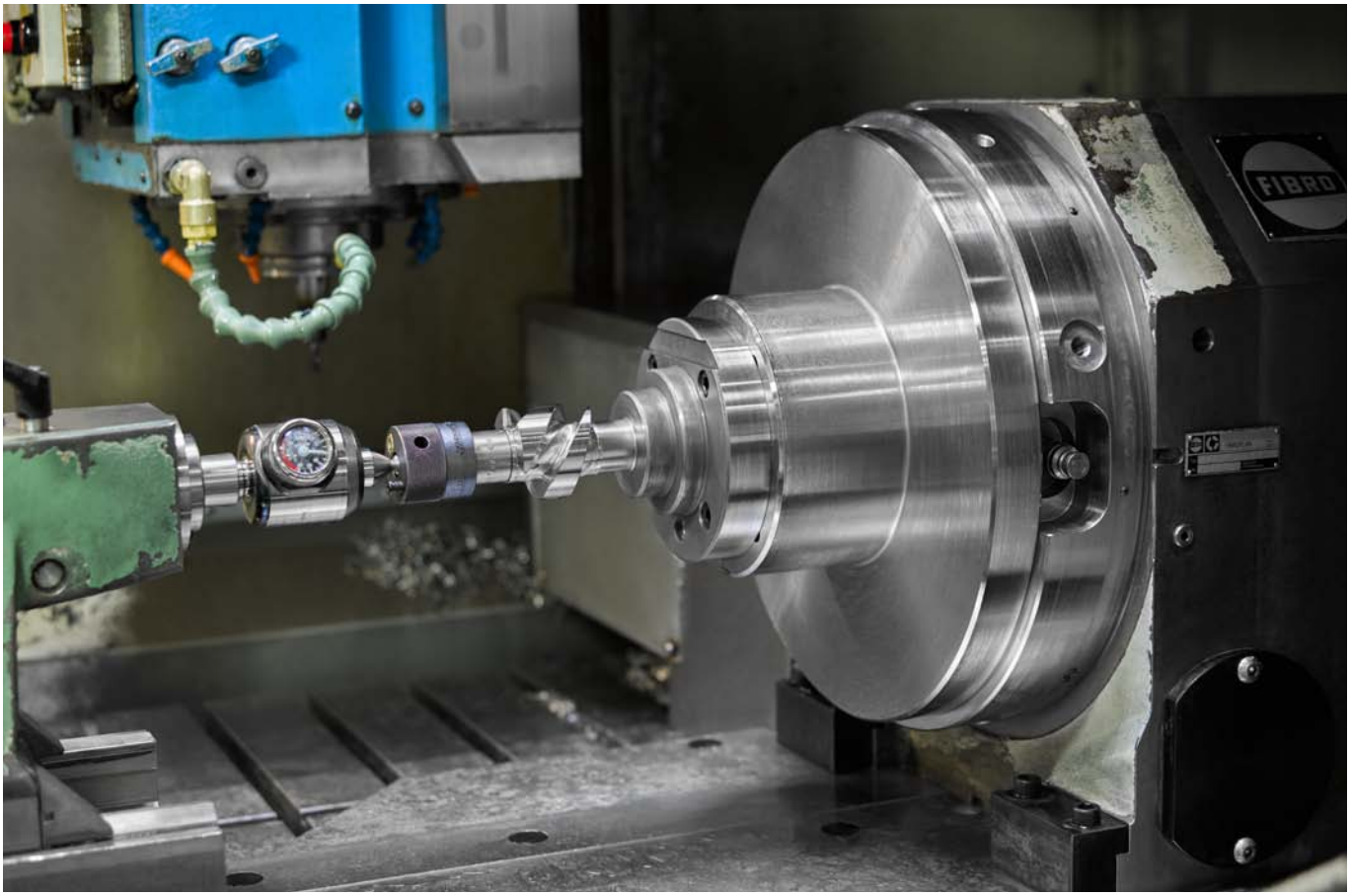
More flexibility in the pallet storage unit thanks to the zero-point-system.
The capacity of the pallet storage unit is expanded by simple and fast conversion of the different pallets.

Subject to technical alterations.

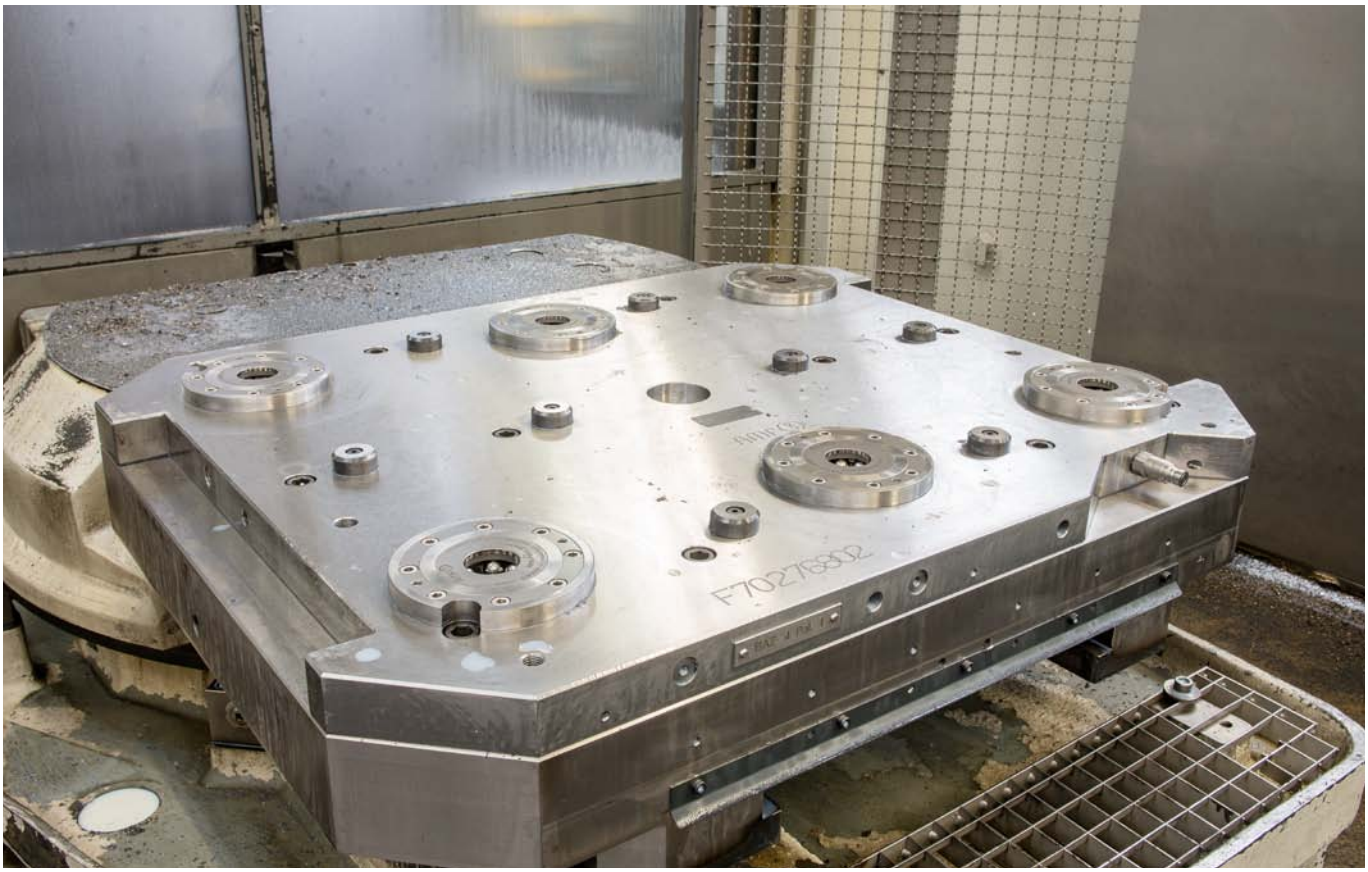
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



AMF zero point clamping system in use on a grinding/milling machine.
It is well worth using, particularly in the case of existing machines with long and frequent set-up procedures.



Subject to technical alterations.



Zero-point clamping technology used in large engine production.
Efficiency by setting up mechanical clamping fixtures in parallel during production time.



The two-section clamping pin system with a large intake catchment and the ball retainer-free module design makes it possible to change the clamping device ergonomically without tilting.

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

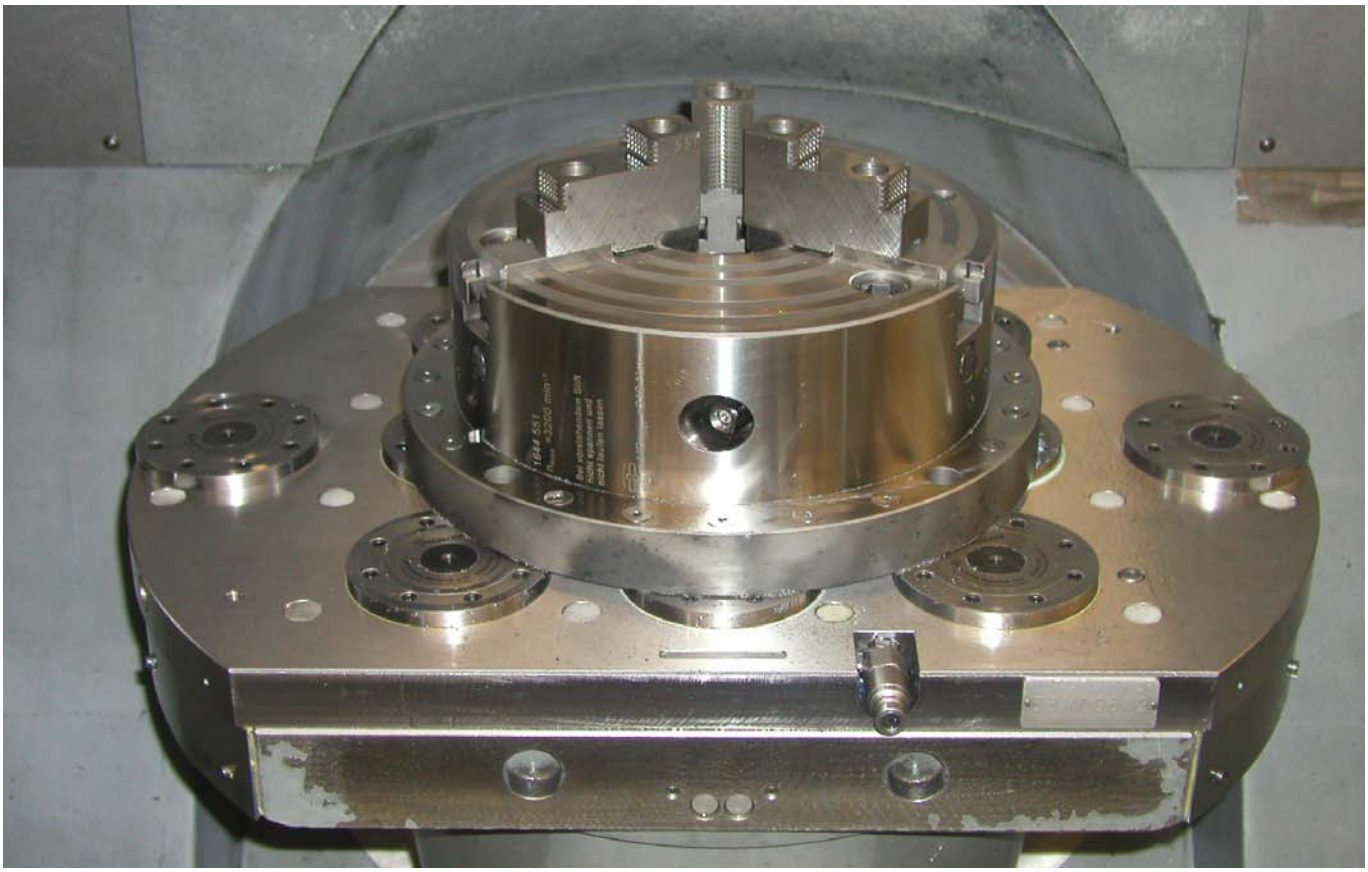


Whether at a standard module distance of 200 x 200 mm or in any other pitch spacings and arrangements of the clamping modules, the AMF zero-point system can be adapted to any practical requirement.



Thanks to the low installation height of our clamping modules, the assembly of the clamping device can be adapted flexibly to the respective machining height and workpiece

Subject to technical alterations.



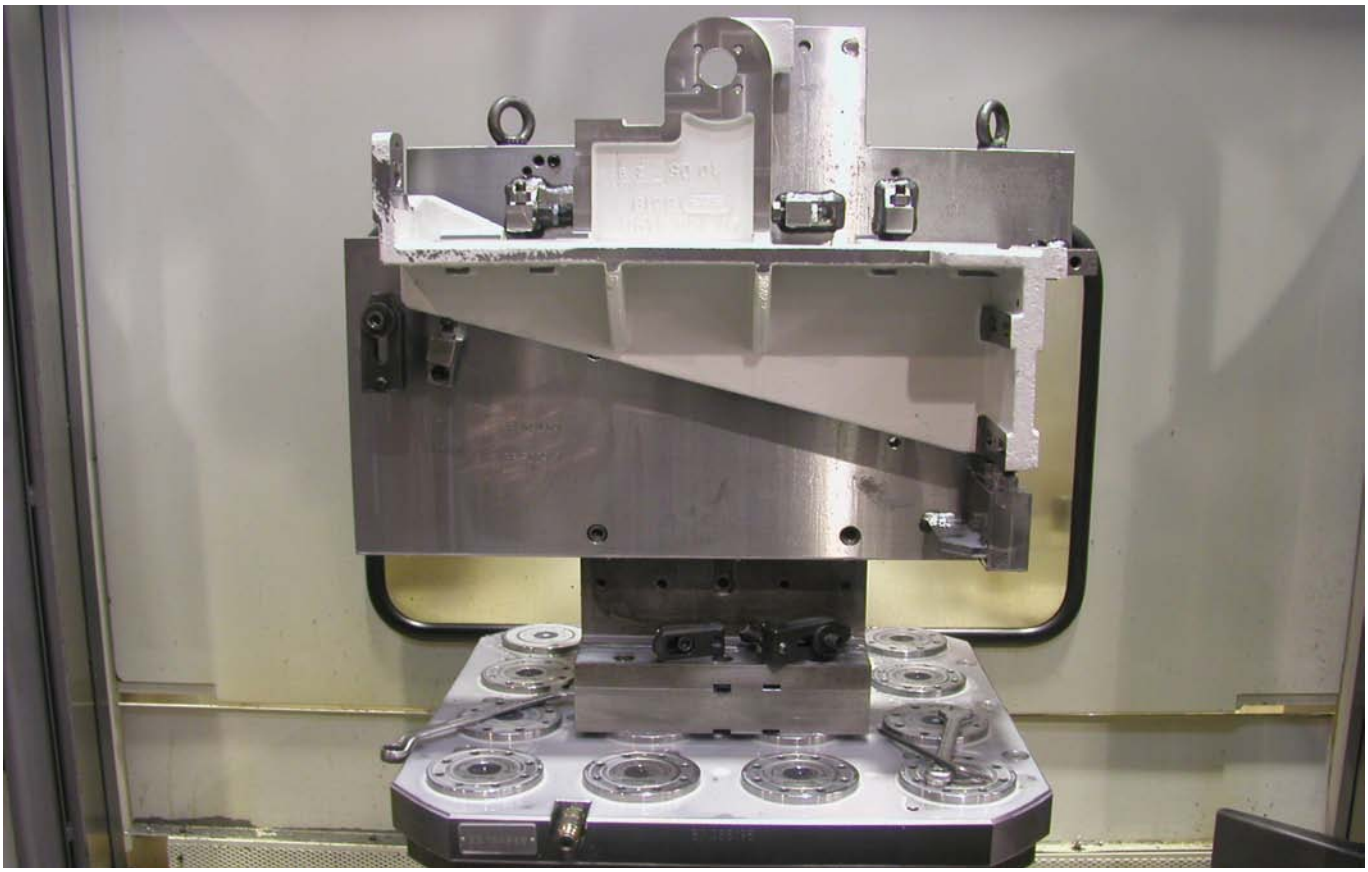
Simple changing of a 3-jaw chuck by means of the AMF zero-point system.



Direct clamping of the workpiece on a horizontal machining centre.
Two of the four zero-point clamping consoles can be adjusted in height. This enables workpiece tolerances to be compensated.

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

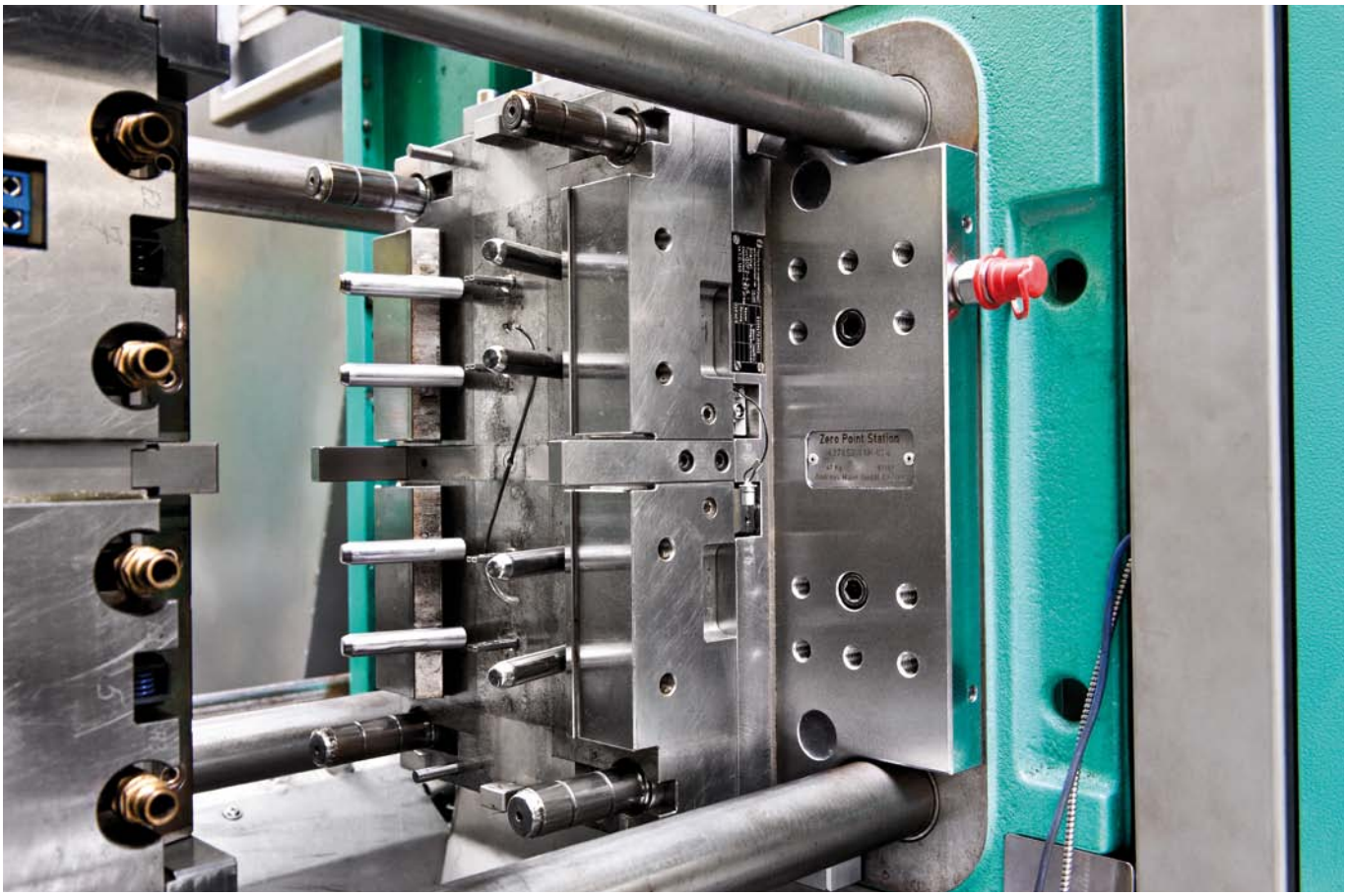


The AMF zero-point system offers a secure fit during drilling operations under unfavourable lever ratios.
Thus, even complex workpieces with high cutting parameters can be machined reliability.

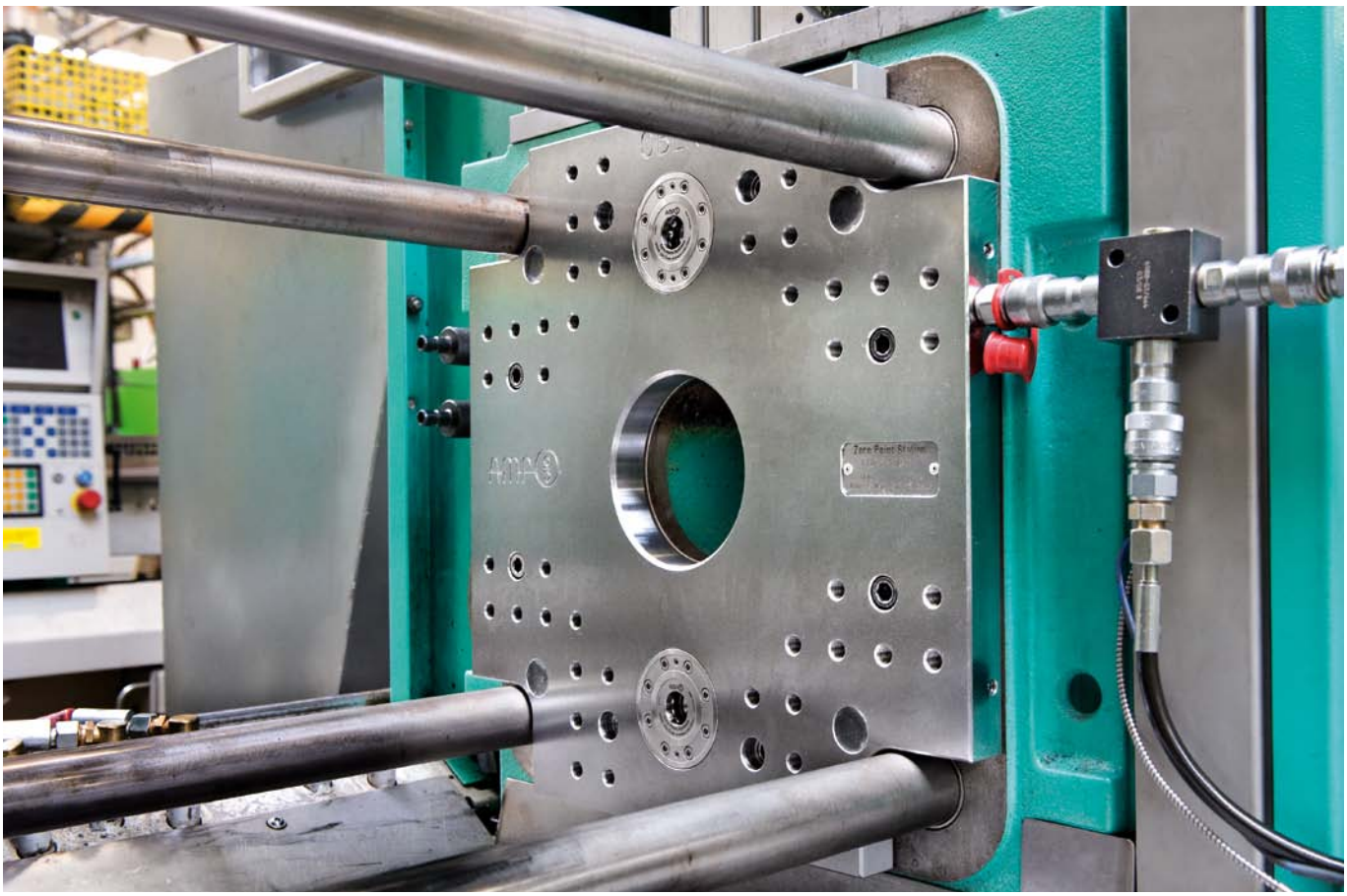


Clamping profile with three pneumatic 4-point clamping stations. Thanks to the high pull-in forces of the zero-point system,
changing the clamping device becomes simple and user friendly even in the case of horizontal applications.

Subject to technical alterations.



In injection moulding, the tools are successfully changed in a way that optimises set-up time through the use of the AMF zero-point system.
With friendly recommendation of Robert Bosch GmbH, Waiblingen

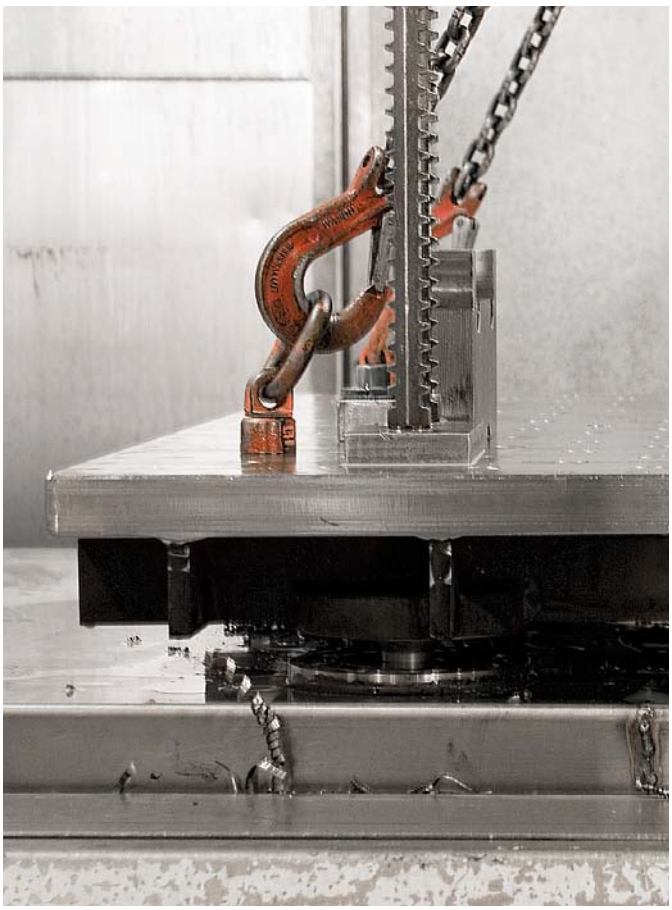


Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

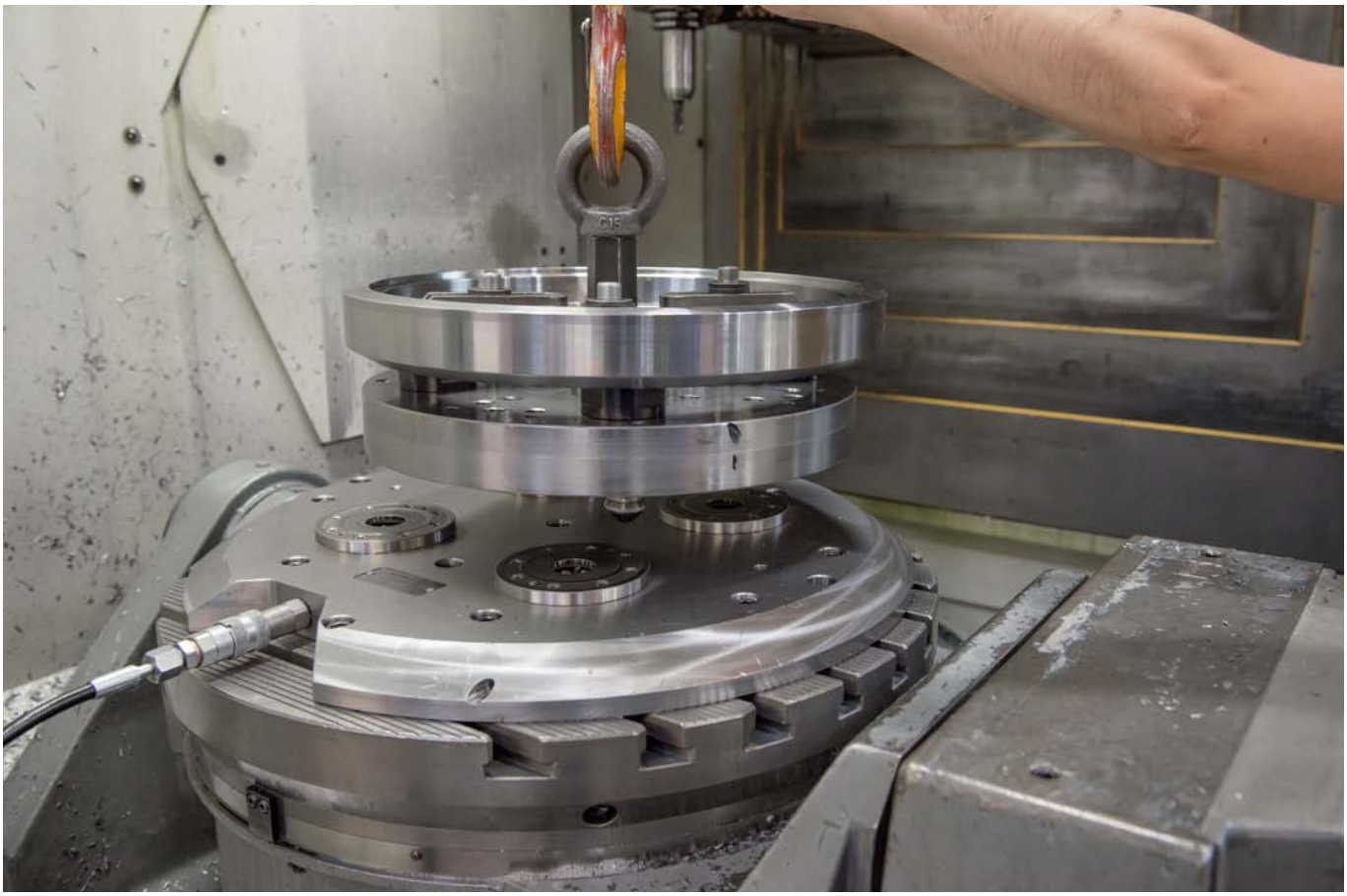


The cylindrical design of the pull-studs and the adapter in the clamping module guarantee a balance of height and length tolerances even at long distances.





Subject to technical alterations.

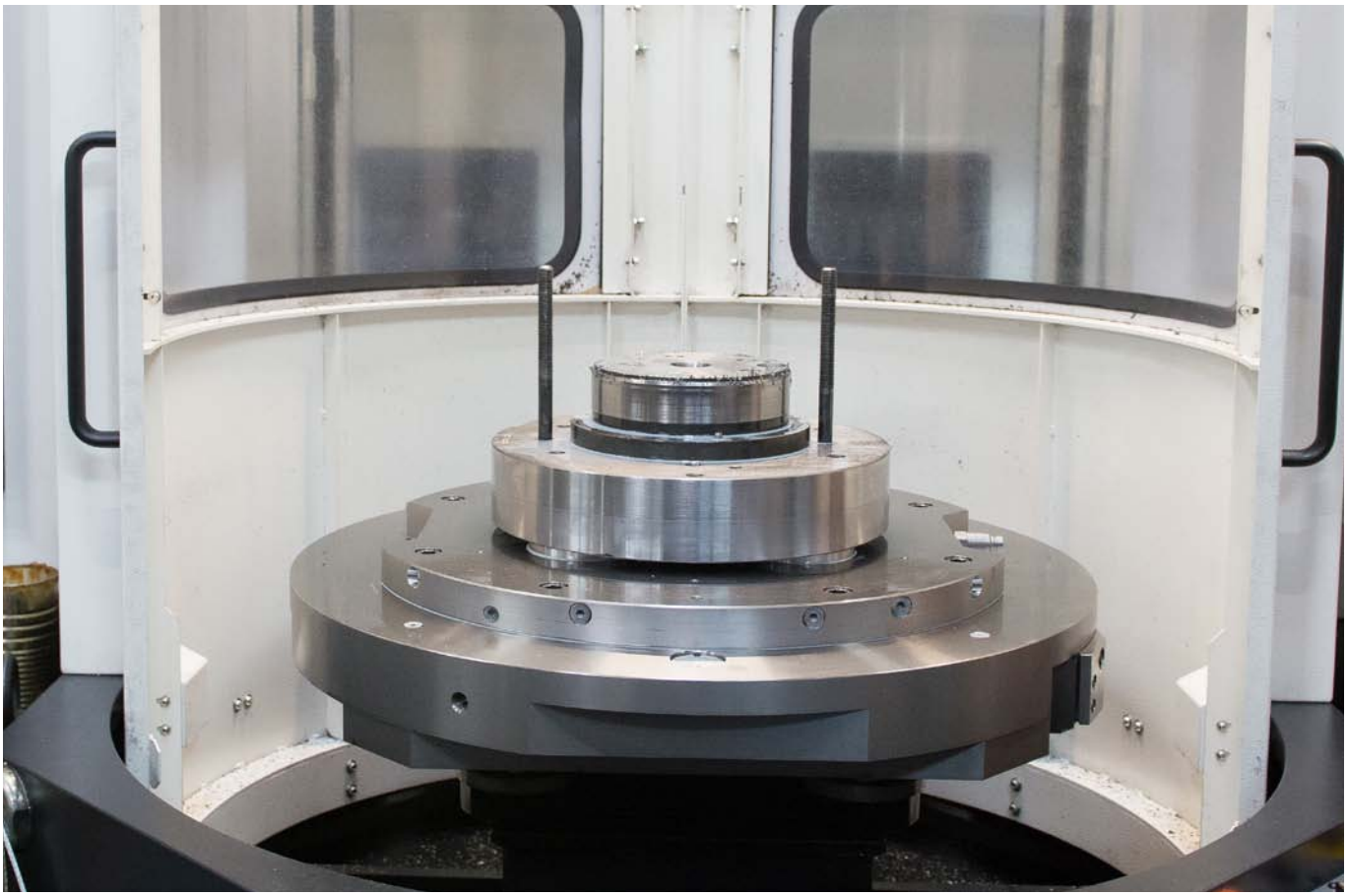


5-axis-machining of machine building components. 4-point clamping station with individual outer contour for maximum accessibility.



Subject to technical alterations.

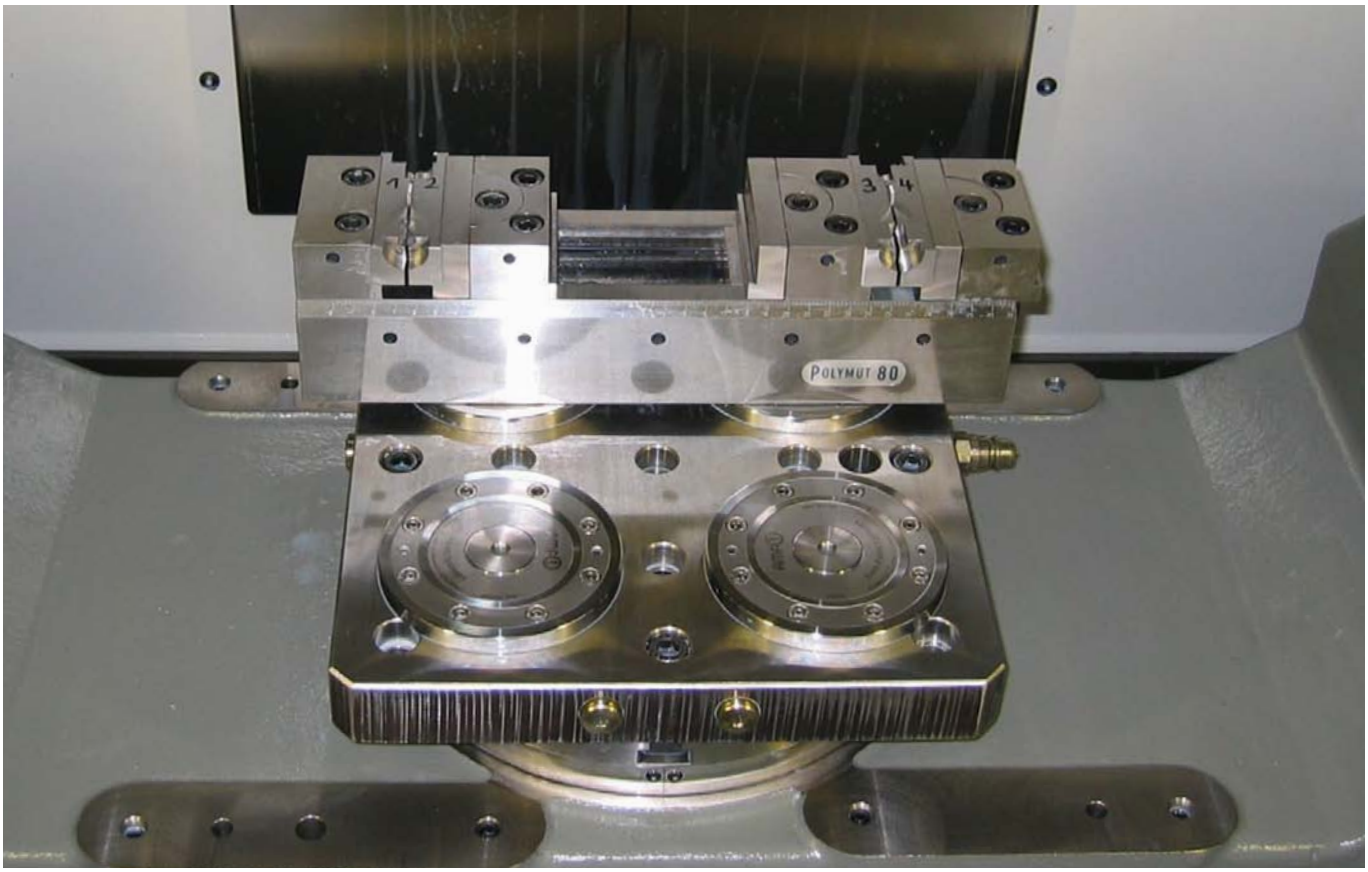
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



AMF zero-point clamping system in use on a milling-grinding centre with pallet.
The zero-point system is the standard interface here on all machine pallets.



Subject to technical alterations.



The 4-point clamping station replaces the machine table. This guarantees maximum utilisation of the machine's stroke.



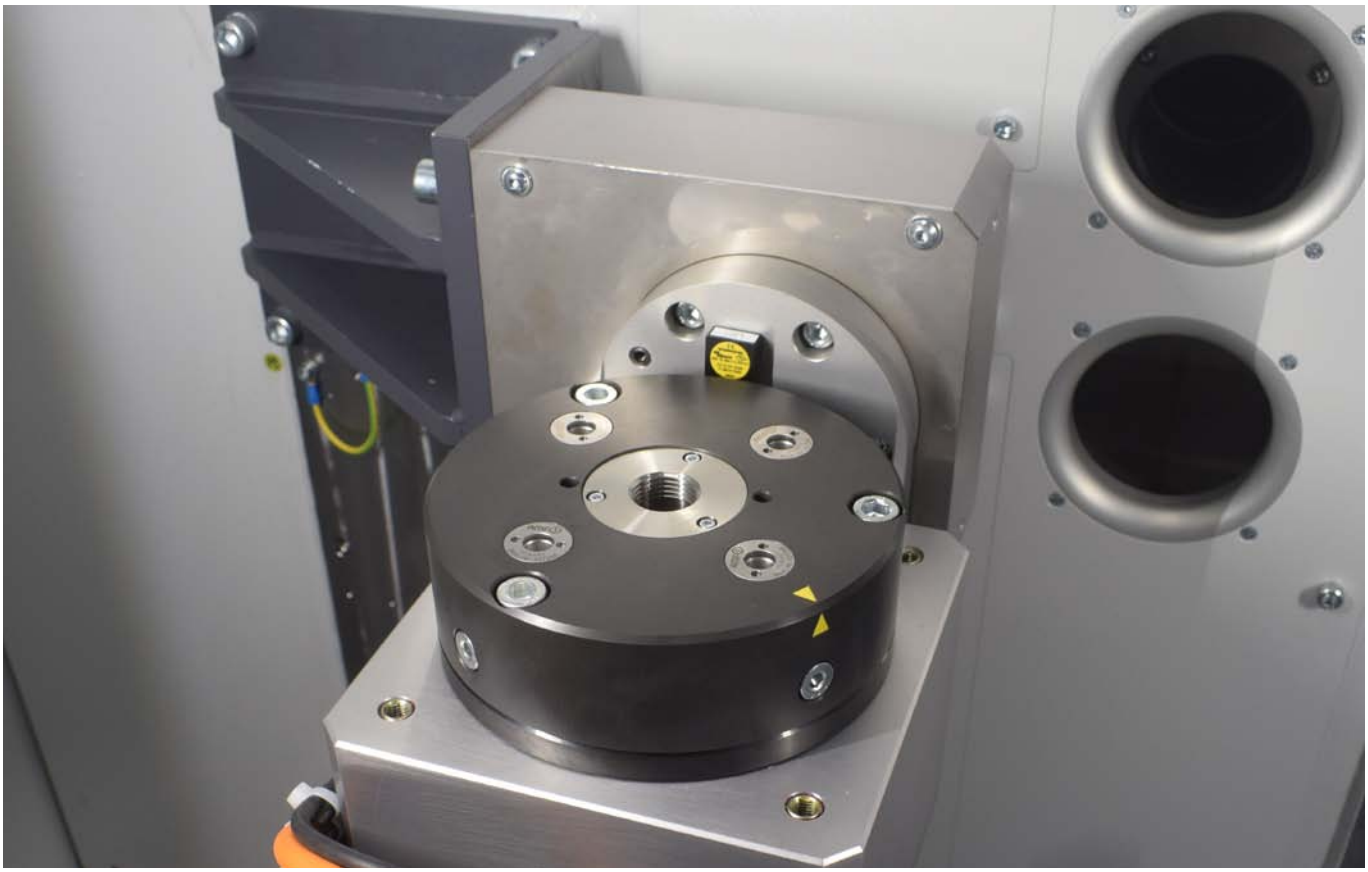
The interior of the clamping module is completely sealed.
This means that the system is optimally protected against liquids and dirt.



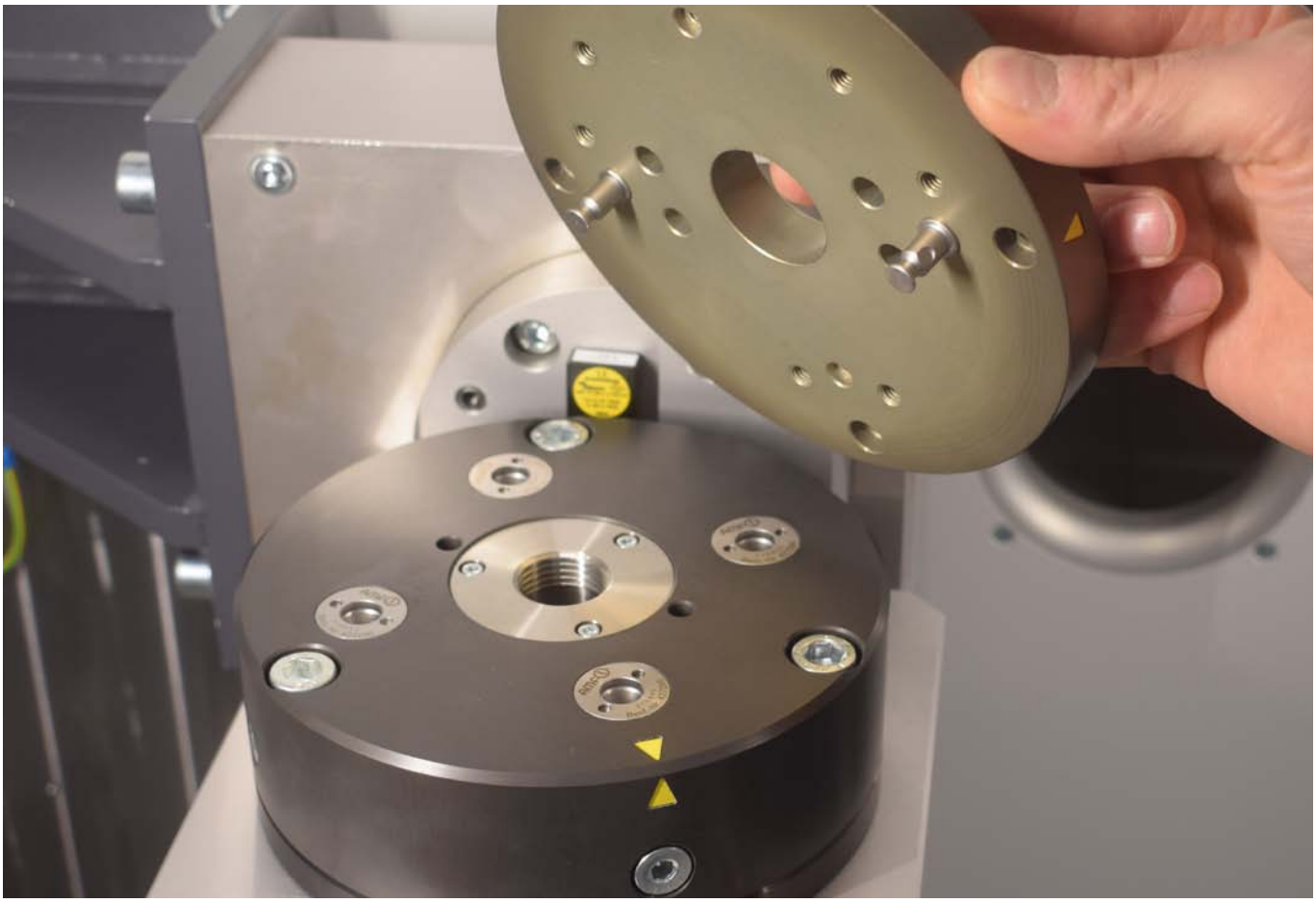
Use in the food industry

Subject to technical alterations.

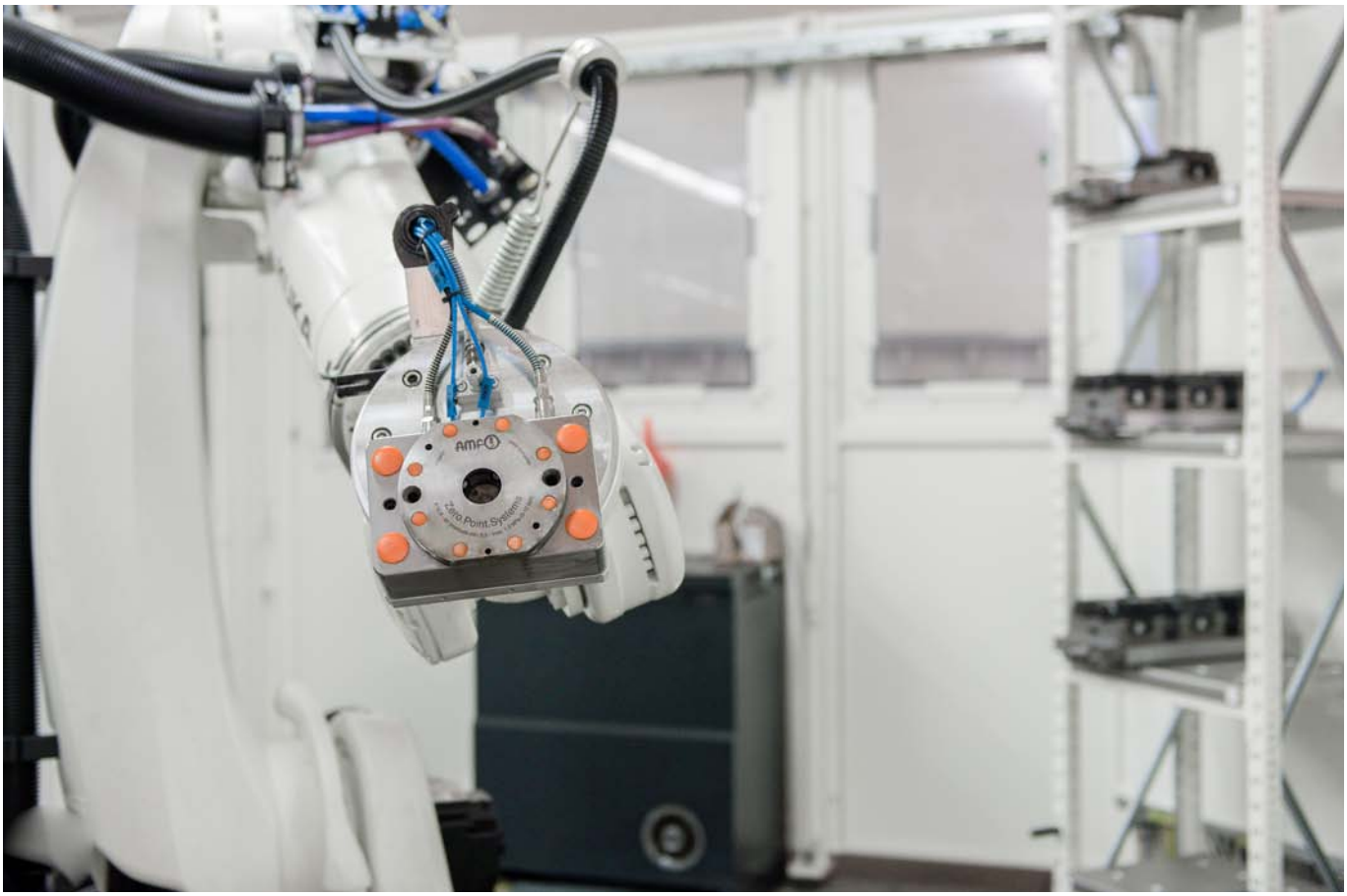
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



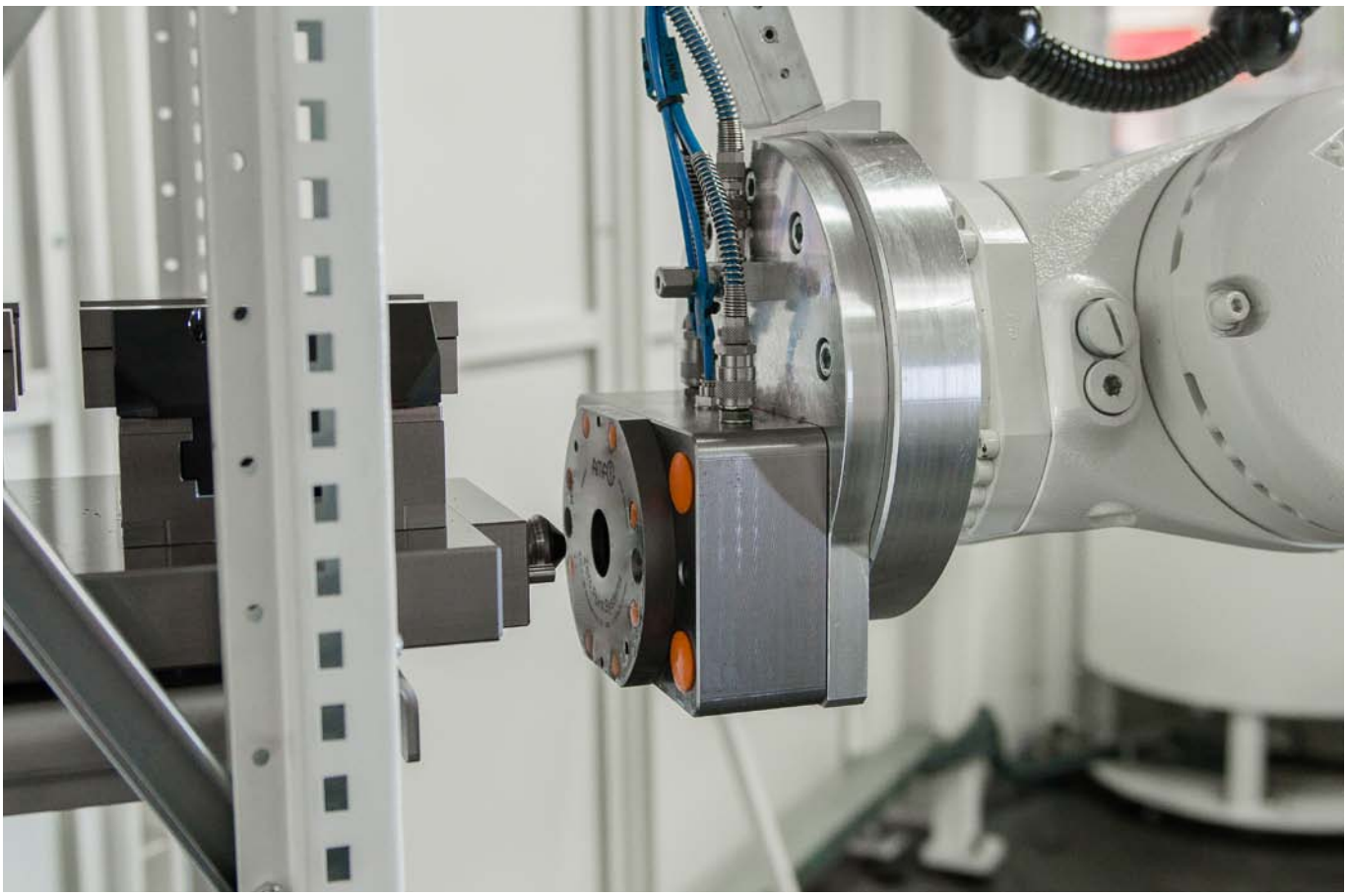
Our SP150 clamping modules in operation on a laser welding system for round parts and small parts. The compact layout facilitates versatile operation of various welding applications. Including clamping arrangements with a central aperture. This increases flexibility and increases process reliability.



Subject to technical alterations.



Automation solution with AMF zero-point system as standard interface for robotic loading.



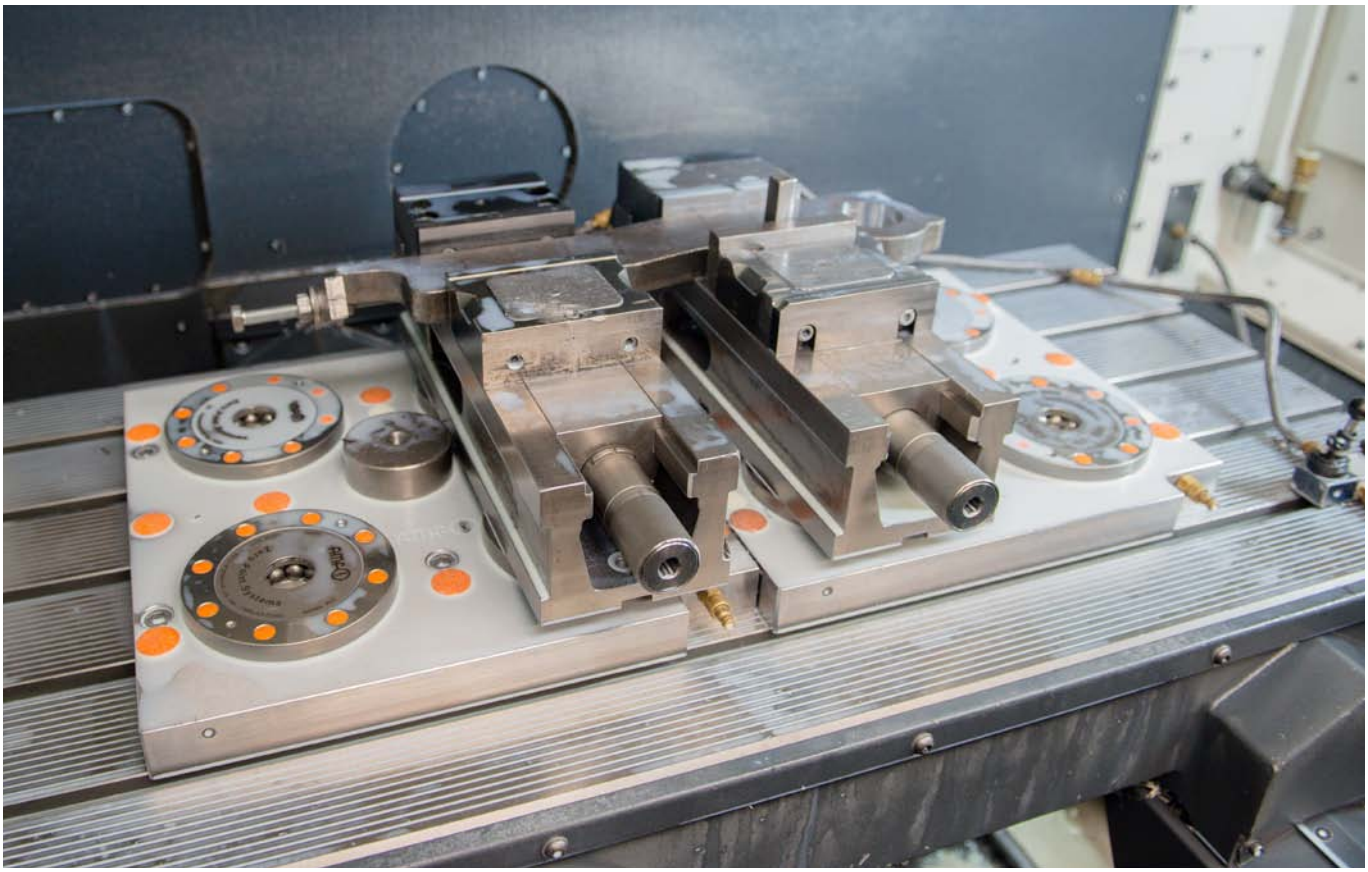
Subject to technical alterations.



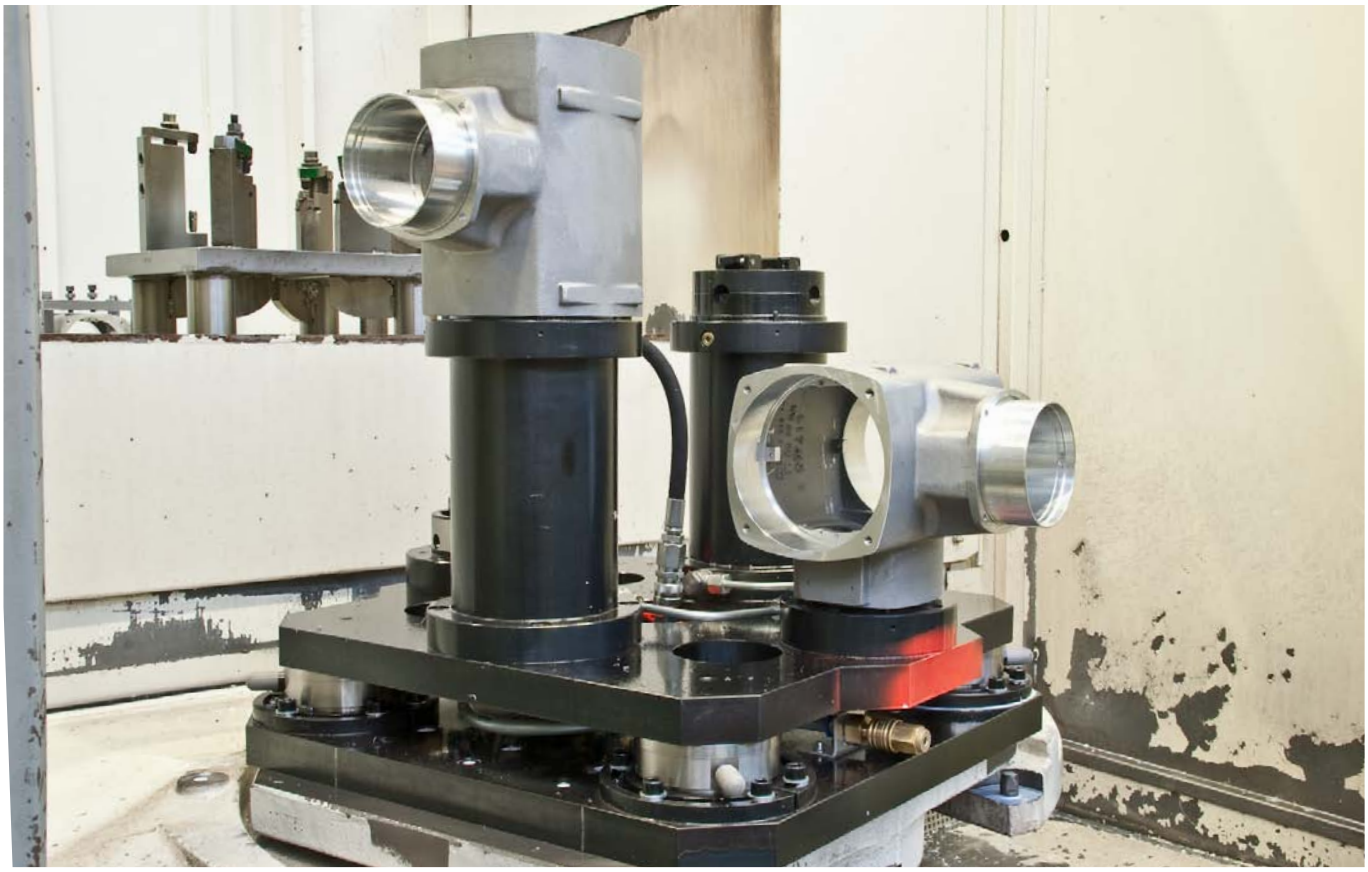
Numerous sensor options and reliable fit with high handling weights guarantee smooth integration into automated robotic loading as well as subsequent machining.



Subject to technical alterations.



Two pneumatic standard clamping stations retrofitted on a 3-axis milling machine.
The easy entry point into zero-point clamping technology, available from stock.



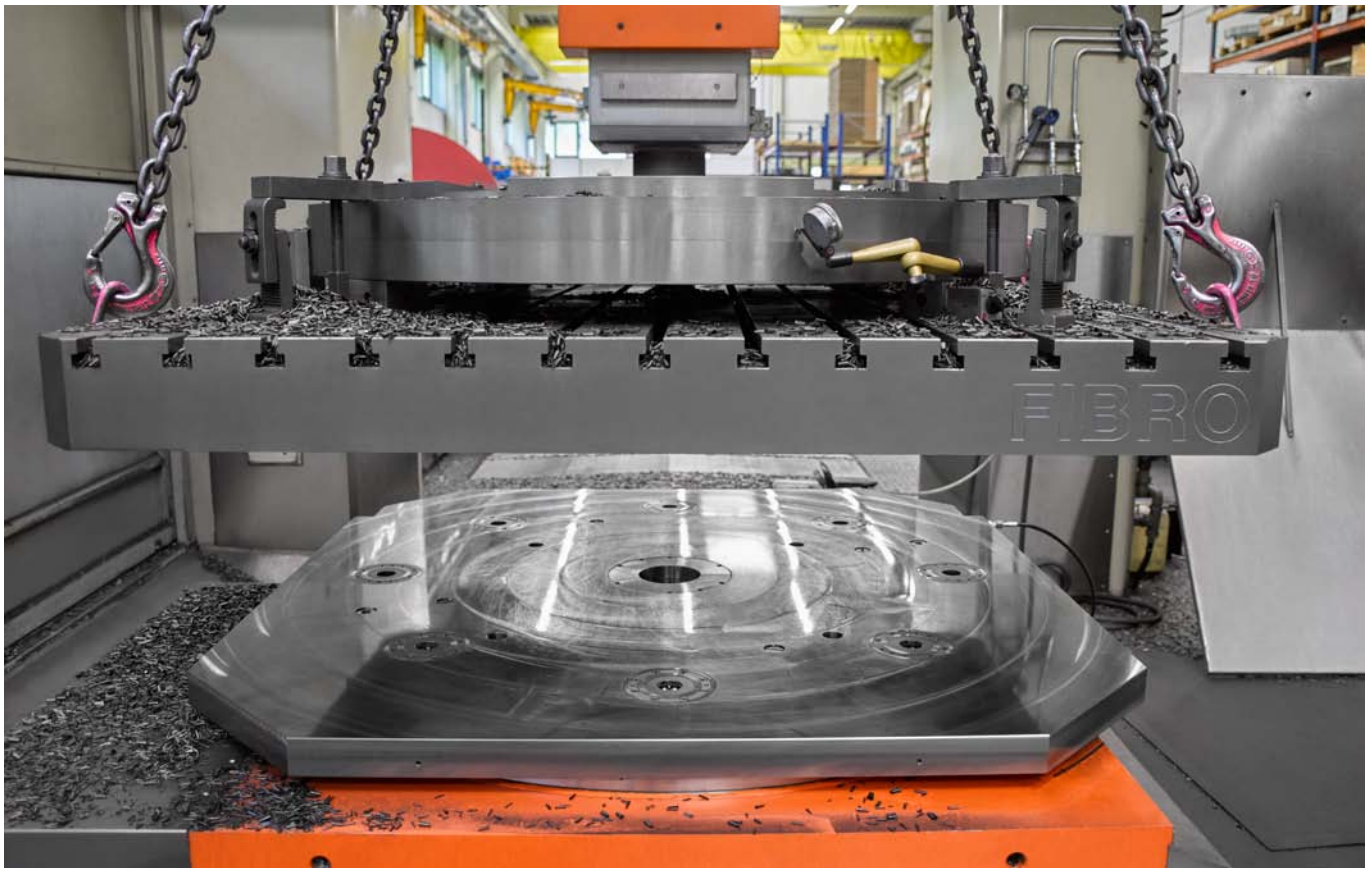
Surface-mounted clamping modules in combination with AMF hydraulic clamping systems on a machining centre.

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



AMF-Clean-Stick in use: automated cleaning of clamping fixture and machine table.

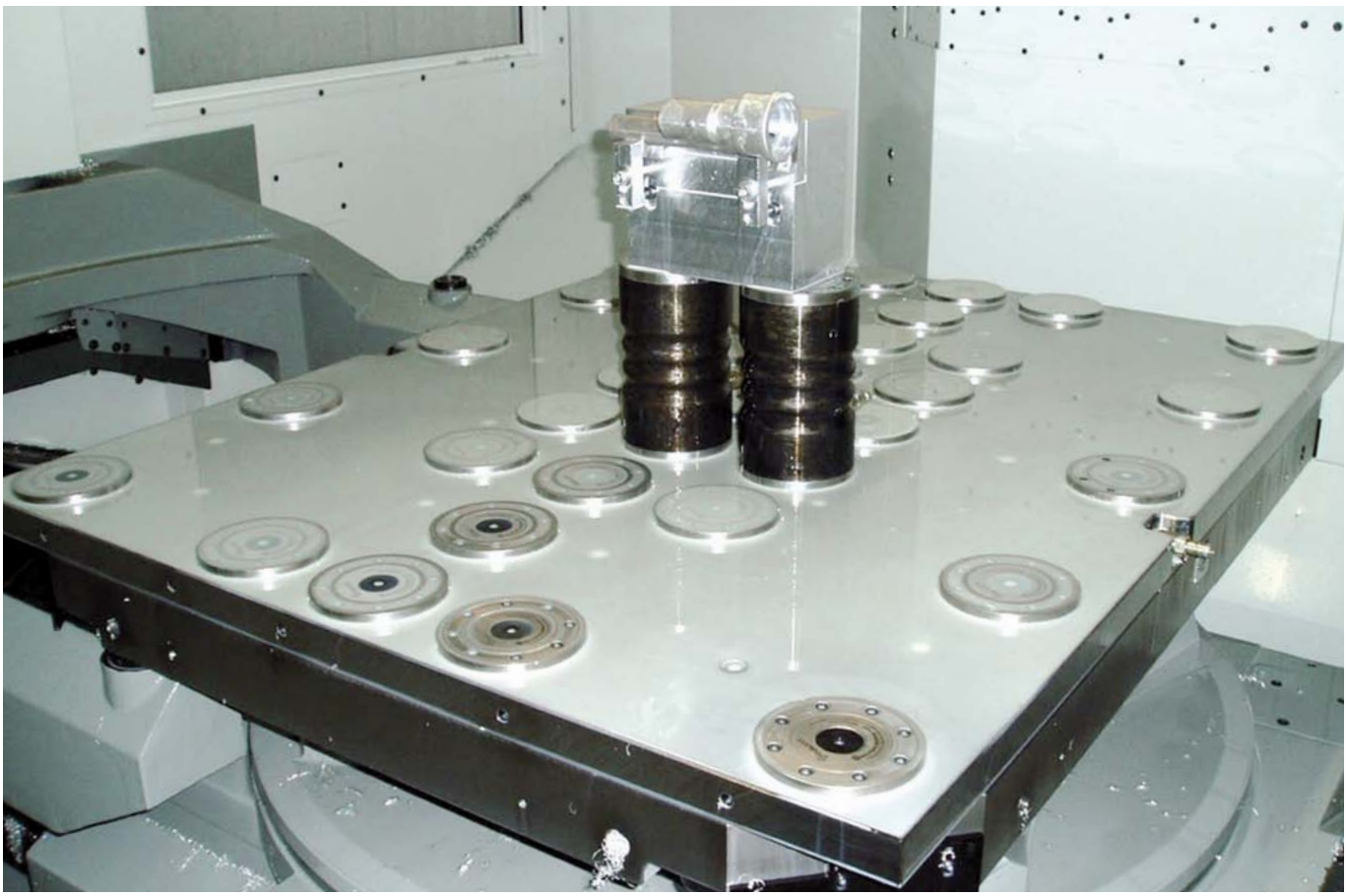


Top and bottom-sided integrated clamping module in a rotary indexing table. The set-up times have been reduced from several hours to a few minutes and the flexibility of the entire machine has been increased to a maximum.

Subject to technical alterations.



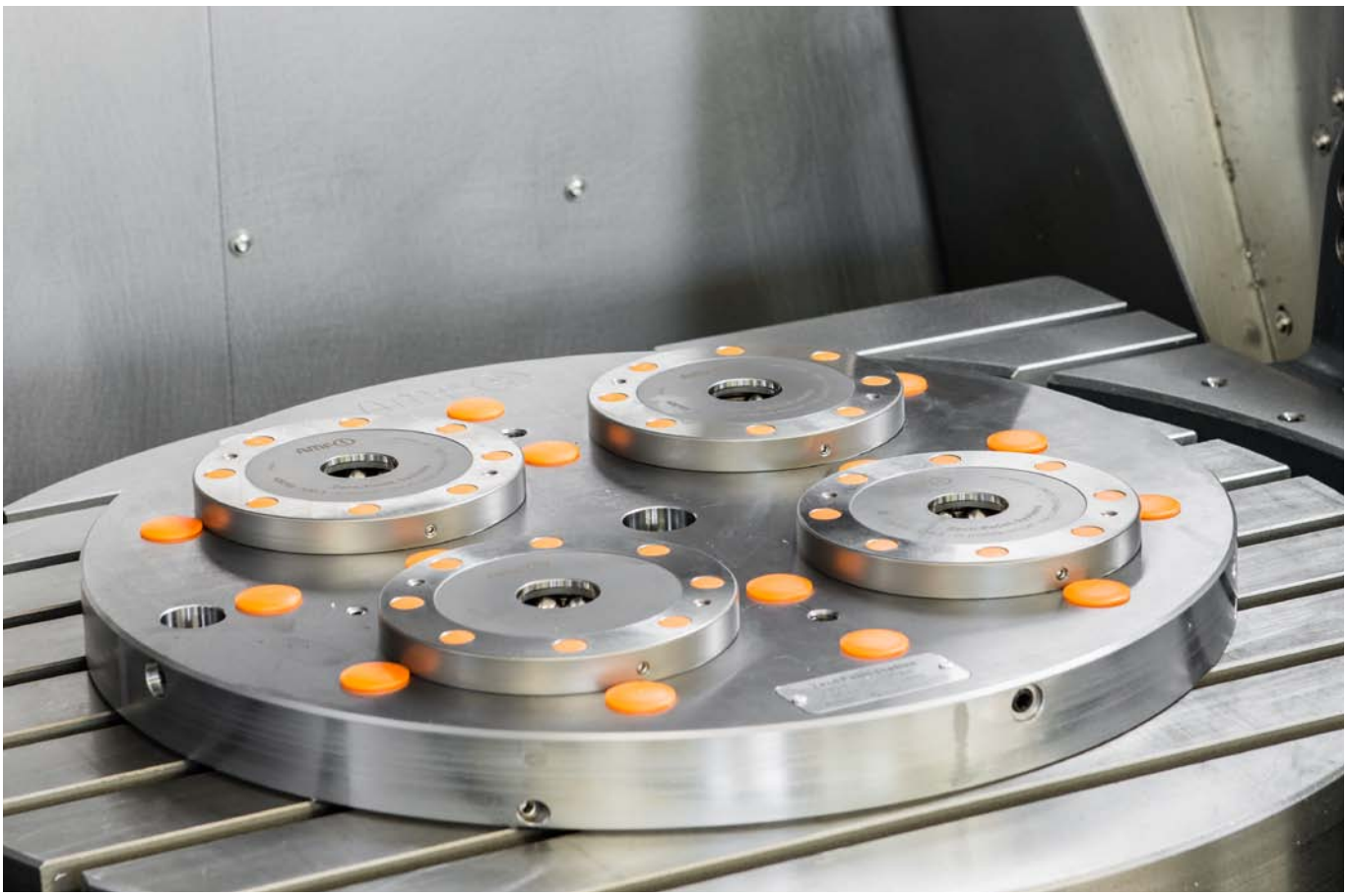
5-side machining by means of clamping brackets for direct clamping of the component.



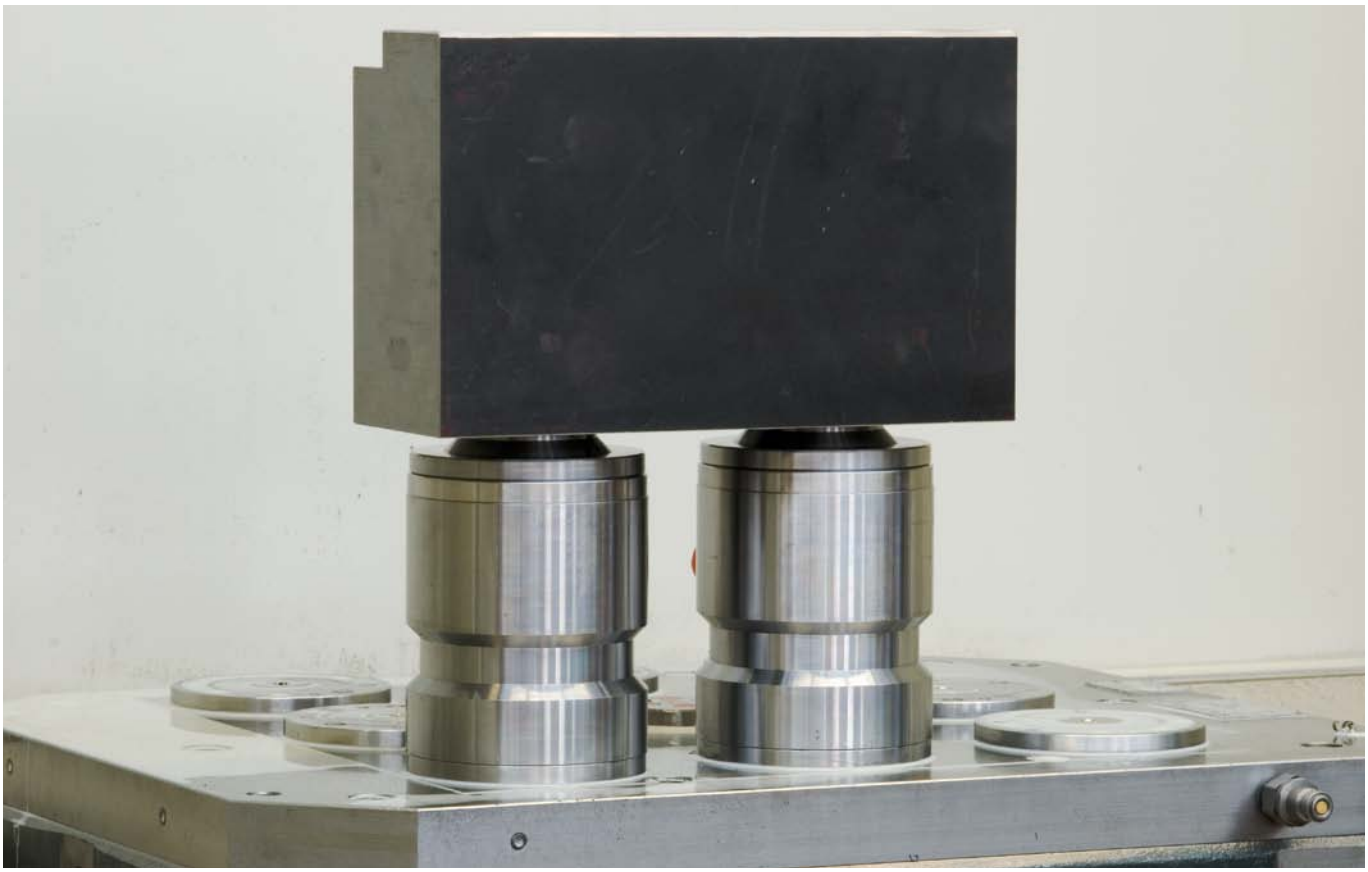
Subject to technical alterations.



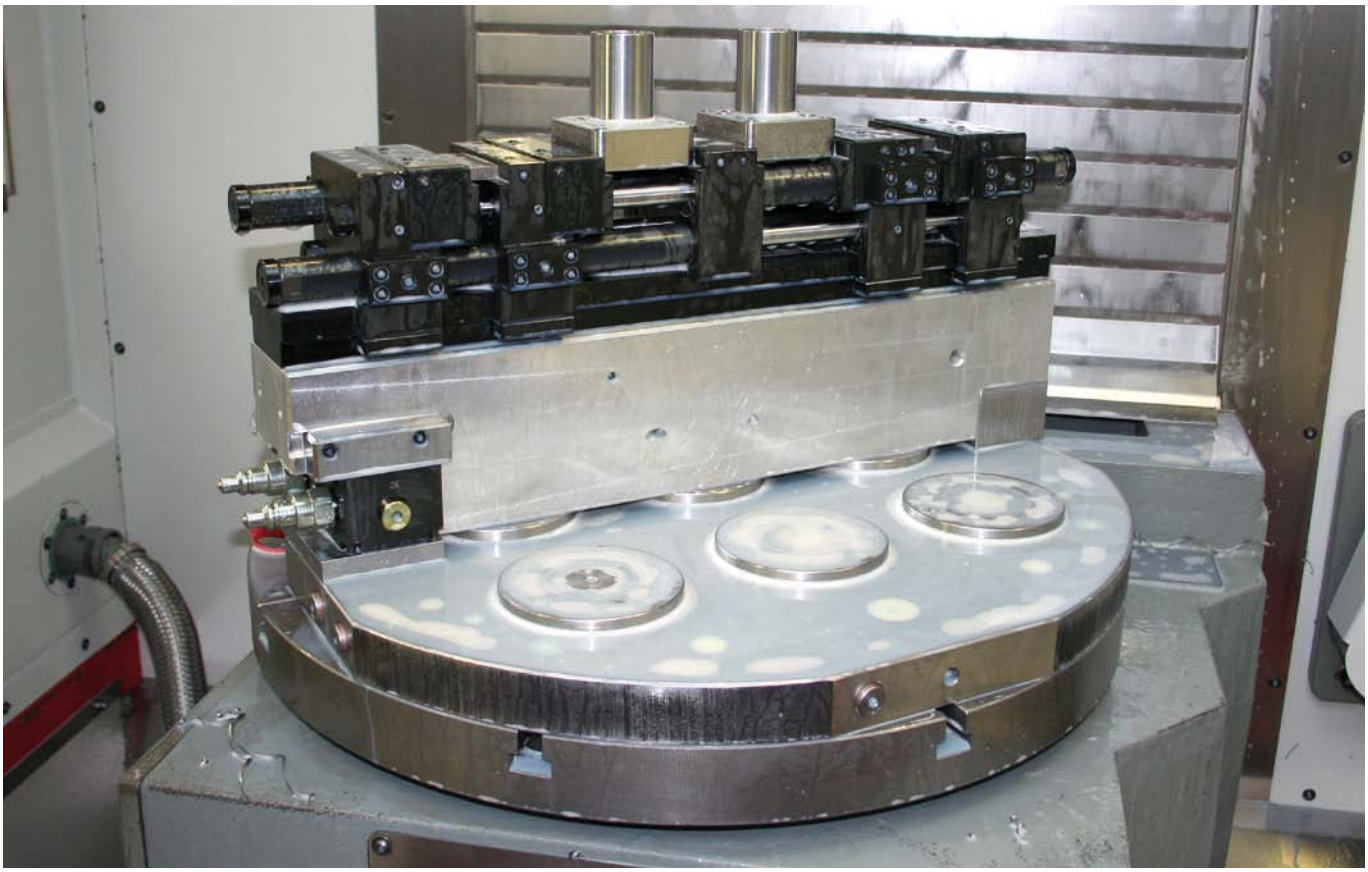
4-point clamping station with integrated bearings and direct locking control system for use on milling-grinding machines up to a maximum speed of 2200 rpm.



Subject to technical alterations.



AMF protective shields as useful accessory for direct clamping of the component.
It ensures complete machining of the workpiece axially to the clamping bracket.



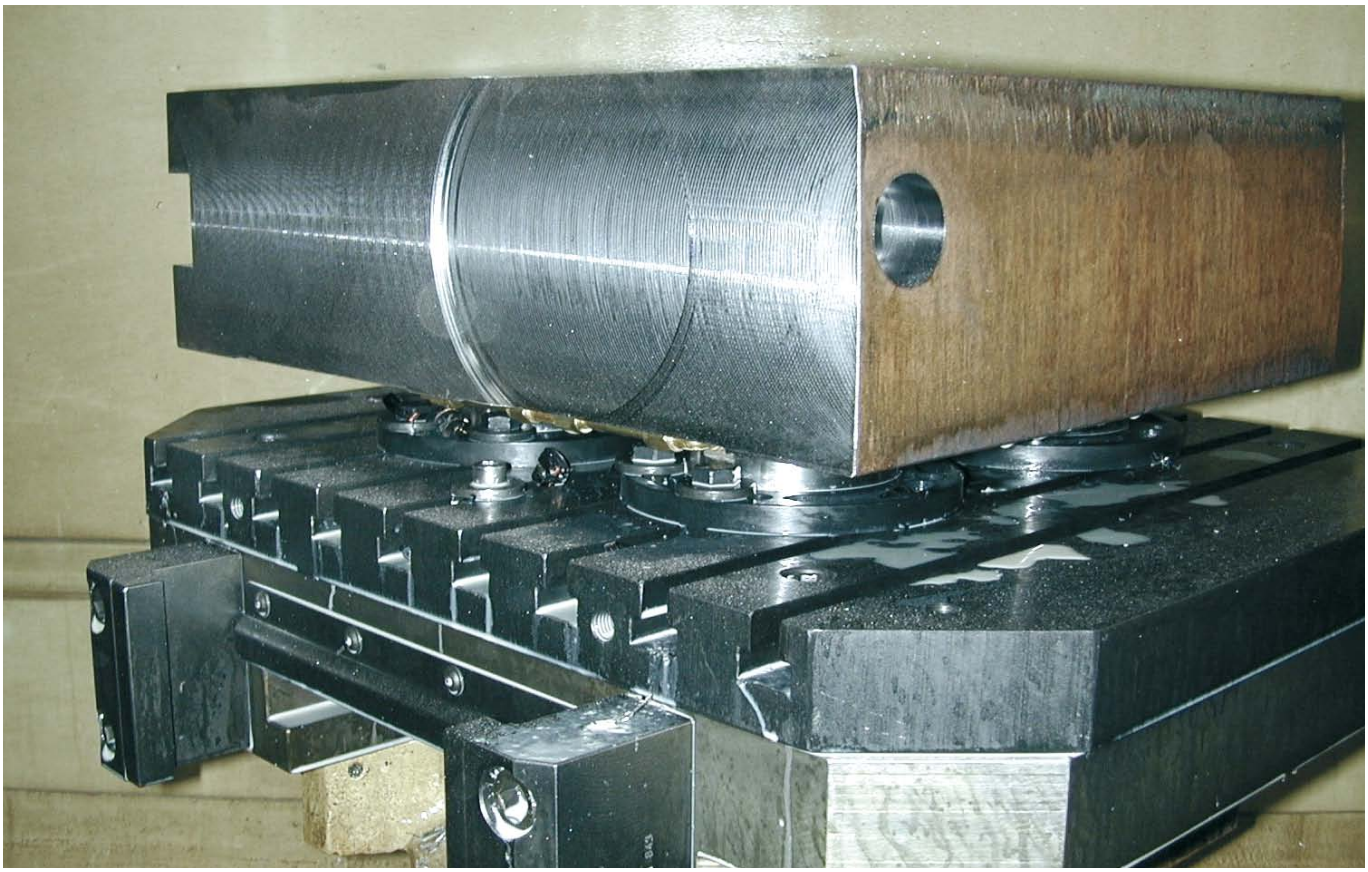
Hydraulic vice for machining multiple or various workpieces in one clamping process
clamped on the zero-point system.

Subject to technical alterations.

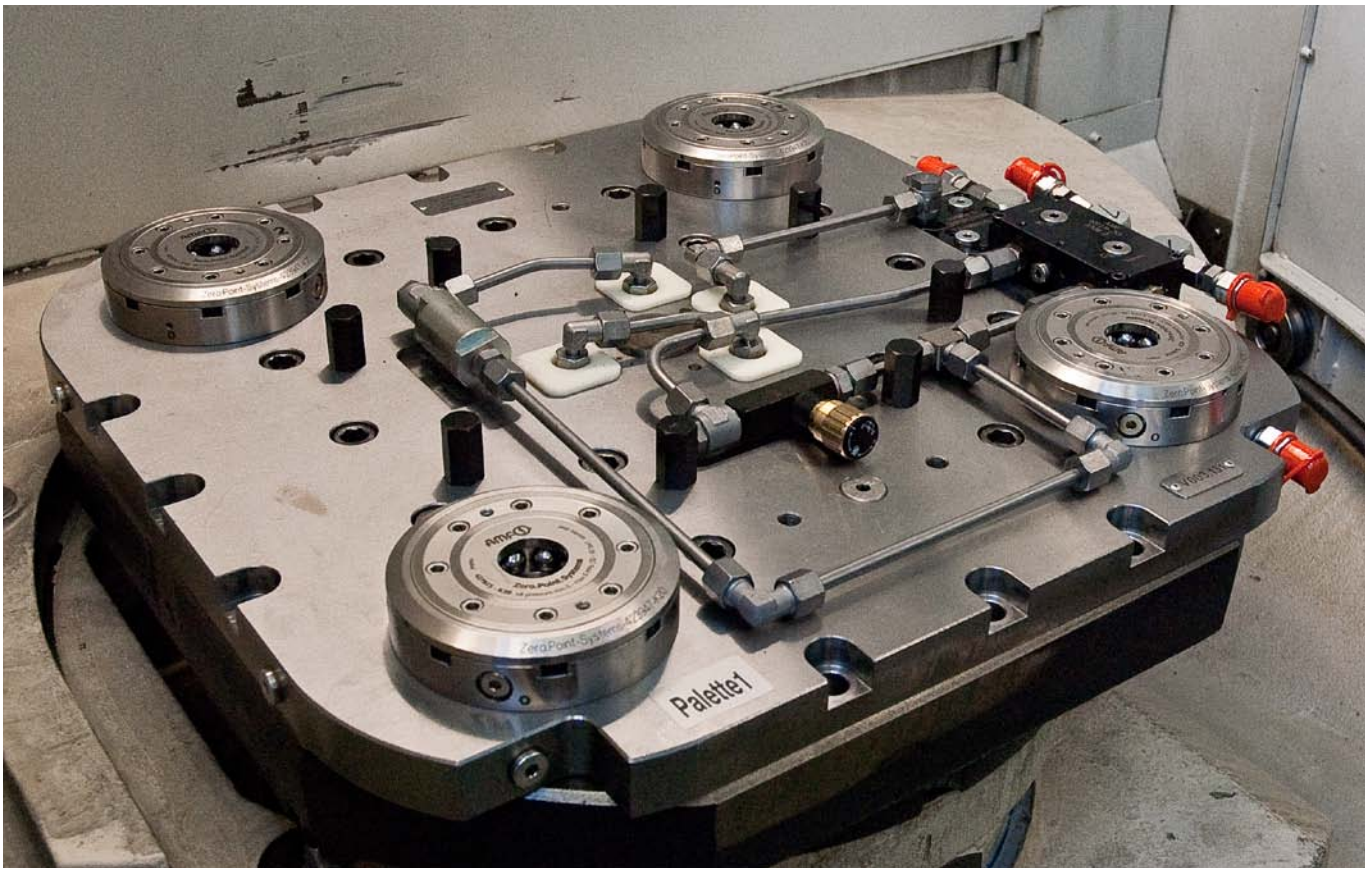
ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de



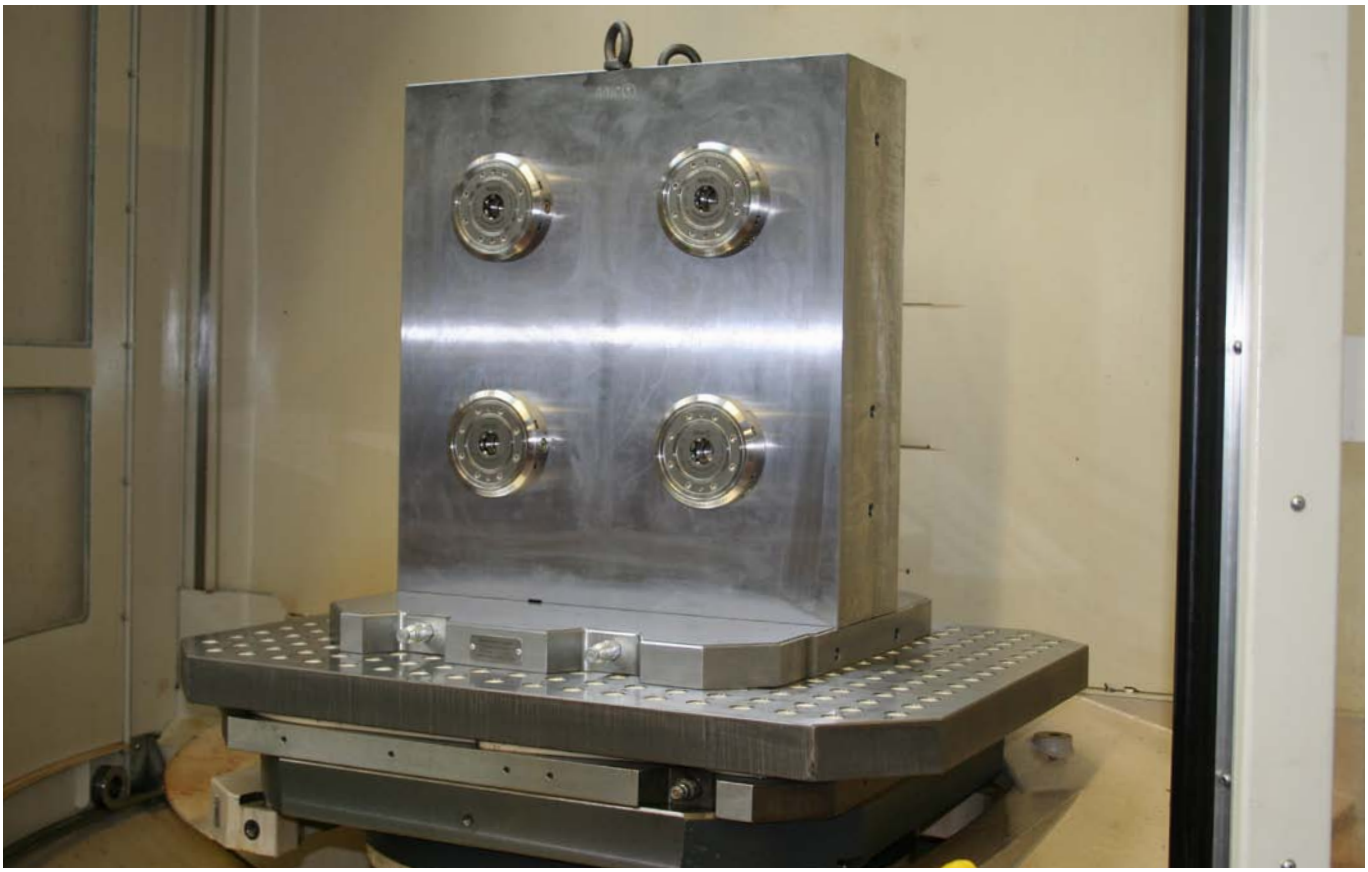
Zero point clamping bracket used in heavy duty machining.



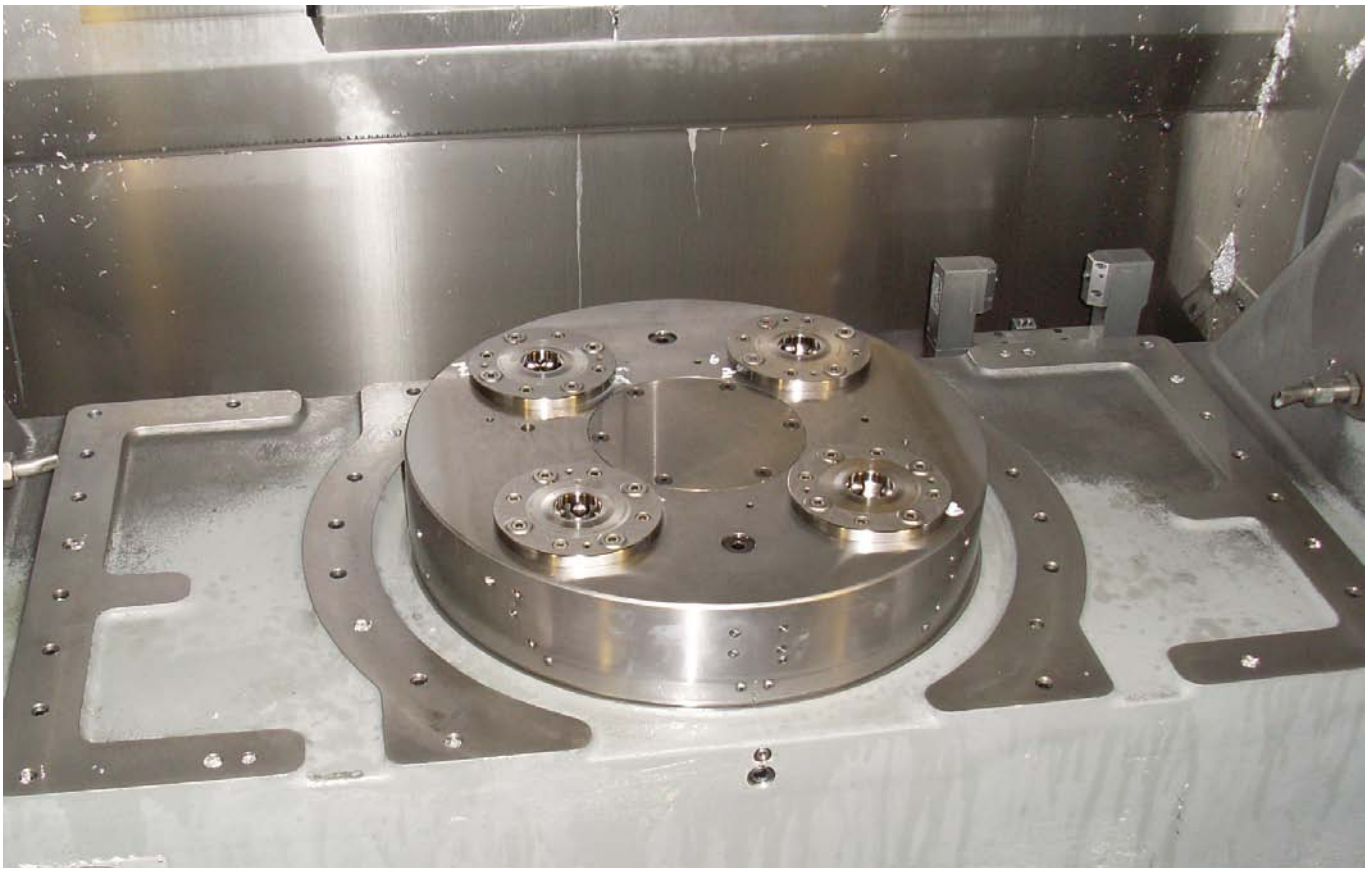
Surface-mounted clamping modules with clamping flanges for easy and flexible positioning of the T-slot tables.



Combined application between zero-point clamping technology and hydraulic media transfer.
This enables the supply of media for existing hydraulic clamping fixtures.

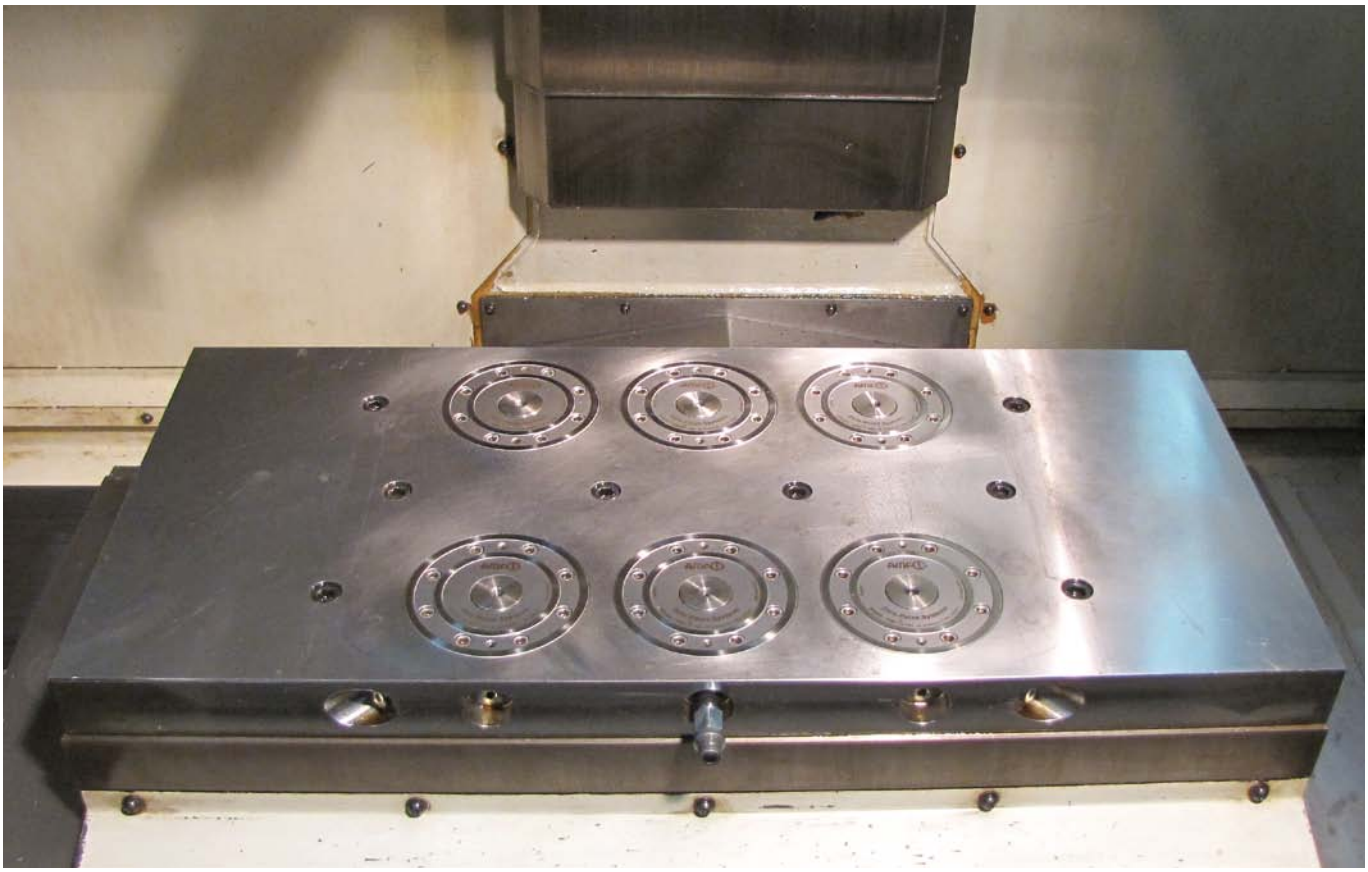


Integration clamping module as flange version for installation on clamping profiles.

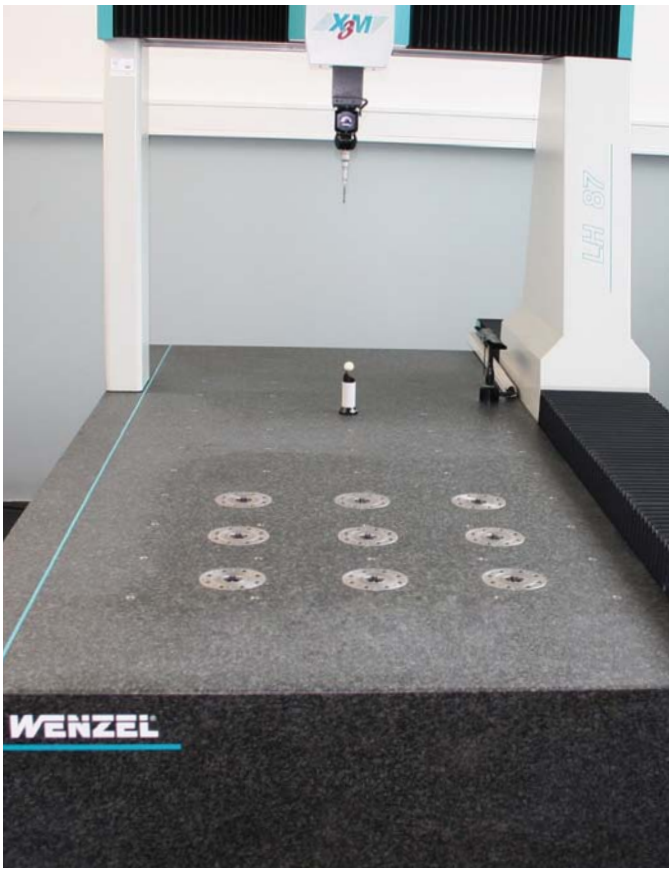


Automation solution with lock and support control as well as pull-stud sensor
used in a fully automated production process with robotic loading.

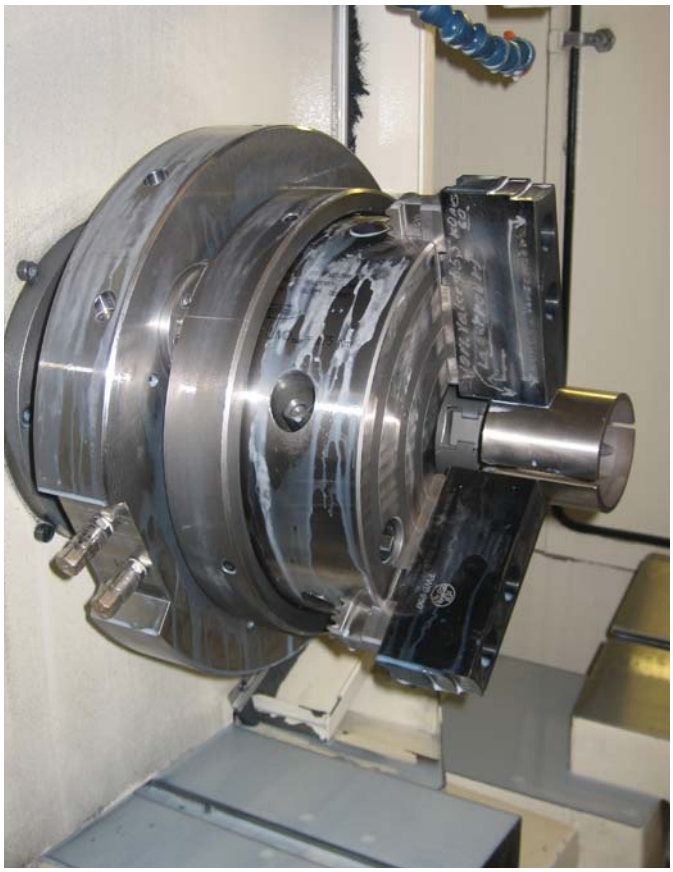
Subject to technical alterations.



The cylindrical mating receptacle makes recessed installation of the clamping modules easily possible without any loss of precision.

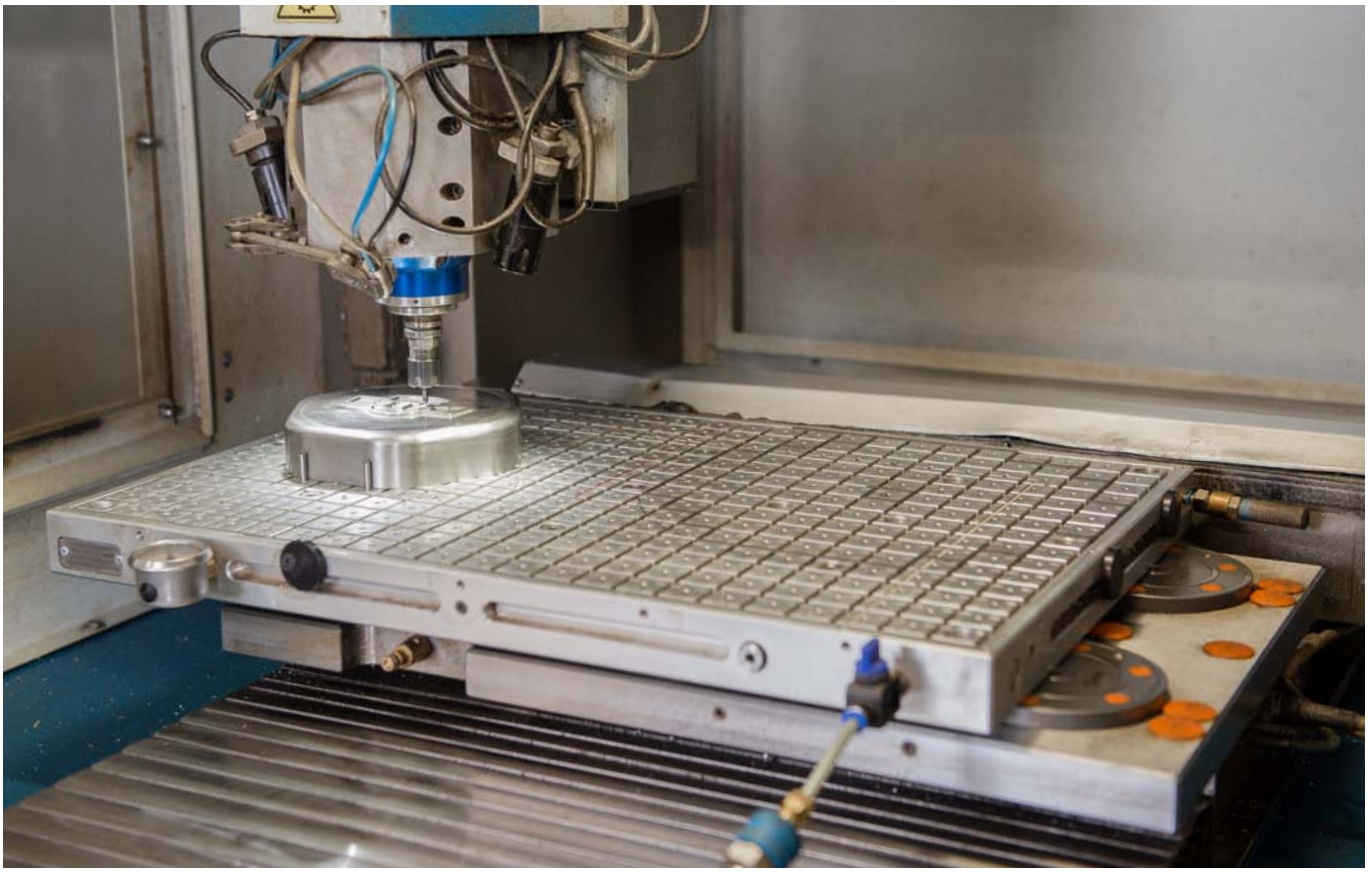


Zero-point clamping technology as standard interface on a coordinate measuring machine. Automation even in post-processing.



The high precision of the AMF zero-point system permits use in grinding technology.

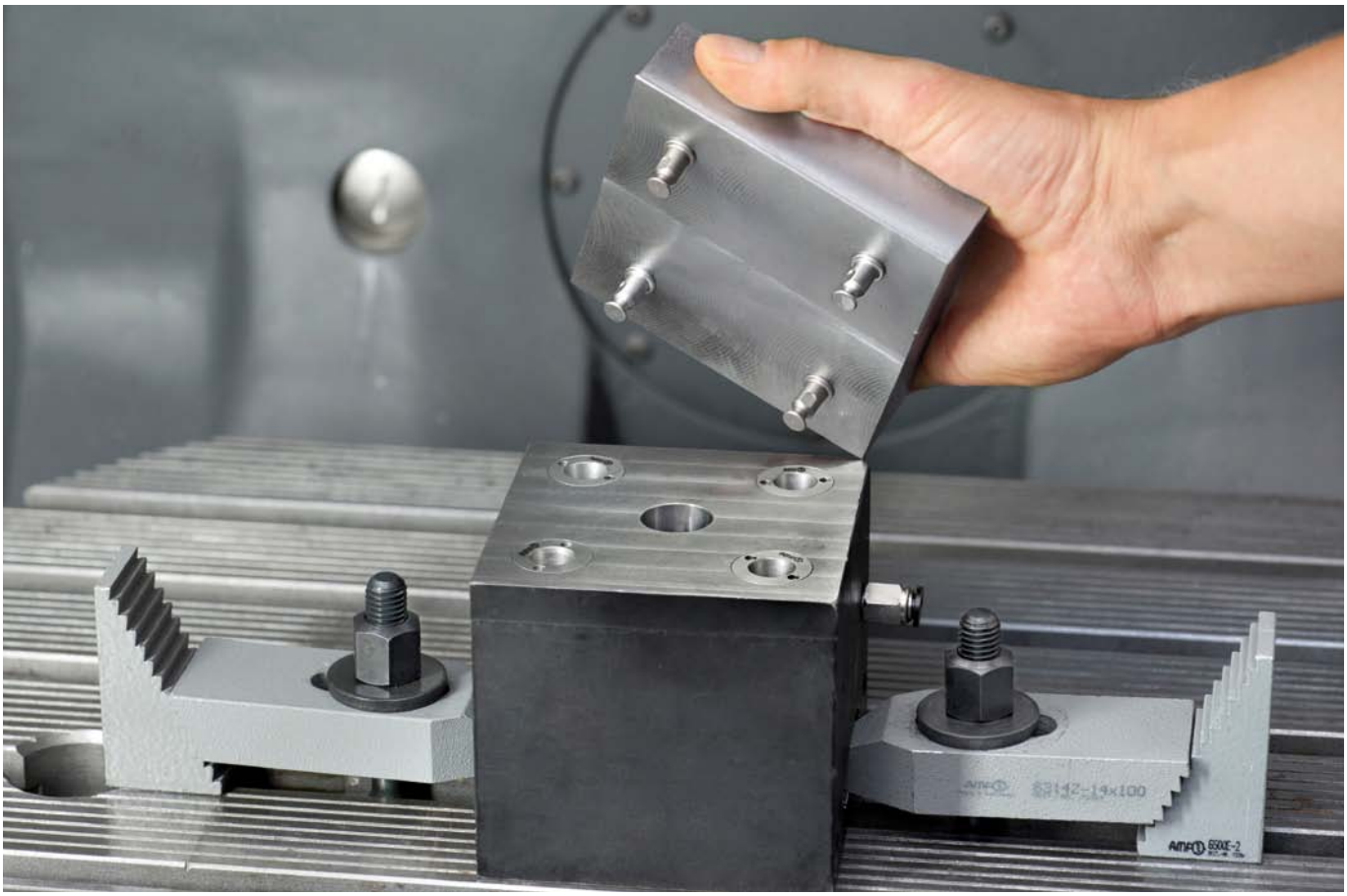
Subject to technical alterations.



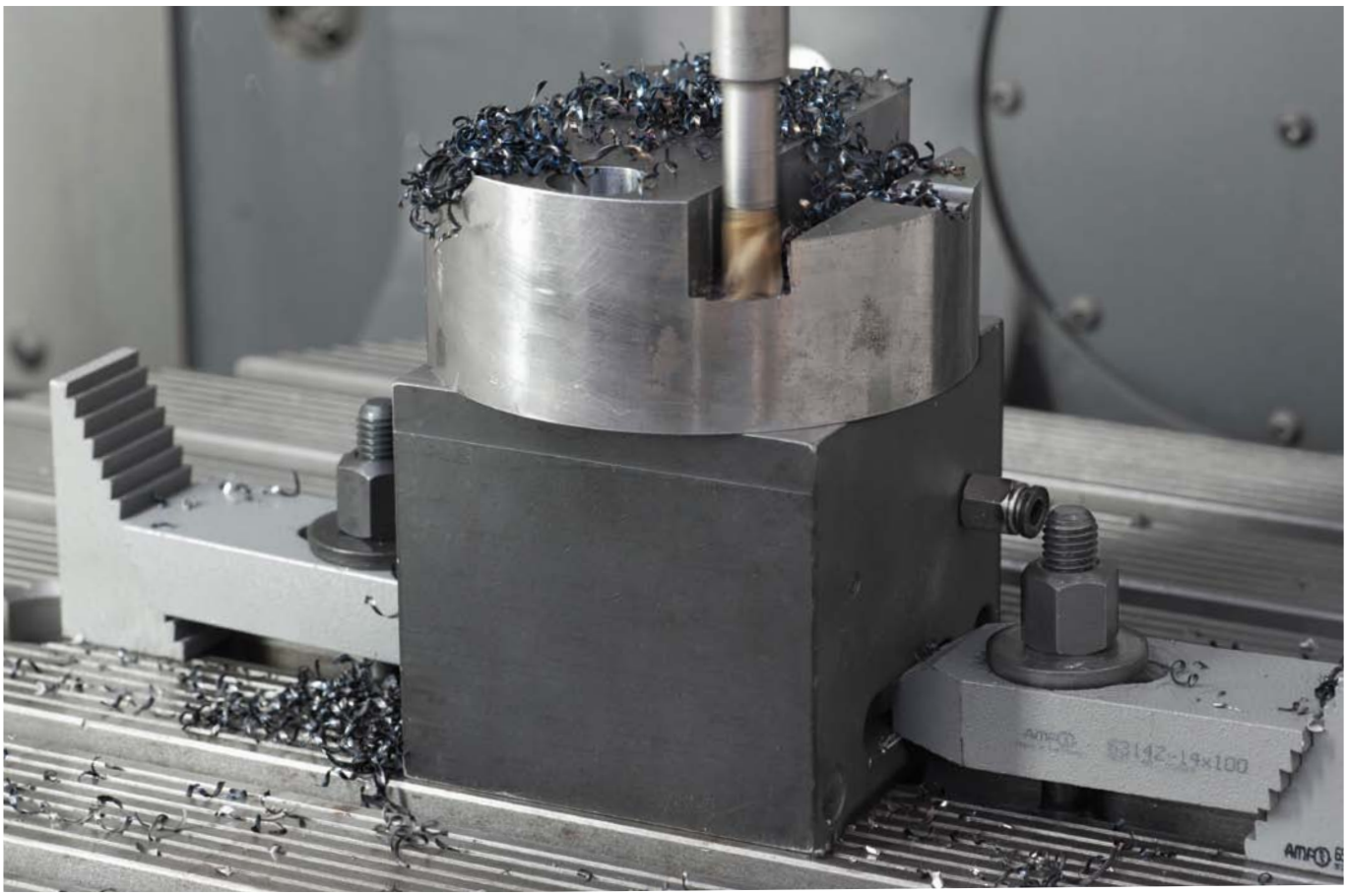
Combined application of vacuum and zero-point clamping technology.
The vacuum clamping plate is equipped with pull-stud mountings at the factory.



The mechanical collet is clamped directly using zero-point clamping technology.
Ideal for clamping thin-walled or sensitive workpieces with complex outer contours.



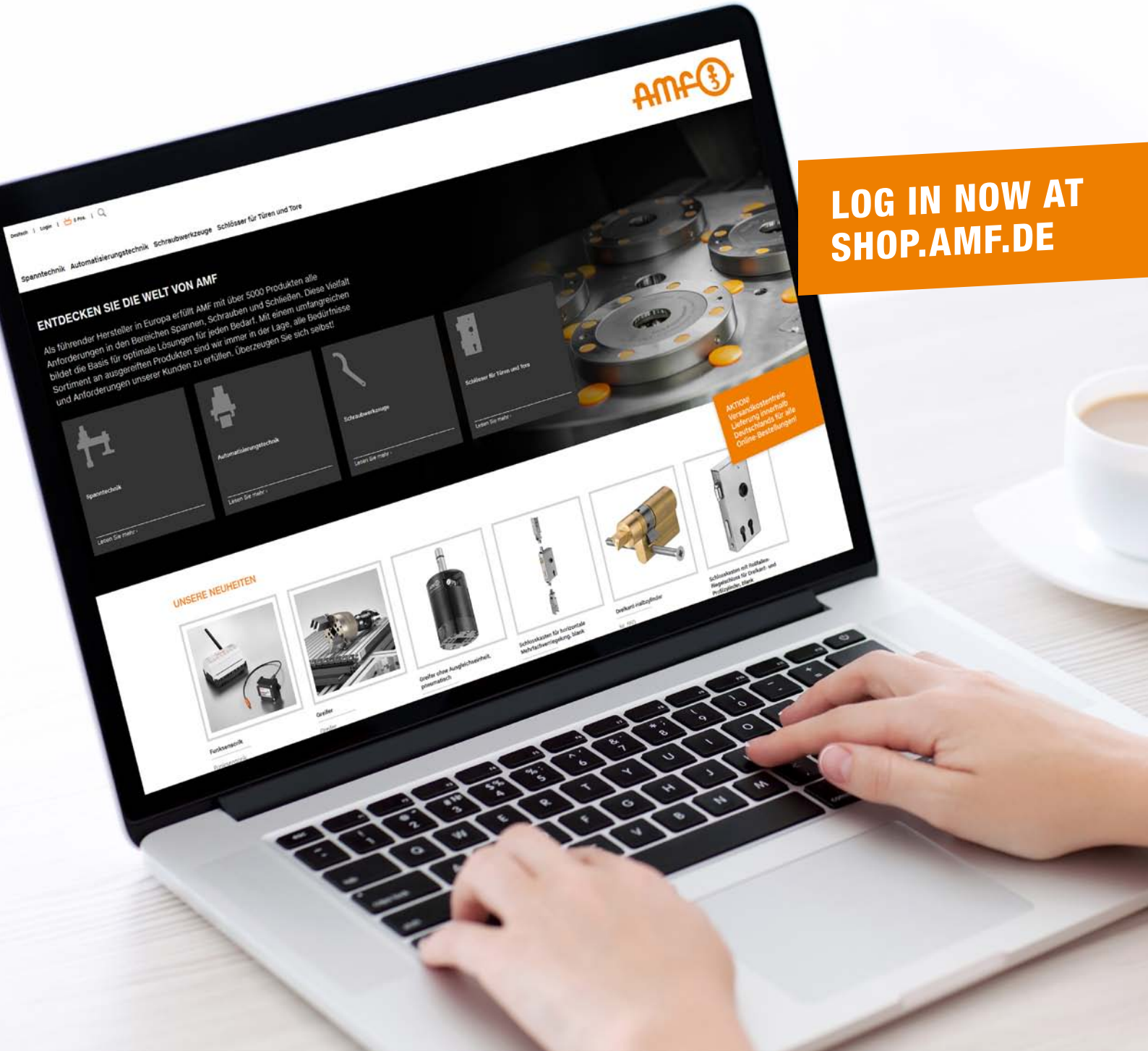
4-point clamping station K02 with interchangeable pallet.



Subject to technical alterations.

CONVENIENT ORDERING – IN OUR ONLINE SHOP

+ Over 6000 products can be ordered online
+ Order tracking online
+ Easy download of CAD data
+ Online inquiry of availability
+ Management of different shopping carts



LOG IN NOW AT SHOP.AMF.DE

YOU ALREADY HAVE A CLAMPING SYSTEM?!
YOU CAN STILL TAKE ADVANTAGE OF OUR BENEFITS ...

With our „Gonzales“ and „Unitool“ clamping modules, we offer you flexibility in retrofitting and expanding your existing zero-point clamping technology. As a result, a complete replacement of the system you currently use is no longer absolutely necessary. You keep your investment as low as possible and still take advantage of the benefits of the AMF Zero-Point System.



„GONZALES“ CLAMPING MODULE (FIG. LEFT)

Your existing Speedy 1000/2000 or DockLock 1000 modules can be exchanged for our corresponding „Gonzales“ modules if you meet the following requirements:

- Unlike Speedy 1000/2000 and DockLock 1000, „Gonzales“ requires a hydraulic unclamping pressure of min. 50 bar / max. 60 bar.
- With countersunk installation, replacement is only possible if there is enough space for the larger covers of the „Gonzales“ modules (cover dia. 112 mm or 140 mm).
- Modules with media ducts cannot be exchanged
- Use „Gonzales“ modules exclusively with „Gonzales“ modules in one clamping.

With the „Gonzales“ modules, the corresponding pull-studs of the systems Speedy 1000/2000 and DockLock 1000 can be clamped. „Gonzales“ pull-studs can be clamped with the corresponding Speedy 1000/2000 and DockLock 1000 modules.

„UNITOOL“ CLAMPING MODULE (FIG. RIGHT)

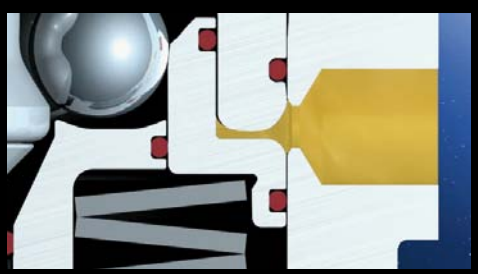
Our „Unitool“ clamping module fits the pull-stud of the Unilock system (dia. 40 mm). The Unitool pull-stud also fits the Unilock system module (NSE-138).

STAINLESS STEEL



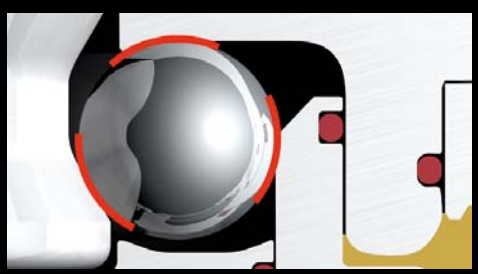
High-alloy, hardened tool steel - and so no corrosion.

SAFETY SYSTEM



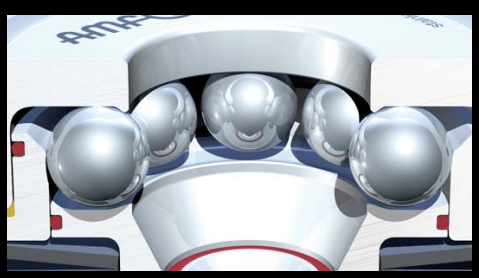
Process reliability - Clamping module always opens. A piston blockade is thus impossible (only Gonzales modules).

FORM FIT



The balls are optimally encapsulated on 3 sides. As a result, the pull-stud always remains firmly clamped in the module.

NO BALL CAGE



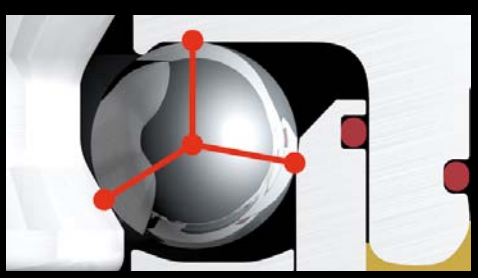
The balls lie freely in the ball canal. This freedom of movement enables the balls to continuously re-position themselves.

SWING-FREE



Swing-free run-in and run-out through the optimal contour of the pull-stud (only Gonzales modules).

THREE-POINT PRINCIPLE



Power transmission by means of the three-point principle! This optimised force distribution prevents shearing load on the balls.

All depictions are model presentations of the functional principle. Subject to technical alterations.

No. 6370EGRH

Installation clamping module “Gonzales”

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Speedy	DockLock	Weight [Kg]
305201	1000	15	25	●	-	2,3
306043	1000	15	25	-	●	2,3
305219	2000	25	55	●	-	3,5

Application:

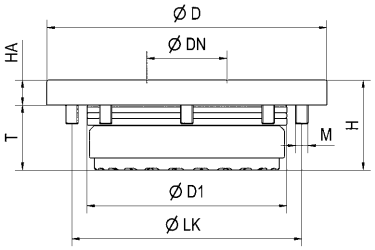
Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

Use „Gonzales“ modules exclusively with „Gonzales“ modules in one clamping. When changing systems, observe the following: Unlike Speedy 1000/2000 and DockLock 1000, „Gonzales“modules require an unclamping pressure of min. 50 bar / max. 60 bar. With recessed installation, observe the cover diameter D 112 mm / 140 mm. The installation clamping module is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module has one connection: 1x hydr. opening (1).
* Please observe the installation instructions.

On request:

- Installation diagrams



Dimensions:

Order no.	Size	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
305201	1000	112	32	80	36	10	92	8 x M5	26
306043	1000	112	32	80	36	10	91	10 x M5	26
305219	2000	140	47	110	36	10	122	8 x M5	26

CAD

No. 6370AGRH

Suface-mounted clamping module “Gonzales”

Hydraulic opening.
Opening operating pressure: min. 50 bar - max. 60 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL





Order no.	Size	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
303362	1000	15	25	2,3
303388	2000	25	55	3,5

Application:

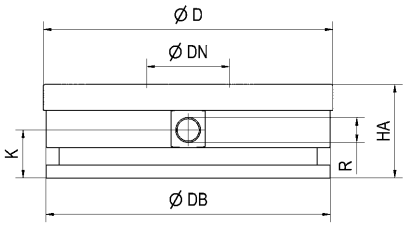
Zero-point clamping system in combination with hook clamping flange 63707BG for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

Use „Gonzales“ modules exclusively with „Gonzales“ modules in one clamping. When changing systems, observe the following: Unlike Speedy 1000/2000 and DockLock 1000, „Gonzales“modules require an unclamping pressure of min. 50 bar / max. 60 bar. The surface-mounted clamping module is opened hydraulically (1) and mechanically locked through spring force. Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free).
The clamping module has one connection: 1x hydr. opening (1).
* Please observe the installation instructions.

On request:

- Installation diagrams



Dimensions:

Order no.	Size	dia. D	dia. DB	dia. DN	HA	K	R
303362	1000	112	110	32	36	18,5	G1/8
303388	2000	140	139	47	40	18,5	G1/8

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370EURL

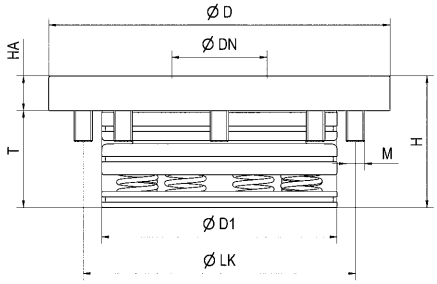
Installation clamping module “Unitool”

Pneumatic opening.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL







CAD

Order no.	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
303560	30	55	3,2

Application:

Zero-point clamping system for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

The installation clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL-005 is recommended.
The clamping module has two connections:
1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).
Use „Unitool“ modules exclusively with „Unitool“ modules in one clamping.
* Please observe the installation instructions.

On request:

- Installation diagrams

Dimensions:

Order no.	dia. D	dia. DN	dia. D1	H	HA	dia. LK	M	T
303560	148	40	102	57	15	118	M8	42

No. 6370AURL

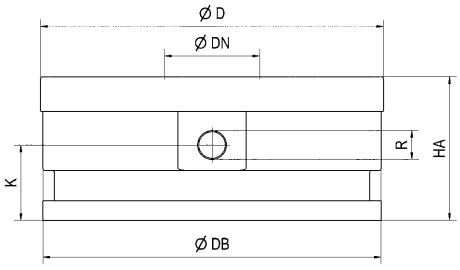
Installation clamping module “Unitool”

Pneumatic opening.
Opening operating pressure: min. 8 bar - max. 12 bar.
Retensioning operating pressure (turbo): min. 5 bar - max. 6 bar.
Cover and piston hardened.
Repeatability < 0.005 mm.

EDELSTAHL Rostfrei INOX STAINLESS STEEL







CAD

Order no.	Pull-in/locking force up to [kN]	Holding force* [kN]	Weight [Kg]
303586	30	55	6,5

Application:

Zero-point clamping system in combination with hook clamping flange 6370ZB for set-up-time-optimised clamping during cutting and non-cutting machining.

Note:

The surface-mounted clamping module has high holding, pull-in and locking forces. This is opened pneumatically (1) and mechanically locked through spring force. To achieve the specified pull-in and locking forces, it must be briefly retensioned pneumatically (turbo) (2). Subsequent uncoupling of the pressure lines is possible at all times (module is tensioned pressure-free). Use of the pneumatic pressure booster 6370ZVL is recommended.
The clamping module has two connections:
1x pneum. opening (1) / 1x pneum. retensioning (turbo) (2).
Use „Unitool“ modules exclusively with „Unitool“ modules in one clamping.
* Please observe the installation instructions.

On request:

- Installation diagrams

Dimensions:

Order no.	dia. D	dia. DB	dia. DN	HA	K	R
303586	148	146	40	62	32,5	G1/4

Subject to technical alterations.

No. 6370ZNG-10

Pull-stud „Gonzales 1000“

Hardened.
Pull-stud can also be used in the modules Speedy 1000 and DockLock 1000.

EDELSTAHL Rostfrei INOX STAINLESS STEEL



Order no.	Size	dia. DN	dia. D1	H	M	T	Weight [g]
303404	1000	32	25	34,0	M8	4,8	70
303420	1000	32	25	34,0	M8	4,8	70
303446	1000	32	25	34,0	M8	4,8	70
303461	1000	32	-	29,2	M8	12,0	55

Design:

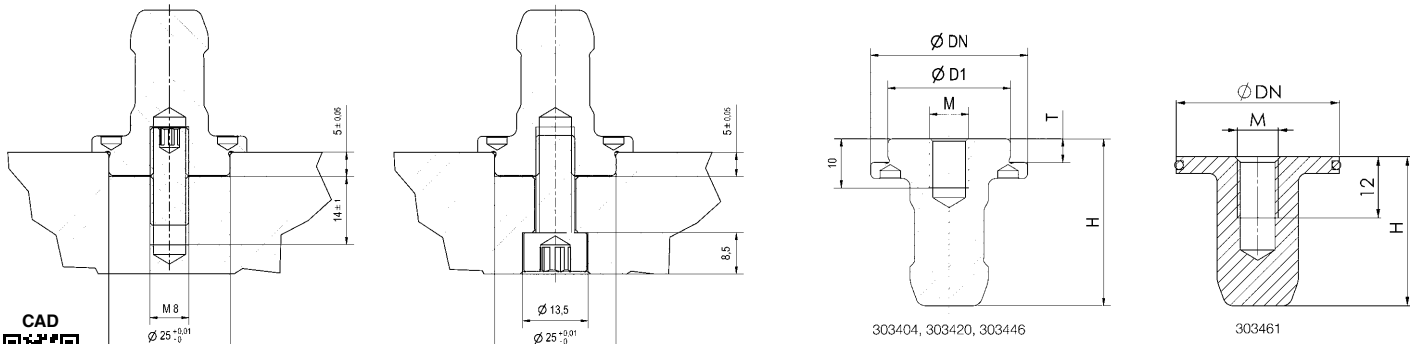
Order no. 303404: zero point pull-stud
order no. 303420: timing pull-stud
order no. 303446: undersize pull-stud
order no. 303461: protection pull-stud

Note:

Tightening torque of the clamping nipple max. 20 Nm. Min. screw grade 8.8.

Dimensions for machining pull-stud mountings:

CAD



No. 6370ZNGH-10

Pull-stud „Gonzales 1000“

With high collar, hardened.
Pull-stud can also be used in the modules Speedy 1000 and DockLock 1000.

EDELSTAHL Rostfrei INOX STAINLESS STEEL



Order no.	Size	dia. DN	dia. D1	H	M	T	Weight [g]
305128	1000	32	25	49	M8	19,8	125
305144	1000	32	25	49	M8	19,8	125
305169	1000	32	25	49	M8	19,8	125
303461	1000	32	-	29,2	M8	12,0	55

Design:

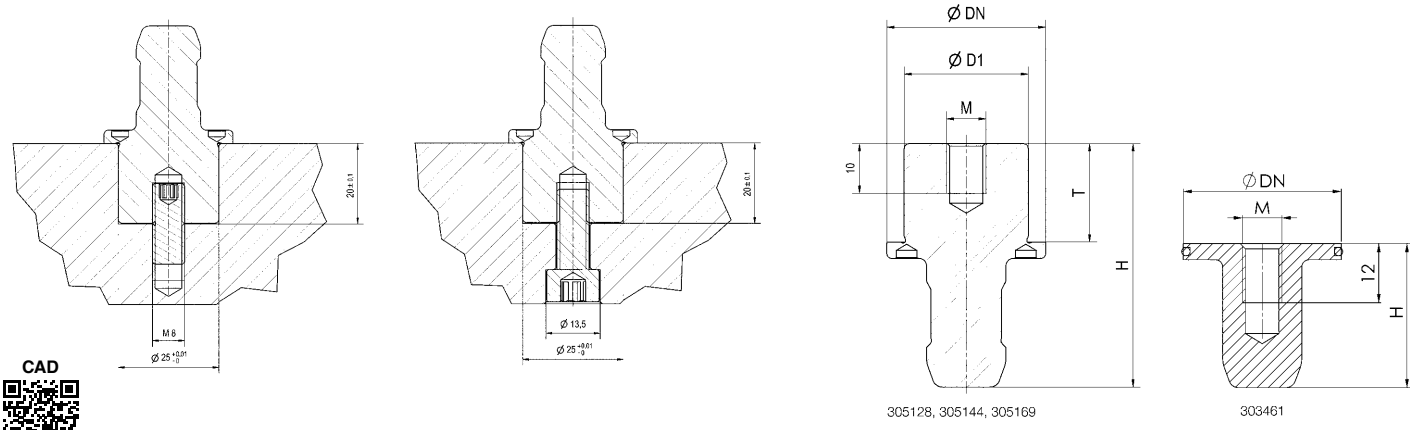
Order no. 305128: zero point pull-stud
order no. 305144: timing pull-stud
order no. 305169: undersize pull-stud
order no. 303461: protection pull-stud

Note:

Tightening torque of the pull-stud max. 20 Nm. Screw grade min. 8.8.

Dimensions for machining pull-stud mountings:

CAD



Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

No. 6370ZNG-20

Pull-stud „Gonzales 2000“

Hardened.
Pull-stud can also be used in Speedy 2000.

EDELSTAHL Rostfrei
INOX
STAINLESS STEEL



Order no.	Size	dia. DN	dia. D1	dia. D2	H	M	T	Weight [g]
303412	2000	47	25	10,8	34,0	M12	4,8	170
303438	2000	47	25	10,8	34,0	M12	4,8	170
303453	2000	47	25	10,8	34,0	M12	4,8	170
303479	2000	47	-	-	29,2	M 8	12,0	180

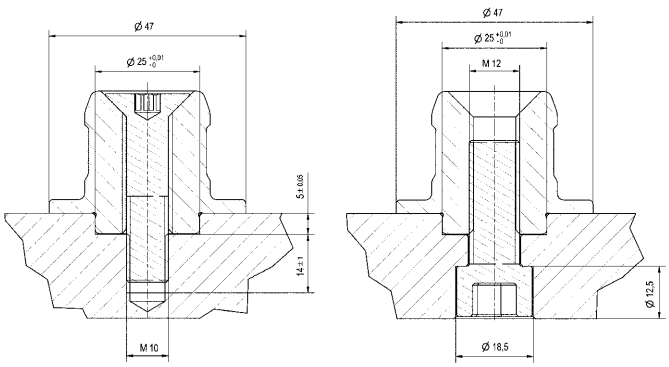
Design:

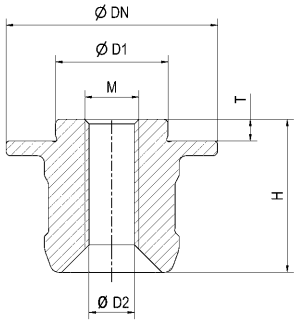
Order no. 303412: zero point pull-stud
order no. 303438: timing pull-stud
order no. 303453: undersize pull-stud
order no. 303479: protection pull-stud

Note:

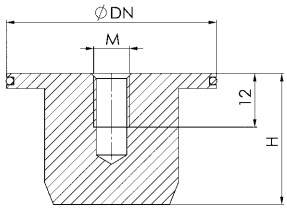
Tightening torque of the pull-stud max. 20 Nm. Screw grade min. 8.8.

Dimensions for machining pull-stud mountings:





303412, 303438, 303453



303479

CAD

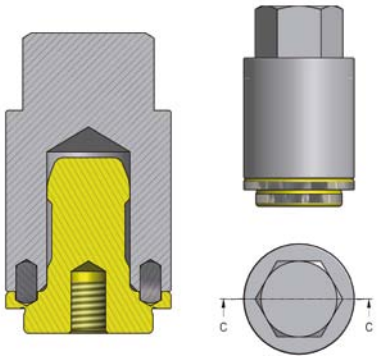
No. 6370ZNSG

Pull-stud key „Gonzales“

For pull-stud no. 6370ZNG/ZNGH „Gonzales 1000“.

Order no.	SW [mm]	Weight [g]
306001	22	80





Subject to technical alterations.

No. 6370ZNU

Pull-stud „Unitool“

Hardened.
Pull-stud can also be used in Unilock system (Ø 40 mm).

EDELSTAHL Rostfrei INOX STAINLESS STEEL

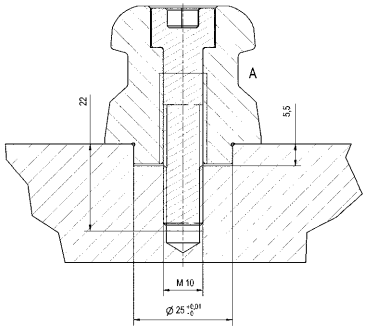


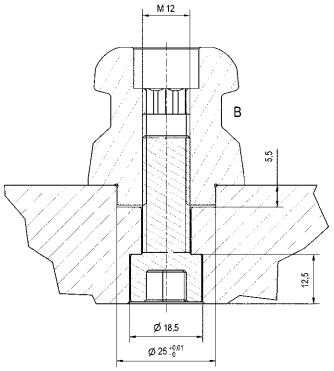
Order no.	dia. DN	dia. D1	dia. D2	H	M	T	Weight [g]
304352	40	25	10	40,0	M12	4,8	230
304592	40	25	10	40,0	M12	4,8	230
304618	40	25	10	40,0	M12	4,8	230
304634	40	-	-	34,7	M 8	12,0	220

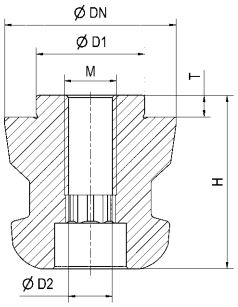
Design:

Order no. 304352: zero point pull-stud
order no. 304592: timing pull-stud
order no. 304618: undersize pull-stud
order no. 304634: protection pull-stud

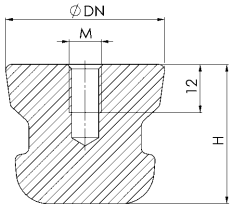
Dimensions for machining pull-stud mountings:







304352, 304592, 304618



304634

CAD

Subject to technical alterations.

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de





WE DEVELOP THE RIGHT SOLUTION –
POTENTIAL SAVINGS BY REDUCING SET-UP TIMES

As a system provider with its own production facility, not only do we have the right product for every need. With many years of experience from all fields of clamping technology we develop the perfect solution for different industries, special projects and for very individual requirements.

With full concentration on a single project, an entire team supports you at AMF, which unites all facets for a successful result.

In close cooperation and with short communication channels, our experienced experts from sales, proposal preparation and purchasing work together with our engineers and designers from the development and production departments.

Thus, we can always ensure that all criteria for a cost-effective production process are met – our specialists look forward to exciting new challenges. **Just talk to us!**



We will be happy to advise you during your current project.
+49 711 5766-2531

... BY ITEM NO.

Article no.	Page
No. 6101L	52
No. 6103HA-20-05	46
No. 6103LA-5	40
No. 6104L	51
No. 6107HA-20-07	47
No. 6108LA-XX-08	41
No. 6108LA-XX-09	42
No. 6108LA-XX-10	43
No. 6109SP-150	50
No. 6109ZB-150	50
No. 6111LA-10-01	44
No. 6111LA-10-05	45
No. 6151HA	27
No. 6151L	27
No. 6203PS4-150	95
No. 6203SP	17
No. 6203S4L-150	95
No. 6203ZMW	138
No. 6203ZNA-150	137
No. 6203ZN-140	125
No. 6203ZN-150	125
No. 6204HA	19
No. 6204IHA	19
No. 6204K1HA-001	103
No. 6204K1HA-004	103
No. 6204K2HA-001	105
No. 6204K2HA-006	105
No. 6204K2HA-011	104
No. 6204K2HA-013	104
No. 6204K2HA-015	102
No. 6204P-S2	118
No. 6204P-S4	118
No. 6204P-S6	119
No. 6204P-S8	119
No. 6204S2HA-001	98
No. 6204S4HA-001	98

Article no.	Page
No. 6204S4HA-002	100
No. 6204S4HA-003	100
No. 6204S6HA-001	99
No. 6204S6HA-002	101
No. 6204S6HA-003	101
No. 6204S6HA-004	102
No. 6204S6HA-008	106
No. 6204S8HA-001	99
No. 6204WU12HA-001	106
No. 6204ZS-01	140
No. 6204ZS-02	140
No. 6206ILA	25
No. 6206LA	24
No. 6206S2L	108
No. 6206S4L	109
No. 6206S6L	110
No. 6206ZS	140
No. 6208IM	57
No. 6208M	56
No. 6208MD	58
No. 6209MXY	78
No. 6209MZ	79
No. 6209MZA	88
No. 6210AGS	76
No. 6210A-20-10	86
No. 6210FN	84
No. 6210FNT	83
No. 6210FN-10-2	85
No. 6210H	68
No. 6210H-10-05	64
No. 6210IA-20-10	87
No. 6210IFR	82
No. 6210IH	69
No. 6210IH-10-05	65
No. 6210IL	73
No. 6210IL-10-05	67

Article no.	Page
No. 6210IZ	81
No. 6210L	72
No. 6210L-10-05	66
No. 6210S	74, 75
No. 6210-XX	90
No. 6210Z	80
No. 6210ZN	59
No. 6210-15-01	90
No. 6211P	112
No. 6211S	112
No. 6212M	60
No. 6212MA-20-10	89
No. 6214RM-250	54
No. 6214RM-250-04	136
No. 6214RM-251	55
No. 6214ZMW-250	138
No. 6214ZN-250-01	123
No. 6214ZN-250-02	123
No. 6214ZN-250-03	123
No. 6215RP-250	16
No. 6215RP-251	16
No. 6217EARHA20	22
No. 6363-**-005	90
No. 6370AARH	32
No. 6370AARHA	33
No. 6370AARL	32
No. 6370AARLA	33
No. 6370AGRH	202
No. 6370AURL	203
No. 6370EAIHA	21
No. 6370EAILA	21
No. 6370EARH	18
No. 6370EARHA	20
No. 6370EARL	18
No. 6370EARLA	20
No. 6370EGRH	202

Article no.	Page
No. 6370EURL	203
No. 6370HARH	28
No. 6370KARH	30
No. 6370P2	120
No. 6370P4	120
No. 6370P6	121
No. 6370S2-001	114
No. 6370S2-002	114
No. 6370S4-001	115
No. 6370S6-001	116
No. 6370ZA	136
No. 6370ZAR	139
No. 6370ZAS	139
No. 6370ZB	34
No. 6370ZD	146
No. 6370ZD-004	146
No. 6370ZF	155
No. 6370ZI	143
No. 6370ZMM	144
No. 6370ZMMG	144
No. 6370ZMN	145
No. 6370ZMNG	145
No. 6370ZMSH	28
No. 6370ZMW-5	138
No. 6370ZNF-10	133
No. 6370ZNF-20	133
No. 6370ZNGH-10	204
No. 6370ZNG-10	204
No. 6370ZNG-20	205
No. 6370ZNM	134
No. 6370ZNR-10	127, 128
No. 6370ZNR-20	129, 130
No. 6370ZNSA	136
No. 6370ZNSF	133
No. 6370ZNSG	205
No. 6370ZNSN	135

Article no.	Page
No. 6370ZNSSN	135
No. 6370ZNS-001	131
No. 6370ZNS-002	134
No. 6370ZNU	206
No. 6370ZN-10	127, 128
No. 6370ZN-20	129, 130
No. 6370ZN-20-029	137
No. 6370ZN-40	131
No. 6370ZN-5	126
No. 6370ZR	148
No. 6370ZRA	148
No. 6370ZR-02	153
No. 6370ZSA-01	49
No. 6370ZSA-02	48
No. 6370ZSA-03	49
No. 6370ZSB	70
No. 6370ZSK	150, 153
No. 6370ZSK-08	154
No. 6370ZSK-11	151
No. 6370ZSS-04	153
No. 6370ZSV-01	154
No. 6370ZSZ-112	70
No. 6370ZS-06-2000	147
No. 6370ZS-07	153
No. 6370ZS-08	149
No. 6370ZVL	155
No. 6370ZVL-004	152
No. 6370ZVL-005	152
No. 6370ZVL-007	154
No. 6370ZZ	137
No. 6376Z	141, 142
No. 6916-11	155
No. 6984-30	143
No. 6985R	149
No. 6988	151

... BY ORDER NO.

Order no.	Page
302836	33
302851	33
302877	33
302893	33
303016	20
303057	20
303065	28
303107	28
303149	129
303156	129
303164	129
303172	129, 130
303180	131
303198	131
303206	131
303214	131
303222	131
303230	131
303248	134
303255	134
303263	114
303271	114

Order no.	Page
303289	114
303297	114
303321	115
303339	115
303362	202
303388	202
303404	204
303412	205
303420	204
303438	205
303446	204
303453	205
303461	204
303479	205
303503	30
303545	33
303560	203
303578	131
303586	203
303610	127
303636	127
304352	206

Order no.	Page
304519	127
304535	127, 128
304592	206
304618	206
304634	206
305128	204
305144	204
305169	204
305193	33
305201	202
305219	202
305375	20
305383	155
305409	148
305417	148
305425	148
305912	135
305938	135
305953	18
306001	205
306019	126
306035	126

Order no.	Page
306043	202
306050	126
306076	126
306092	131
306159	32
306167	137
306175	32
306183	137
306209	137
306217	28
306241	137
306258	28
320986	148
321000	148
321026	148
321042	148
321067	148
325217	143
340034	135
340059	135
421396	152
421453	153

Order no.	Page
421479	153
422345	136
422360	136
422386	136
422402	136
422428	136
422444	136
423962	27
423988	27
424002	144
424085	27
424101	27
424119	116
424143	27
424168	27
424184	144
424200	144
424226	144
424242	145
424267	144
424556	28
425033	120

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

... BY ORDER NO.

Order no.	Page
425041	120
426494	155
426569	146
426700	120
426726	114
426734	116
426742	115
426759	116
426767	120
426775	121
426783	120
426791	121
426809	120
426817	121
426825	34
426833	34
426841	34
426866	28
426882	135
426908	135
427088	152
427286	17
427302	125
427328	125
427344	125
427369	19
427484	98
427492	100
427500	98
427518	100
427526	99
427534	101
427542	99
427559	101
427567	102
427575	104
427591	102
427625	106
427641	106
427666	105
427682	105
427708	105
427724	105
427740	105
427765	105
427781	105
427807	105
427823	105
427849	105
427856	150
427864	104
427872	150
427880	104
427906	104
427963	148
427971	20
428060	103
428086	103
428102	103
428128	103
428144	103

Order no.	Page
428169	103
428409	46
428425	21
428441	21
428490	19
428664	140
428680	20
428730	24
428755	24
428771	25
428797	25
429019	148
429266	118
429282	118
429308	119
429324	119
429845	20
429936	148
429969	134
429985	134
430009	134
430025	134
430041	153
430058	145
430066	153
430082	147
430108	153
430124	153
430140	153
430165	140
430181	140
430207	141
430223	142
430264	143
430280	127
430306	127
430322	129
430348	129
477570	154
526517	137
531996	81
532010	81
532036	81
532051	81
532077	81
532093	81
532119	81
532135	81
532150	81
532176	81
532192	81
532218	81
532234	81
532242	81
532374	74
532390	74
532416	75
532424	82
532432	75
532440	82
532499	87

Order no.	Page
532853	67
533034	95
533059	95
533075	154
534412	69
534453	73
534487	80
534495	73
534503	80
534529	80
534537	72
534545	80
534560	80
534586	80
534602	80
534628	80
534644	80
534669	80
534685	80
534701	80
534719	65
534727	80
534743	80
534750	86
534768	66
534776	64
534800	68
534842	72
534883	68
534925	72
535732	90
535757	85
550197	90
550198	90
550249	108
550251	109
550252	110
550254	108
550255	109
550256	110
550257	41
550258	41
550259	42
550260	42
550261	43
550262	43
550279	47
550281	139
550282	139
550283	139
550284	139
550285	139
550286	70
550287	70
550288	143
550438	59
550439	59
550440	59
550441	59
550442	59
550443	59

Order no.	Page
552810	139
552811	139
552812	139
552813	139
552963	52
552964	52
552965	52
552967	51
552968	51
553152	24
553154	49
553182	48
553183	49
553405	60
553995	140
554058	79
554493	146
554926	131
554927	131
554928	131
554929	131
554936	128
554937	128
554938	128
554939	130
554940	130
554941	130
554942	131
554943	131
554944	131
558008	149
558043	150
558044	150
558045	148
558050	148
558051	51
558052	88
558053	88
558903	79
558905	78
558906	78
559089	50
559090	54
559092	123
559093	123
559094	60
559095	84
559096	84
559097	83
559098	83
559120	131
559140	85
559390	44
559391	45
559403	50
559439	138
559678	56
559680	57
559681	58
559683	80
559684	81

Order no.	Page
559933	90
560021	151
561391	136
561989	16
561990	22
561991	41
561992	40
561993	89
562192	126
562193	126
562194	126
562354	56
562355	57
562356	58
562748	127
562750	127
562751	127
562753	133
562755	128
562757	128
562759	128
562761	129
562764	129
562766	129
562767	133
562768	130
562769	130
562771	130
562804	137
562861	133
562862	133
563900	18
563925	153
564839	17
564840	125
564841	125
564842	125
564843	138
564855	138
565059	151
565395	138
567133	55
567134	16
567135	123
567136	76
567137	76
567201	154
63198	149
63206	149
63214	149
63222	149
63230	149
63248	149
65326	155
68817	151
68825	151
78006	90
78238	90

... IN ALPHABETICAL ORDER

Description	Page
A	
Actuating pin	136
Adapter clamping module B10 to BH5, hydr.	64
Adapter clamping module B10 to BH5, hydr. with indexing	65
Adapter clamping module B10 to BP5, pneum.	66
Adapter clamping module B10 to BP5, pneum. with indexing	67
Adapter for clamping module, mechanical	89
Adapter for height compensation	88
Adapter reduction from KH20, KP20, KP10.3 to B10	86
Adapter reduction from KH20, KP20, KP10.3 to K10, with indexing	87
Adapter set for pull-stud size 10	141, 142
Adapter with external thread	148
Adapter with straight clamp	76
Air gun valve, pneumatic	154
Air-Hydraulic Pump	146
Alignment tool K02 for timing pull-stud	137
Assembly element BH10 and BH20, hydraulic	68
Assembly element BH20, hydraulic, with indexing	69
Assembly element BP10, BP10.3 and BP20, pneumatic	72
Assembly element BP10.3 and BP20, pneumatic, with indexing	73
B	
Base element, flat, for T-slot plate	83
Base element, round, for T-slot plate	84
Base element, with indexing for grid plates	82
C	
Centering sleeve Ø 15	90
Centring pin	90
Centring sleeve, cylindrical	90
Clamping flange, Set	34
Clamping module, mechanical	56, 60
Clamping module, mechanical, screw-in version	54
Clamping module, mechanical, with indexing	57
Clamping module, screw-in version	16
Clamping module, screw-in version, short design	16
Clamping module with locking function, mechanical, screw-in version	55
Clamping module with sensor query for opening and interlock	51, 52
Collet attachment for clamping module KH20 and BH20, hydr.	70
Compact cylinder	30
Compensation pull-stud	135
Counterbalance clamping sleeve	123
Counterbalance element XY-plane	78
Coupling connector	151
Coupling mechanism adapter	144
Coupling nipple adapter	145
Cover caps for clamping module	140
Cover caps for clamping pallets	140
Cover ring for clamping modules	139
D	
Double clamping module, mechanical	58
E	
Engagement screw	131, 133, 135
Engagement screw for protective shield	136
F	
Fastening kit with sensors	50
Fixture plate	112, 118-121
Flow meter	49
Footrest valve, pneumatic	154
H	
Height adjustment element	79
High Pressure Hose	149
Horizontal engagement screw	134
Horizontal rapid-clamping cylinder	28
Hose, pneumatic	153
Hose set, hydraulic	147
Hydraulic tube	149
I	
Indexing T-nut	143
Insertion tool	138
Installation clamping module	19, 20, 22, 24
Installation clamping module, flange version	27
Installation clamping module for automation solutions	41, 42, 43, 46
Installation clamping module for automation solutions, screw-in version	40
Installation clamping module “Gonzales”	202
Installation clamping module, screw-in version	17, 18
Installation clamping module “Unitool”	203
Installation clamping module with central lock for automation solutions	44, 45, 47
Installation clamping module with indexing	19, 21, 25
Installation clamping module with sensor query for opening and interlock	50
Interchangeable pallet	95
Intermediate element	80
Intermediate element, with indexing	81
M	
Manifold	151
Manual directional valve	155
Mounting key for horizontal rapid-clamping cylinder	28
Mounting kit for collet attachment	70
P	
Pipe fittings, brass	148
Pneumatic pressure booster	152
Pneumatic pressure booster set	152
Pneumatic sensor unit, Control and sensor module	48
Positioning pull-stud	137
Pressure intensifier	146
Protective cap	153
Protective shield	136
Puller	137
Pull-stud for T-slots	59
Pull-stud „Gonzales 1000“	204
Pull-stud „Gonzales 2000“	205
Pull-stud key „Gonzales“	205
Pull-stud nut	134
Pull-stud size 10 for M10 engagement screw	128
Pull-stud size 10 for M10 engagement screw with reduced fitting collar	128
Pull-stud size 10 for M8 engagement screw	127
Pull-stud size 10 for M8 engagement screw with reduced fitting collar	127
Pull-stud size 10 for M8 engagement screw without fitting collar	133
Pull-stud size 10 with colour coding for M8 engagement screw	127
Pull-stud size 140	125
Pull-stud size 150	125
Pull-stud size 20 for M12 engagement screw	129
Pull-stud size 20 for M12 engagement screw with reduced fitting collar	129
Pull-stud size 20 for M12 engagement screw without fitting collar	133
Pull-stud size 20 for M16 engagement screw	130
Pull-stud size 20 for M16 engagement screw with reduced fitting collar	130
Pull-stud size 20 with colour coding for M12 engagement screw	129
Pull-stud size 40 for M16 engagement screw	131
Pull-stud size 40 for M18 engagement screw	131
Pull-stud size 5 for M6 engagement screw	126
Pull-stud size 5 for M8 engagement screw	126
Pull-stud „Unitool“	206
Push-in fittings, pneumatic	153
Q	
Quick coupling „flat-face“ G1/4	150
Quick coupling „flat-face“ G1/8	150
Quick fitting coupling, pneumatic	153
S	
Screw-in coupling mechanism	144
Screw-in coupling nipple	145
Sensor module for pneumatic sensor unit	49
Shut-off valve	155
Single clamping bracket	103
Special grease for zero-point clamping modules	155
Spring washer for base element, round	85
Suface-mounted clamping module “Gonzales”	202
Support control, pneumatic	143
Support element, adjustable ± 5 mm	75
Support element, fixed	74
Surface-mounted clamping module	32, 33
T	
T-plug connection, pneumatic	154
Z	
Zero-point clamping sleeve	123
1	
12-point clamping cube	106
2	
2-point clamping bracket	102, 104, 105
2-point clamping station	98, 108, 114
4	
4-point clamping station	95, 98, 100, 109, 112, 115
6	
6-point clamping station	99, 101, 102, 106, 110, 116
8	
8-point clamping station	99

ANDREAS MAIER GmbH & Co. KG · Phone: +49 711 5766-196 · Web: www.amf.de

Terms of Sale, Delivery and Payment

These Terms of Payment apply for companies, legal entities governed by public law and public law special funds. Our goods and services are supplied exclusively on the basis of the following conditions. Any deviating purchasing conditions of the customer not expressly recognised by us will not become part of the contract through acceptance of the order. By placing the order and accepting the goods we deliver, the customer confirms its consent to our terms and conditions.

1. Offer and contractual conclusion

All our offers are always subject to change without notice unless otherwise explicitly agreed. Our delivery contracts are based on the latest version of our catalogue. Dimension and weight values, as well as illustrations, drawings and data, are non-binding and can be changed by us at any time. Therefore, deviations cannot be ruled out and do not justify any compensation claims against us.
Orders are considered accepted only when confirmed by us in writing. If, for organisational reasons, the customer does not receive a separate confirmation upon the delivery of goods, the invoice shall also be deemed the order confirmation.

2. Prices

The prices are in EURO, ex-works, excluding VAT, packing, freight, postage and insurance. Unless otherwise agreed, our list prices valid on the day of delivery shall apply. For orders below 50 EUR goods net, we must make a minimum quantity surcharge of a 10 EURO for cost reasons.

3. Tool costs

Unless any other agreements have been reached, the tools fabricated for the purpose of executing the order shall remain our property in all cases, even if we have invoiced a tool cost component separately.

4. Payment

Unless otherwise stated on the invoice, the purchase price falls due for net payment within 30 days of the invoice date (without deduction of discount). Invoice amounts of below 50 EURO are due for payment immediately.
In case of payment default, we shall be entitled to charge default interest. The amount corresponds to our interest rate for current account credits at our main bank; the minimum however being 8 percentage points above the relevant base interest rate applied by the European Central Bank. Moreover, in case of default following written notice to the customer, we shall be entitled to cease to fulfil our obligations until payments are received.

5. No set-off

The customer can set-off only with legally confirmed or undisputed counterclaims.

6. Right of withdrawal in case of delayed acceptance or payment and insolvency

If the customer fails to accept the goods in due time, we shall be entitled to set a reasonable period of grace, after which we can dispose of the goods elsewhere and supply the customer on a reasonably longer term. Our rights to withdraw from the contract under the provisions of Section 326 BGB and demand damages for non-performance shall not be affected. If the customer fails to pay for the goods once payment is due, we shall be entitled, at the end of a reasonable period of grace we have set, to withdraw from the contract and demand the return of any goods already supplied. Section 323 BGB remains unaffected in all other cases.
If the customer applies for the opening of insolvency proceedings, we shall be entitled, prior to the ordering of security measures by the insolvency court, to withdraw from the contract and demand the immediate return of the goods.

7. Customer-specific fabrications/project fabrications (custom fabrications)

Customer-specific fabrications require binding information on design, quantity etc. in written form at the time of ordering. For manufacturing reasons, we reserve the right to supply up to 10% above or below the order quantity. Technical modifications or cancellations are subject to any costs incurred. The return of customer-specific fabrications is impossible.

8. Delivery and packaging, transfer of risk

The delivery date is non-binding; although stated to the best of our knowledge. It is subject to us receiving correct, defect-free and complete deliveries. The stated delivery dates relate to completion in the factory, starting on the day the order is accepted by us.
Delivery is EXW (ex-works) in accordance with Incoterms 2010. Therefore, the costs are borne by the customer. The risk is transferred to the customer when the goods are passed to the person, company or facility nominated to execute the shipment. This applies also for partial deliveries, or if we have assumed responsibility for delivery and installation. The risk shall be transferred to the customer even in the case of delayed acceptance.
In the absence of specific shipping instructions, we shall proceed as we deem fit and without any obligation to the cheapest or most expedient method. The customer agrees that the order can also be delivered in parts, insofar as this is reasonable for the customer. We shall charge a 5 EURO processing free for shipping to third parties that we supply on behalf of the customer.
The packaging complies with the packaging ordinance. Disposable packaging shall be charged at cost price. The packaging cannot be taken back.

9. Performance impediment and/or impossibility

If we are hindered in the fulfilment of our obligation due to the onset of unforeseeable circumstances, which we are unable to avoid despite reasonable effort in relation to the nature of the circumstances (e.g. operational interruption, delay in the delivery of important raw materials, defects in the delivery), the delivery time shall be extended by a reasonable period, insofar as the supply of goods or services is not rendered unreasonably difficult or impossible.
If we have to accept that these circumstances are not only temporary, we shall be entitled to withdraw from the contract either in whole or in part.
If the supply of goods or services becomes impossible, the customer shall not be obliged to furnish its own contractual service. Section 275 BGB applies mutatis mutandis. If, however, the customer is solely or predominantly responsible for the circumstances that led to impossibility, it shall remain under an obligation to render the return service. The same applies if this circumstance occurs at a time when the customer is behind schedule with acceptance.

10. Samples/returns

Samples shall be provided only against payment. If samples or models are provided, a credit note shall be issued with the subsequent order if the order value is 125 EURO net or more. Goods can be returned only by agreement, although custom fabrications are excluded from such return.
In the case of returns for which we are not responsible (e.g. incorrect order), we shall charge a processing fee of 10%, the minimum value, however, being 7.50 EURO.

11. Retention of title

The goods shall remain our property unless full payment of all claims and/or until the cheques provided for this purpose are honoured. The itemisation of claims in an ongoing invoice, as well as balancing the account and the recognition thereof does not affect the retention of title. The customer is entitled to sell on the retained goods during the ordinary course of business. However, the customer is not permitted to pledge the goods or transfer them by way of security. It shall assign its claim ensuing from the selling on of the retained goods to us in advance. The customer shall be entitled to collect the claim to the extent that it has fulfilled its obligations towards us. At our request, the customer shall be obliged to state third-party debtors and we shall be entitled to report this and the assignment.

12. Property rights

We reserve property rights and copyrights to all contractual documents such as drafts, drawings, calculations and cost estimates. Such documents must not be reproduced or disclosed to third parties without our consent. Any rights to patents, utility models etc. reside solely with us, insofar as such patents have not yet been filed. Our products are allowed to be replicated only with our written consent.
If objects are fabricated according to drawings or samples, the customer shall warrant that any third party property rights are not infringed by manufacture or delivery. If a third party forbids manufacture and delivery on account of property rights, we shall be entitled to stop manufacture and delivery immediately. The customer shall be obliged to reimburse us with all costs incurred and indemnify us from third party compensation claims. Compensation claims by the customer are impossible.

13. Warranty

If the customer agrees with us a particular quality of the goods, we shall base this agreement on our technical delivery specifications. If we have to deliver according to customer drawings, specifications, samples etc., the customer shall assume the risk for suitability for the intended purpose. If, after the contract is concluded, the scope of goods or services is changed at the customer‘s request and this impairs the quality or suitability of the goods, claims for defects on the part of the customer shall be ruled out, insofar as such impairments are caused by the customer‘s requests for change.
The time at which the risk is transferred is decisive for the contractual state of the goods. Wear and tear of wearing parts caused by ordinary use does not constitute a defect. Claims for defects are ruled out in the following cases in particular: Unsuitable or improper use, incorrect installation and/or commissioning by the customer or third party, normal wear and tear, incorrect or negligent handling - in particular excessive use -, unsuitable equipment, replacement materials, chemical, electrochemical or electrical influences, unless such defects are caused by ourselves.
If the goods contain a defects, we shall provide, following a reasonable period of grace set by the customer, either a replacement or a repair as we deem fit. If such subsequent performance fails, the customer shall be entitled to either reduce the purchase price or withdraw from the contract. Any further warranty claims are ruled out. In case of negligible deviations from the agreed quality, no claims for defects shall be recognised.
The discovery of defects must be communicated to us immediately in writing. In the case of recognisable defects, however, within 10 days of acceptance, in the case of non-recognisable defects immediately after they become evident. The warranty is 12 months, starting with delivery of the goods ex-works.

14. Liability

With the exception of harm to life, body or health on account of a breach of duty by ourselves, our liability shall be limited to intent or gross negligence.

15. Place of fulfilment, place or jurisdiction and governing law

The place of fulfilment for all obligations ensuing from this contractual relationship is D-70734 Fellbach.
The place of jurisdiction for all legal disputes ensuing from the contractual relationship is the court responsible for the headquarters of Andreas Maier GmbH & Co. KG.
All disputes ensuing from the contract or regarding the validity thereof shall be finally decided by a court of arbitration in accordance with the Court of Arbitration Ordinance of the German Committee for Arbitration Court Procedures or the Conciliation and Arbitration Arrangement of the International Chamber of Commerce, recourse to ordinary courts of law being excluded. The legal dunning process, however, remains permissible.
German law shall govern (BGB and HGB). The applicability of the UN Convention on Contracts for the International Sale of Goods (CISG) is ruled out.

16. Severability clause

If individual provisions become legally invalid, the remaining provisions shall not be affected. The legally invalid provision shall be replaced by regulations that most closely reflect the economic purpose of the contract with reasonable consideration for the mutual interests. The publication of these Terms of Sale, Delivery and Payment renders all previous versions invalid. This does not apply for any contracts concluded prior to announcement.

ZERO-POINT-SYSTEMS **CATALOGUE 2023/2024**

Request additional catalogues from **www.amf.de**



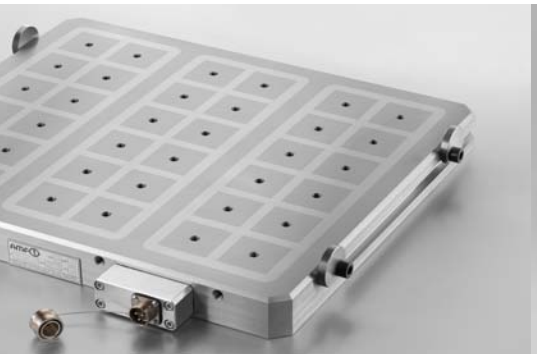
ZERO-POINT-SYSTEMS



HYDRAULIC CLAMPING SYSTEMS



VACUUM CLAMPING SYSTEMS



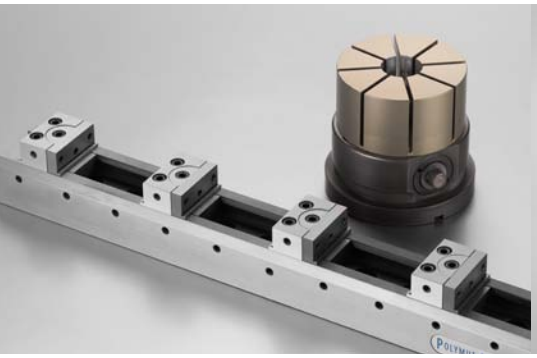
MAGNETIC CLAMPING SYSTEMS



WIRELESS SENSORING SYSTEMS



TOGGLE CLAMPS



SINGLE AND MULTIPLE CLAMPING SYSTEMS



STANDARD CLAMPING SYSTEMS



MARKING AND CLEANING TOOLS

ANDREAS MAIER GmbH & Co. KG
Waiblinger Straße 116 · D-70734 Fellbach
Phone: +49 711 5766-0
Fax: +49 711 575725
E-mail: amf@amf.de
Web: www.amf.de

Order no. 189308 · € 3,60

All sales are subject to our terms o f sale, delivery, and payment. All rights for design, photographs and texts reserved by the publisher, AMF.
No photomechanical reproduction without our express permission. 2023/2024/3EN > MG 2.5.//08/2022 > Printed in Germany