

Andreas Maier GmbH & Co. KG
ZPS – Zero-Point Systems





■ > **Welcome to the world of AMF**

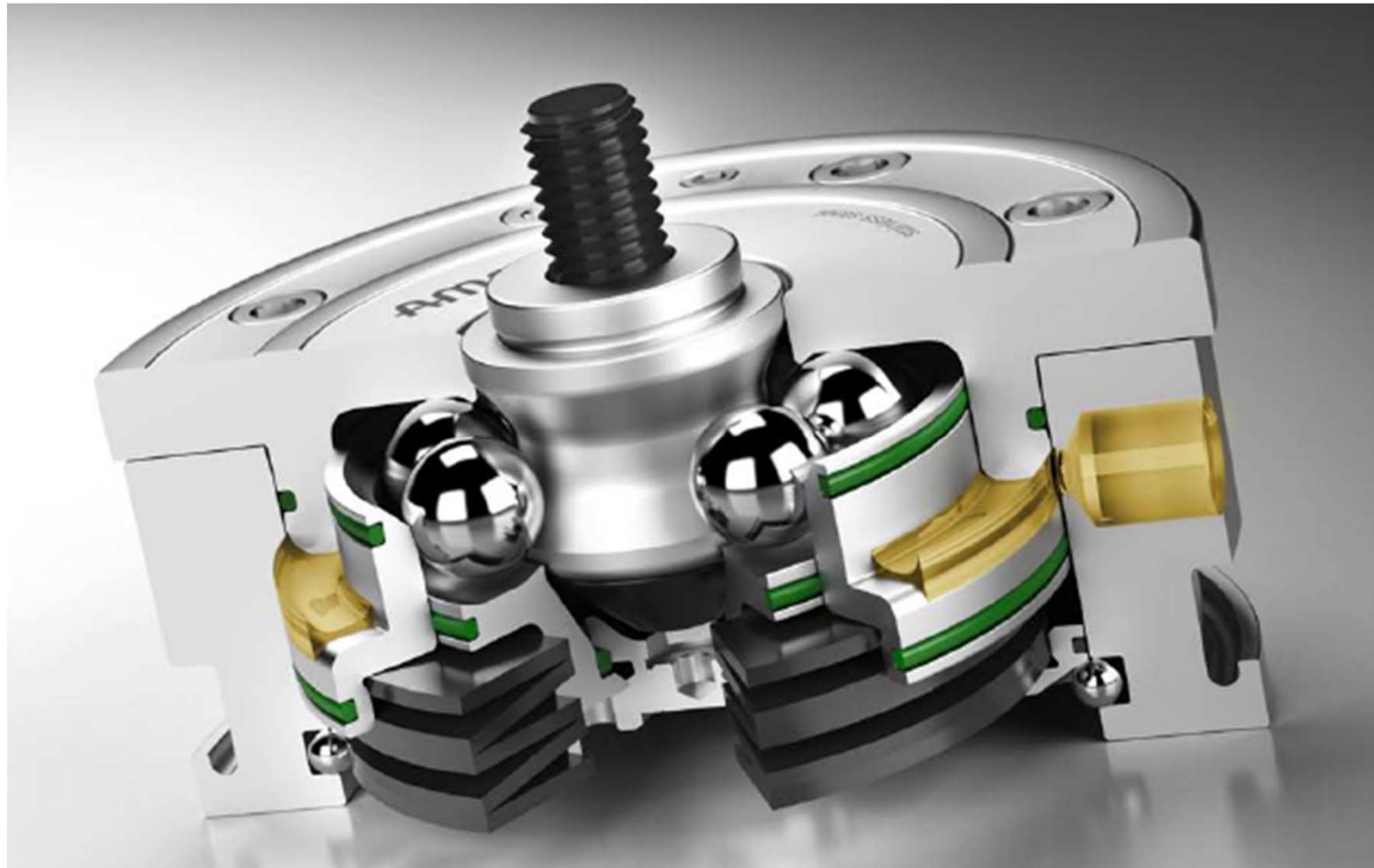
The core competence of is to minimize the setup times for our customers

- > Analysis of setup procedures
- > Consulting in work holding
- > Offering work holding solutions and complete fixtures





> ZPS Zero-Point Systems



> Advantages – Designed down to the last detail



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.



■ > Advantages – Designed down to the last detail



FORM FIT

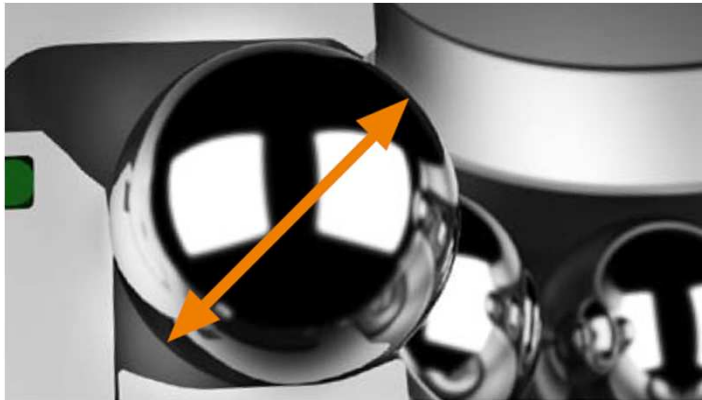
The balls are optimally encapsulated on 3 sides. As a result, the pull-stud always remains firmly clamped in the module.



THREE-POINT PRINCIPLE

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

> Advantages – Designed down to the last detail



LARGE BALL DIAMETER

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



NO BALL CAGE

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



> Advantages – Designed down to the last detail



SIMPLE CLEANING

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

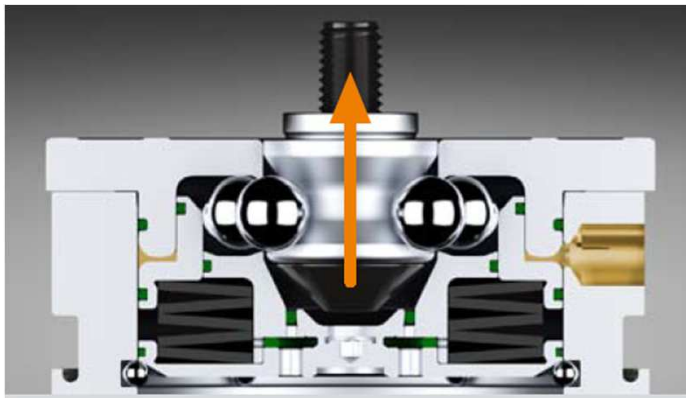


BLOW OUT

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

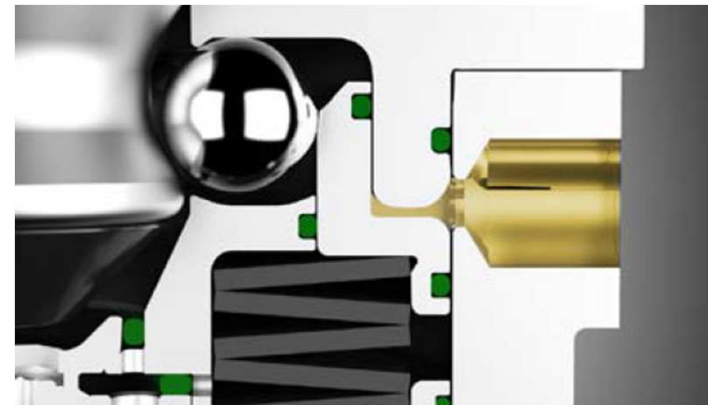


> Advantages – Designed down to the last detail



GOOD HOLDING, PULL-IN AND LOCKING FORCES

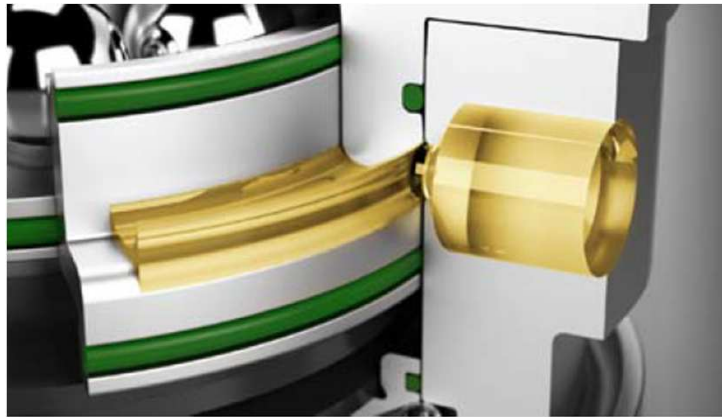
Holding force of up to 105 kN*.
Pull-in and locking force of up to 40 kN.



SAFETY SYSTEM

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

> Advantages – Designed down to the last detail



MEDIA FEED

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



RUSTPROOF STAINLESS STEEL

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

> Our innovations and highlights...



COUNTERBALANCE ELEMENT XY-PLANE
No. 0209MXY, page 113

NEW!



HEIGHT ADJUSTMENT ELEMENT
No. 0210FN, page 120

NEW!



CLAMPING MODULE, MECHANICAL
NEW SIZE K20!
No. 0212M, page 43

NEW!



ZERO-POINT CLAMPING SLEEVE
No. 0214ZN-01-01, page 37

NEW!



COUNTERBALANCE CLAMPING SLEEVE
No. 0214ZN-01-02, page 37

NEW!



HEIGHT ADJUSTMENT ELEMENT
No. 0209MZ, page 114

NEW!



BASE ELEMENT, FLAT, FOR T-SLOT PLATE
No. 0210FNT, page 119

NEW!



CLAMPING MODULE, MECHANICAL K01
No. 0214M-01, page 30

NEW!

INSTALLATION CLAMPING MODULE WITH CENTRAL LOCK FOR AUTOMATION SOLUTIONS
No. 0111LA-10-01, page 51

NEW!



INSTALLATION CLAMPING MODULE WITH CENTRAL LOCK FOR AUTOMATION SOLUTIONS
No. 0111LA-10-05, page 52

NEW!



INTERMEDIATE ELEMENTS
NEW SIZE!
No. 0210Z, page 110 / No. 0210IZ, page 117

NEW!



ADAPTER FOR HEIGHT COMPENSATION
No. 0209MZA, page 115

NEW!



QUICK COUPLING "FLAT-FACE"
No. 0370ZSK, page 150

NEW!

INSTALLATION CLAMPING MODULE WITH SENSOR QUERY FOR OPENING AND INTERLOCK
No. 0109L-02, page 60

NEW!



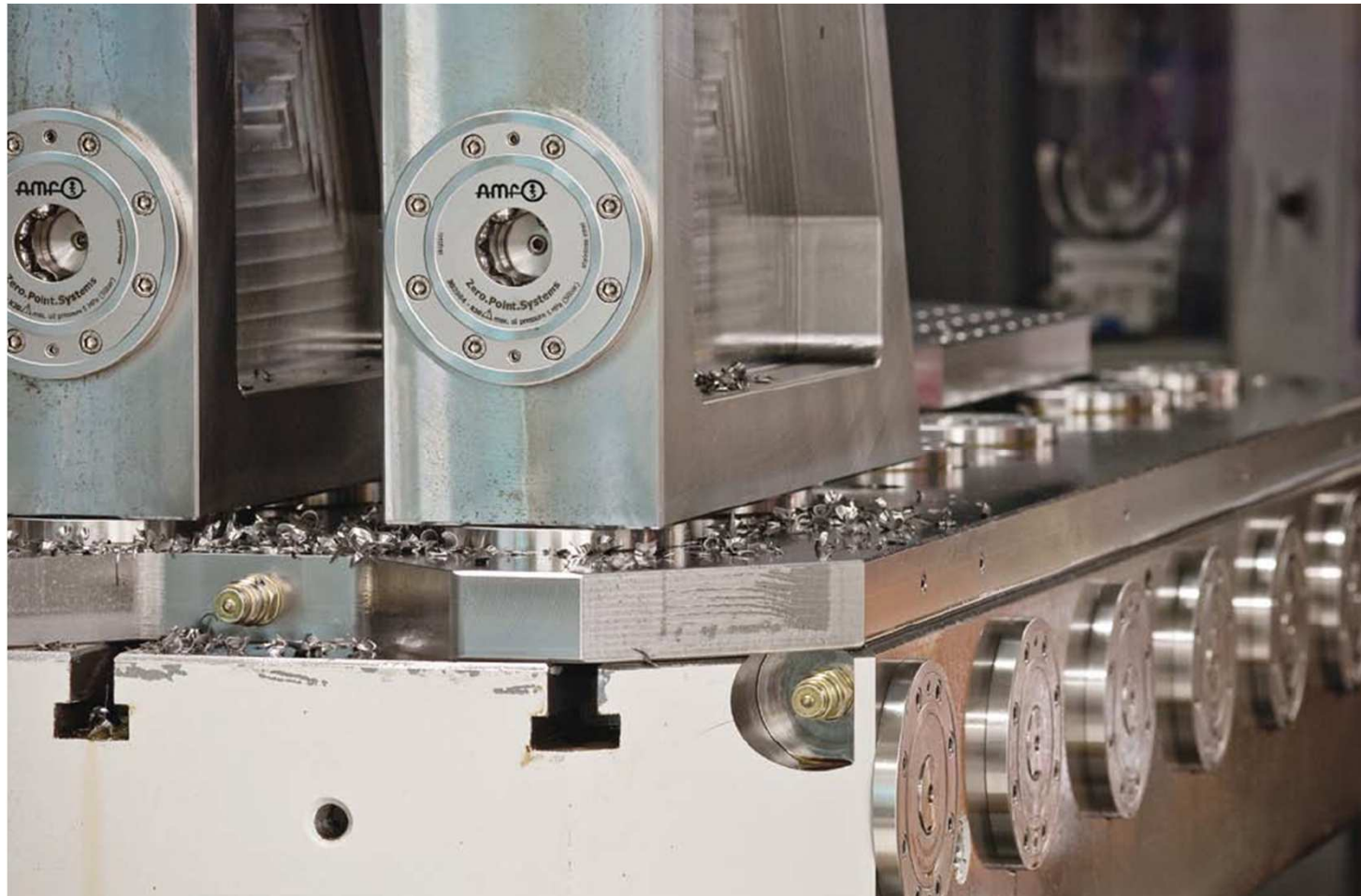


Installation Clamping Modules



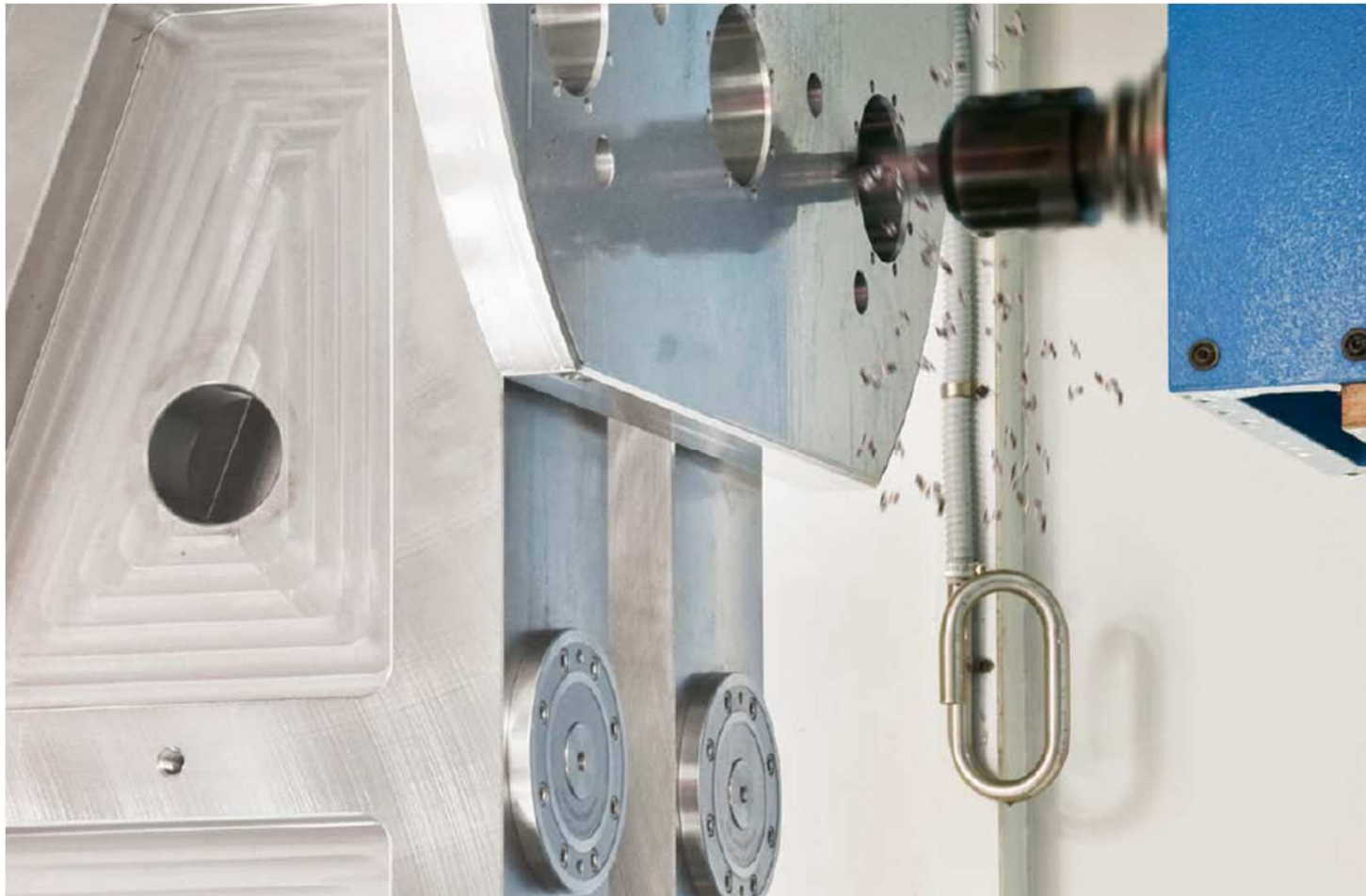


> Installation Clamping Modules



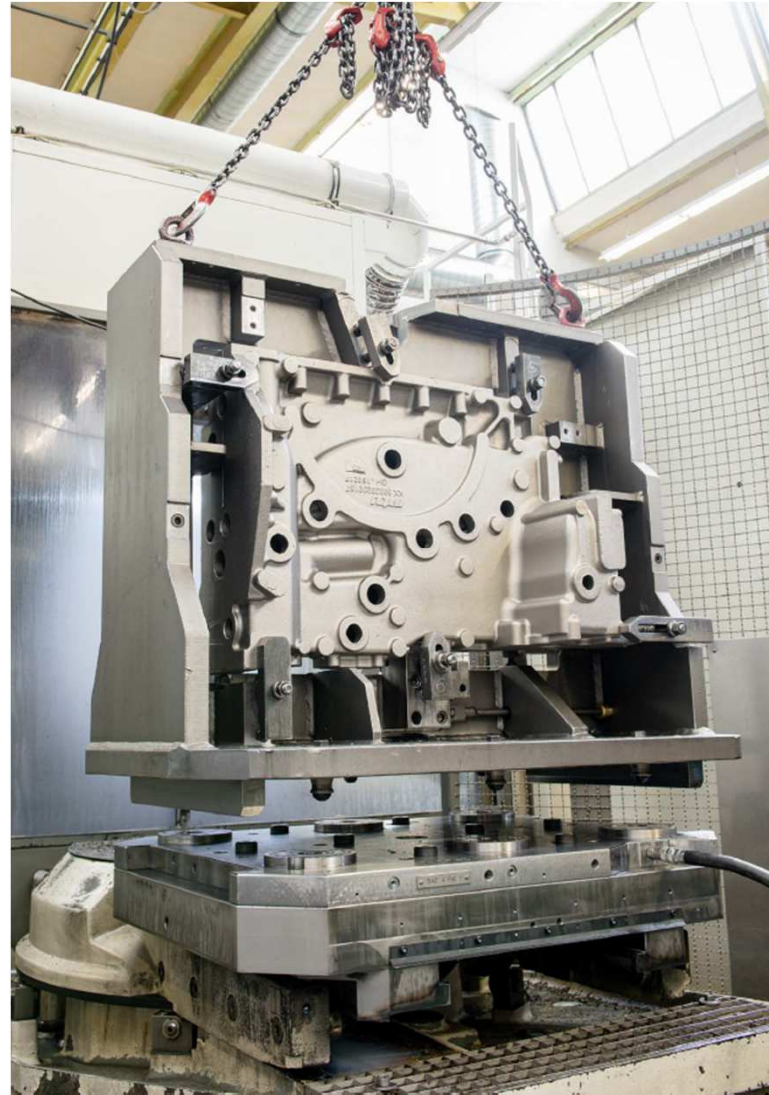


> Installation Clamping Modules



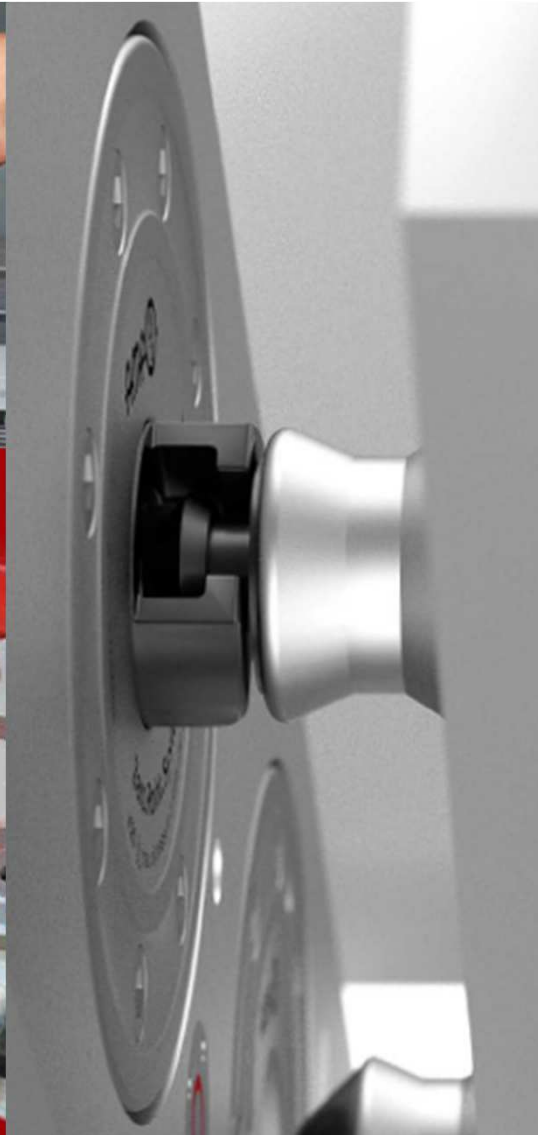


> Installation Clamping Modules





> Installation Clamping Modules





> Surface-mounted Clamping Modules





> Surface-mounted Clamping Modules



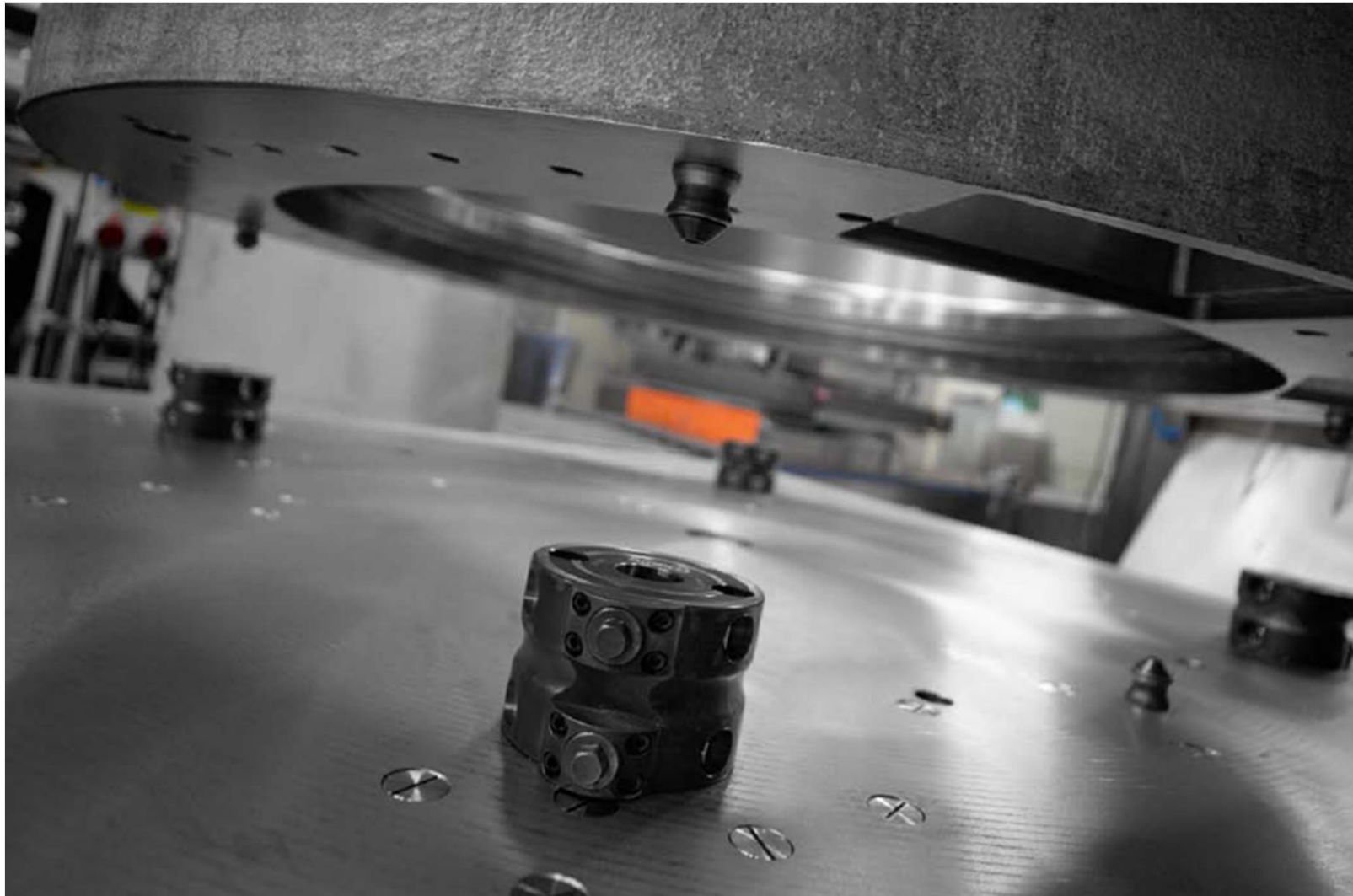


> Mechanical Clamping Modules





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> Mechanical Clamping Modules





> Automation Solutions

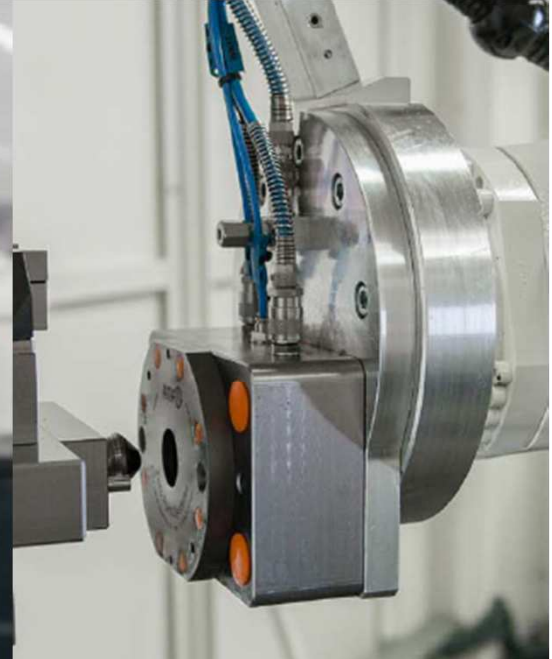
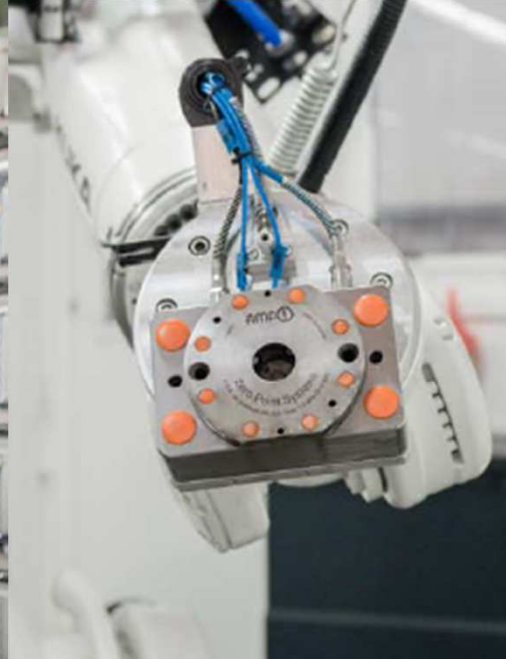


> Automation Solutions

<p>1. OPENING CONTROL</p>	<p>2. INTERNAL BLOW-OUT</p>	<p>3. CENTRAL LOCK</p>	<p>4. STUD SENSING</p>
<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>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.</p>
<p>5. LOCKING CONTROL</p>	<p>6. MEDIA DUCTS</p>	<p>7. BLOW-OFF/SUPPORT CONTROL</p>	<p>8. ELECTRICAL SENSING</p>
<p>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.</p>	<p>ARE MEDIA DUCTS TO A FIXTURE NECESSARY? Oil, compressed air, water, etc. can be run through our couplings without leaks.</p>	<p>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.</p>	<p>IS THE MODULE OPEN OR CLOSED? The integrated inductive sensor can sense the piston position (open/closed) of the clamping module.</p>



> Automation Solutions



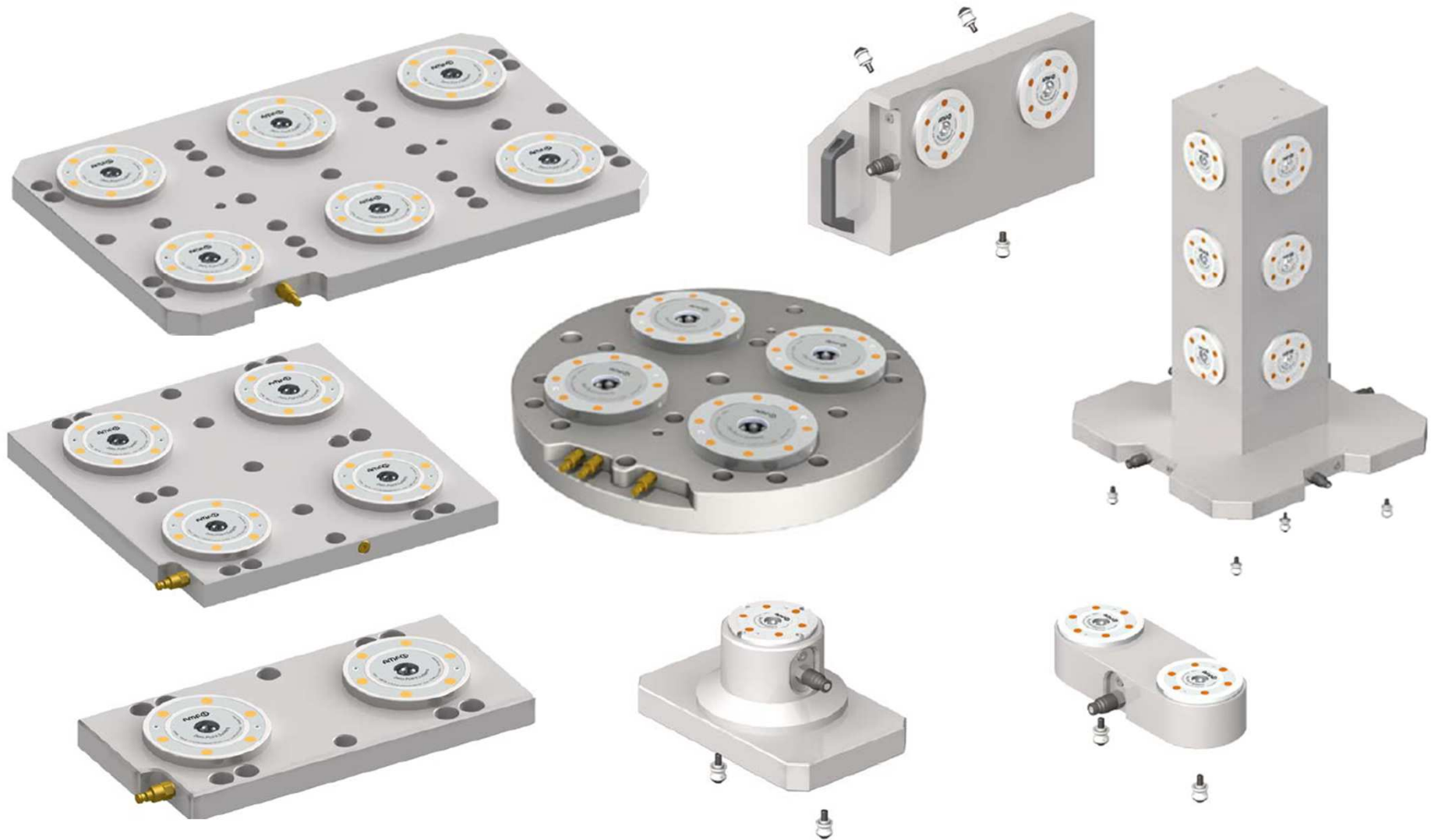


> Automation Solutions





> Clamping Stations



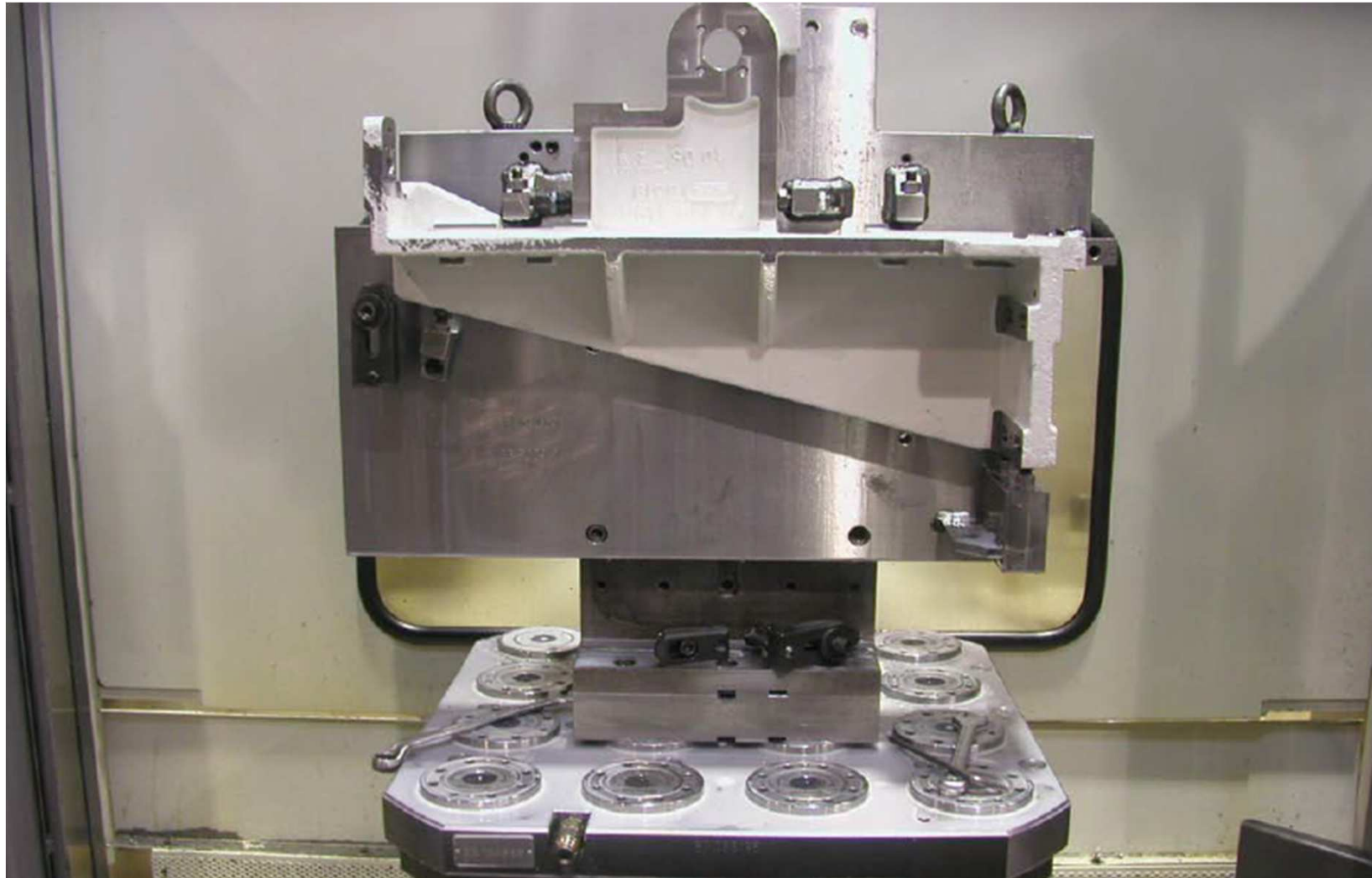


> Clamping Stations





> Clamping Stations



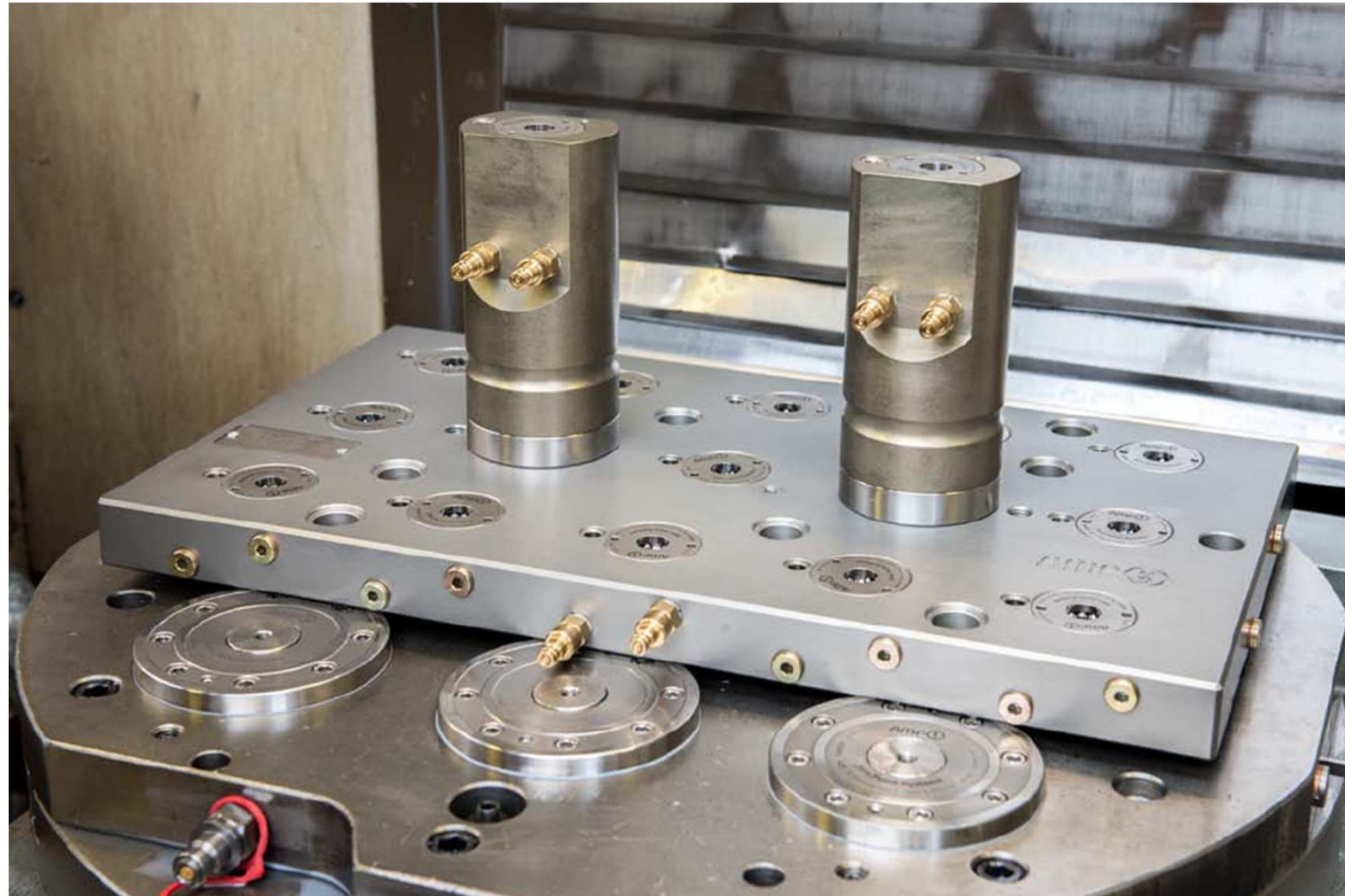


■ > Modular height adapters for your flexible production



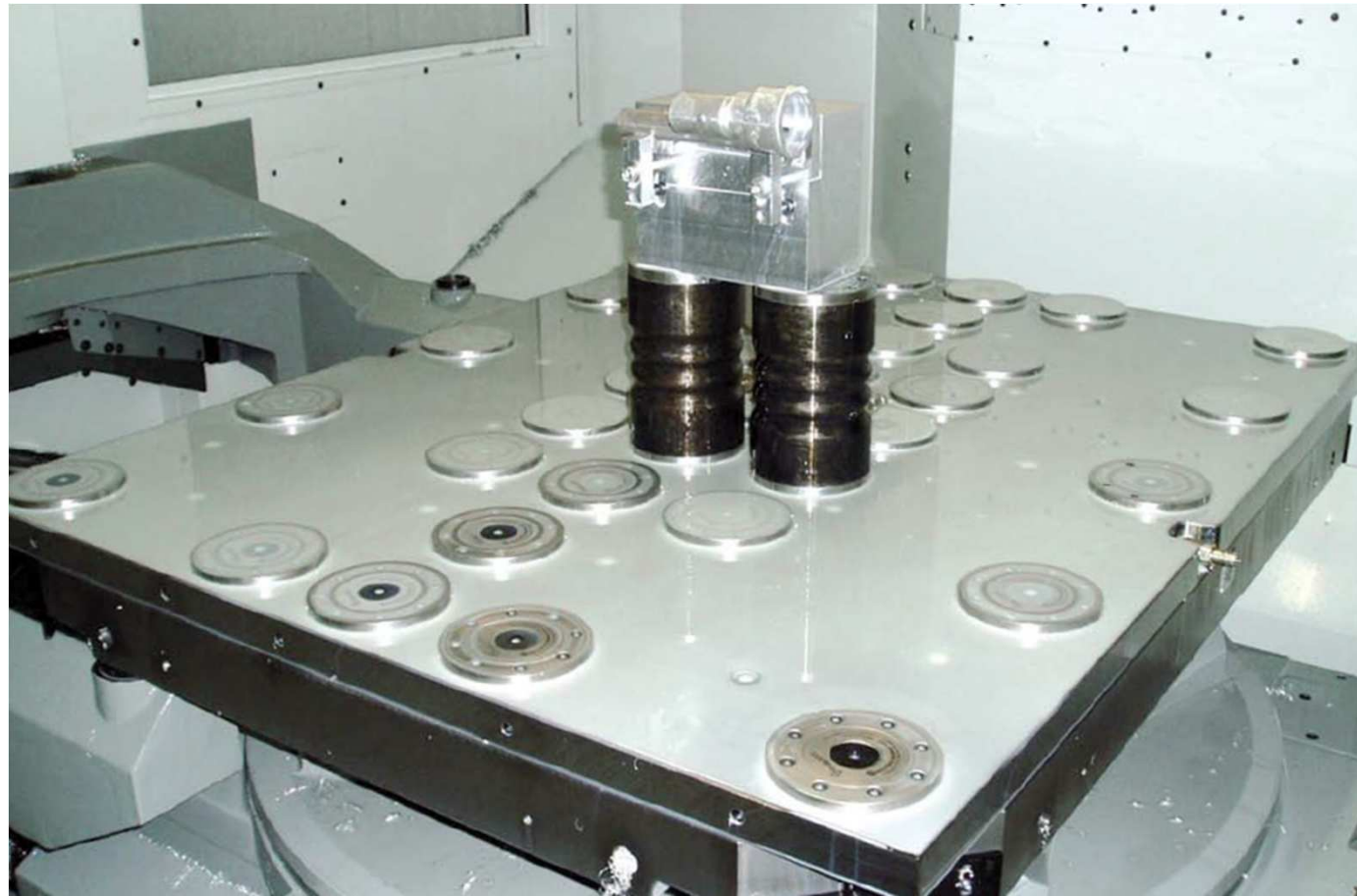


■ > Modular height adapters for your flexible production



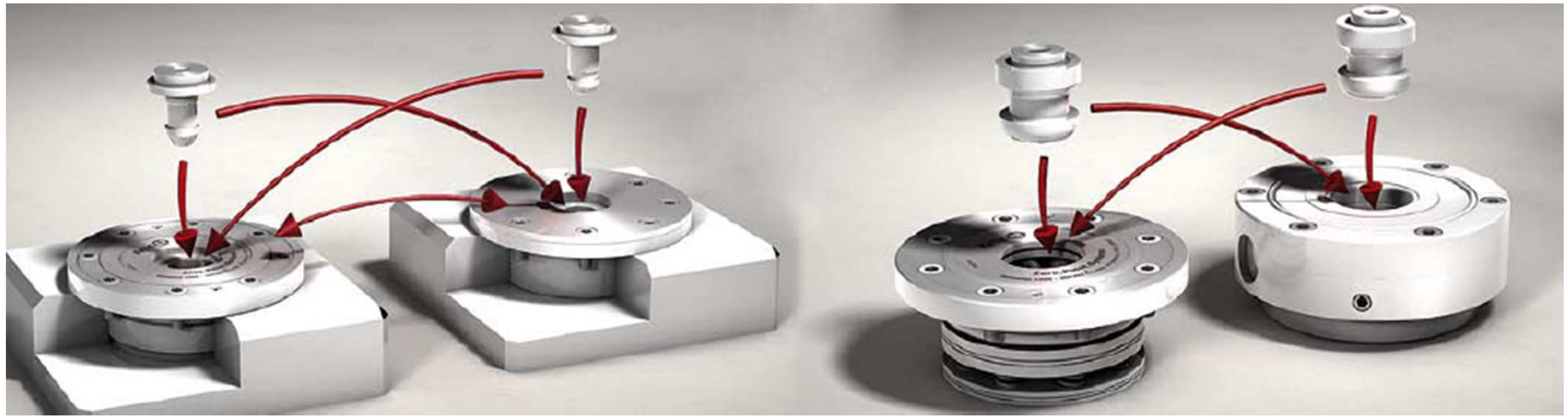


■ > Modular height adapters for your flexible production





> Replacement Modules





Danke für Ihre Aufmerksamkeit.

Tack. *Merci beaucoup.* Thank you. ¡muchas gracias!

Grazie. *Dziękujemy.* *Спасибо.* *Tak.* *Bedankt.*

شكراً جزيلاً *Muito obrigado* 謝謝 शुक्रिया