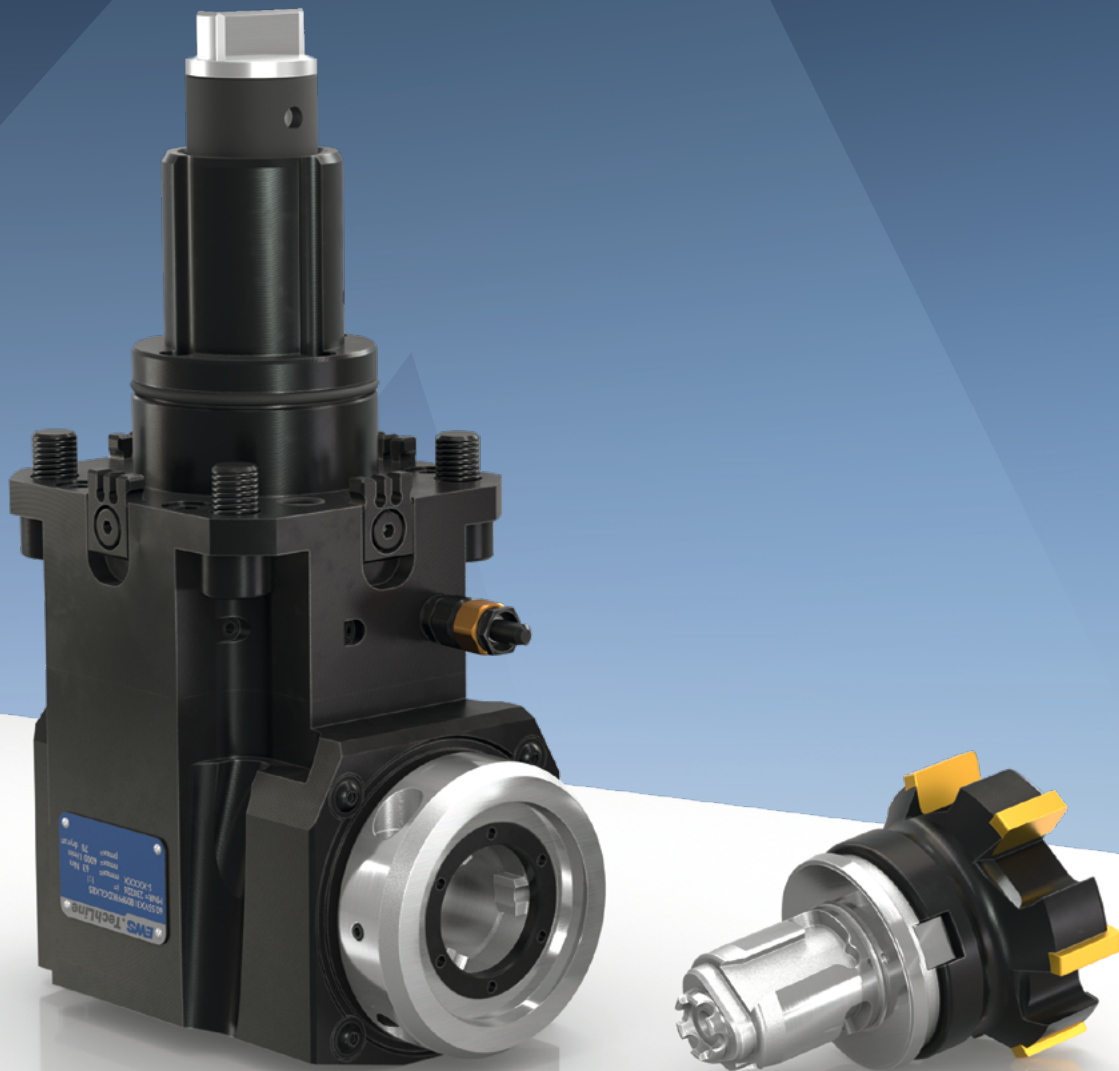


EWS.Varia NEXT

Quick change for drilling, milling, and internal turning.

VX VXT VXP

One System. Every Operation.

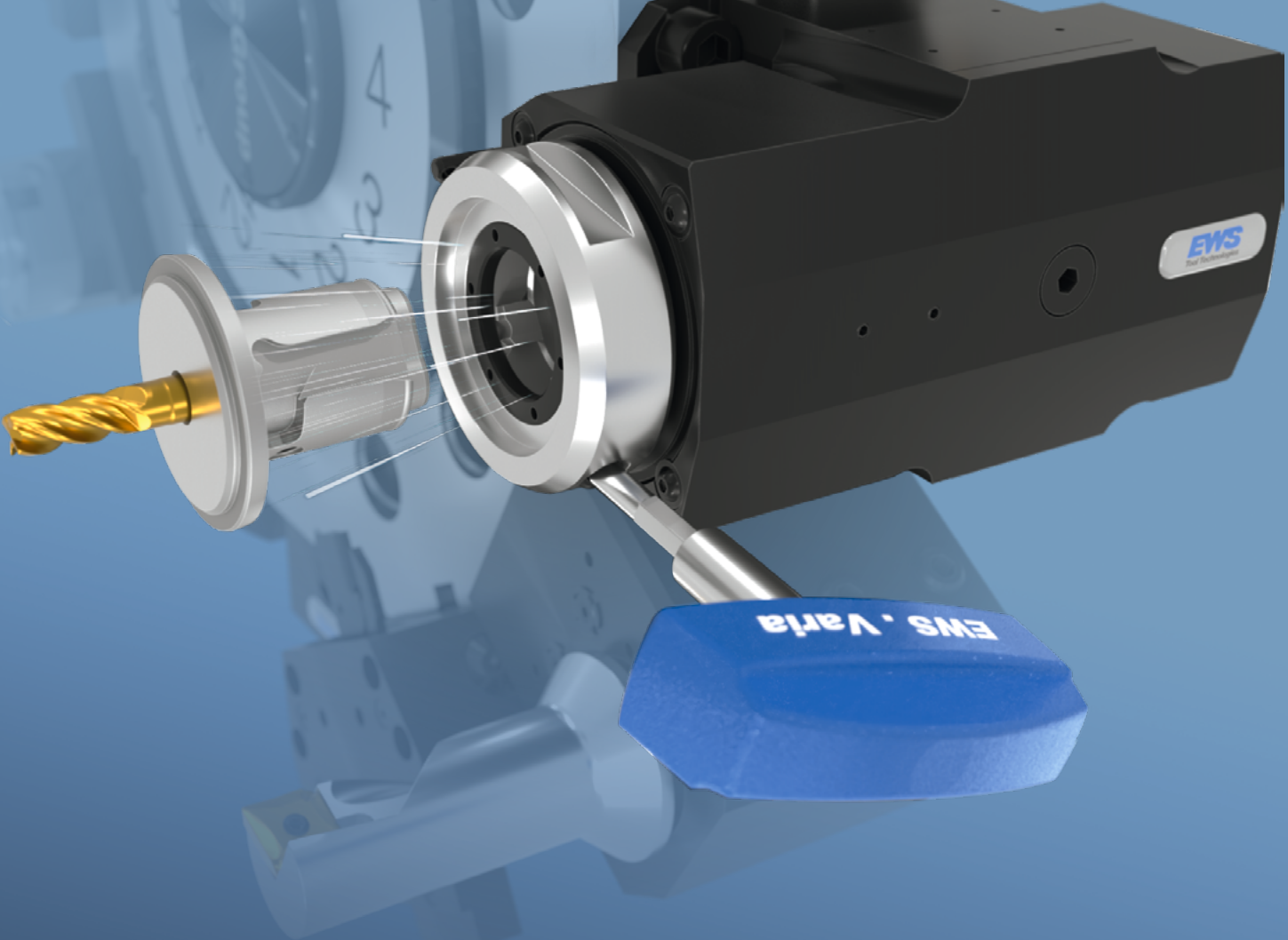


THE VARIA CLAMPING UNIT REMAINS. THE ADAPTER CHANGES.

Every tool change in the machine costs production time. **EWS.Varia** therefore shifts the change to the Varia interface. The tool holder with integrated Varia clamping unit remains on the turret. Tool and adapter are prepared outside the machine and changed as a ready-to-use unit. This allows different applications to be covered using the appropriate adapter.



Watch quick change in the video.



Varia clamping unit (e.g. VDI/BMT)

- ✓ Remains fixed on the turret and receives the adapter.

Varia adapter

- ✓ Receives the tool. Tool and adapter are assembled, preset, and provided ready for use outside the machine.

Quick change

- ✓ Insert, clamp, done. The preset Varia torque wrench ensures the defined tightening torque of 6 Nm.



CH adapter



Shrink fit holder



Boring bar holder



Collet chuck holder



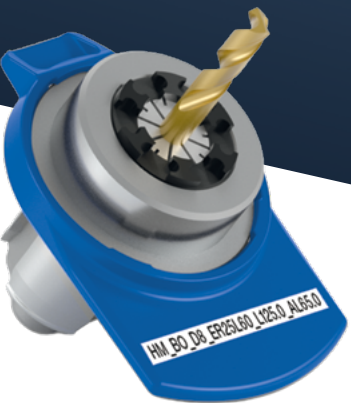
Weldon | Whistle Notch adapter



Hydraulic expansion holder

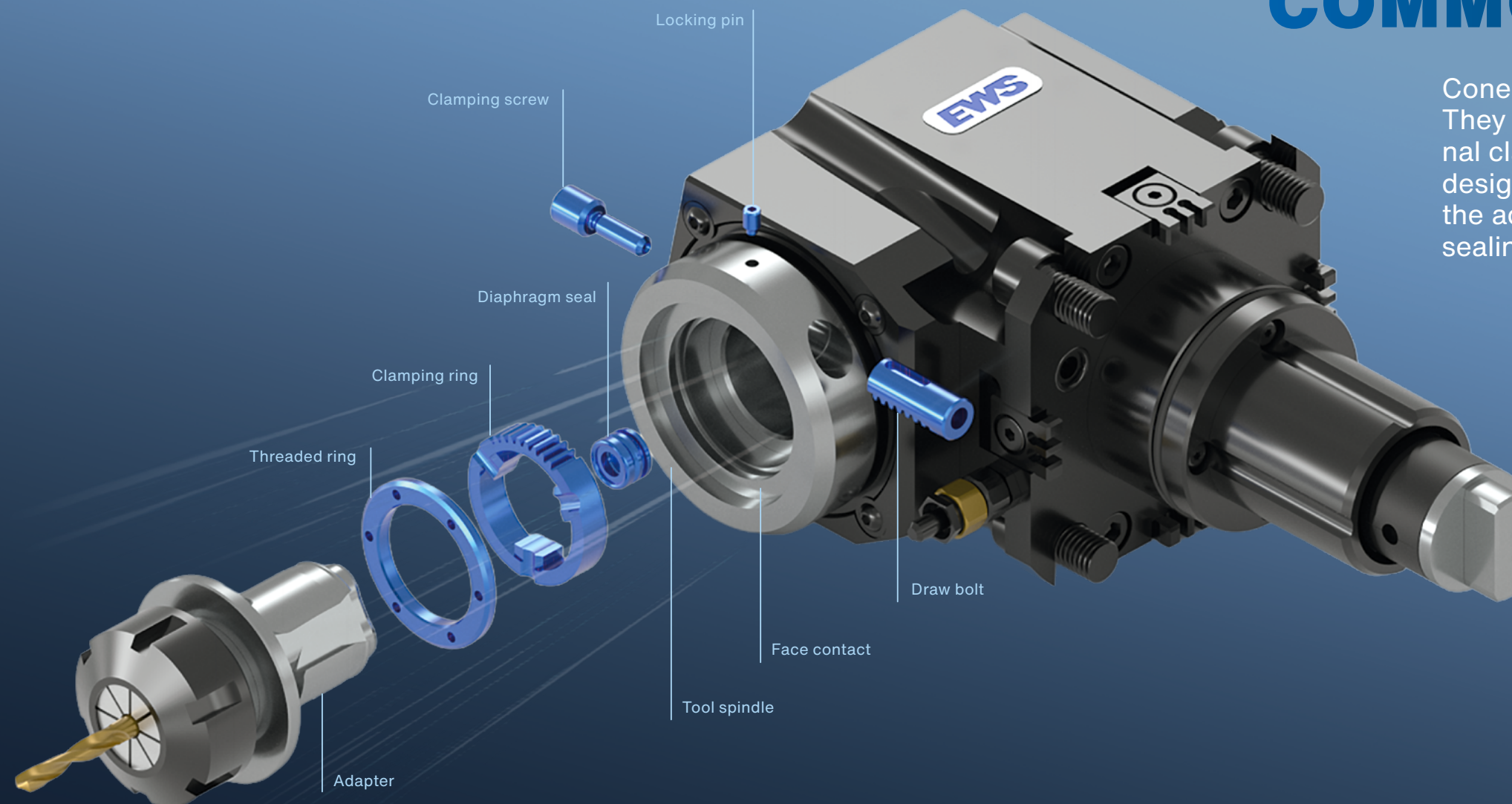


Cutter head holder



Excerpt from the adapter program

PROVEN MECHANICS. COMMON BASIS.



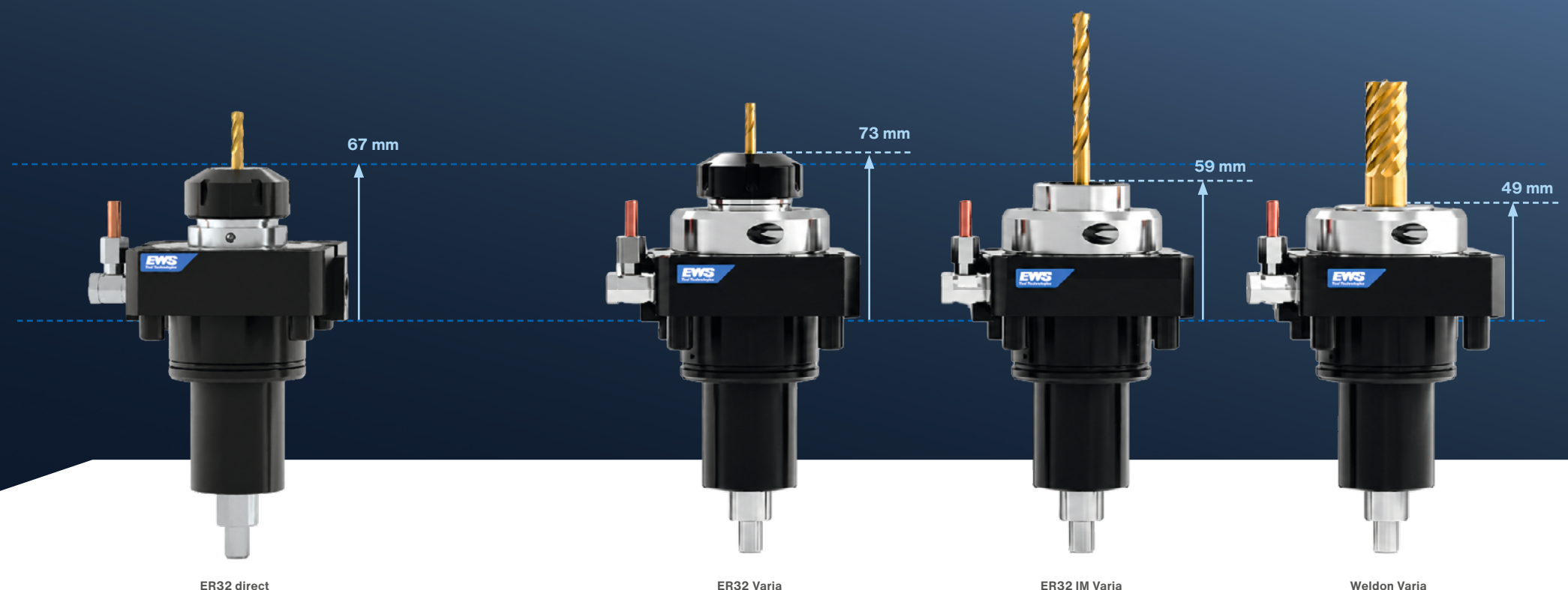
Cone and face contact form the basis of the Varia interface. They center the adapter and provide axial support. The external clamping ring keeps the interior free and enables a compact design. When opening, the mechanical lift-off function releases the adapter from the face contact. The diaphragm seal provides sealing for coolant transfer up to 100 bar.

What the interface can do

- ✓ Compact design with integrated quick change function.
- ✓ Lateral actuation for good accessibility during tool changes.
- ✓ Mechanical lift-off function releases the adapter from the face contact.
- ✓ Diaphragm seal for coolant transfer up to 100 bar.
- ✓ Cone and face contact for repeatable positioning of the adapter.

Compact design, closer to the workpiece

The compact design creates clearance from interfering contours and brings the tool closer to the workpiece.





Torque transmission



VXT

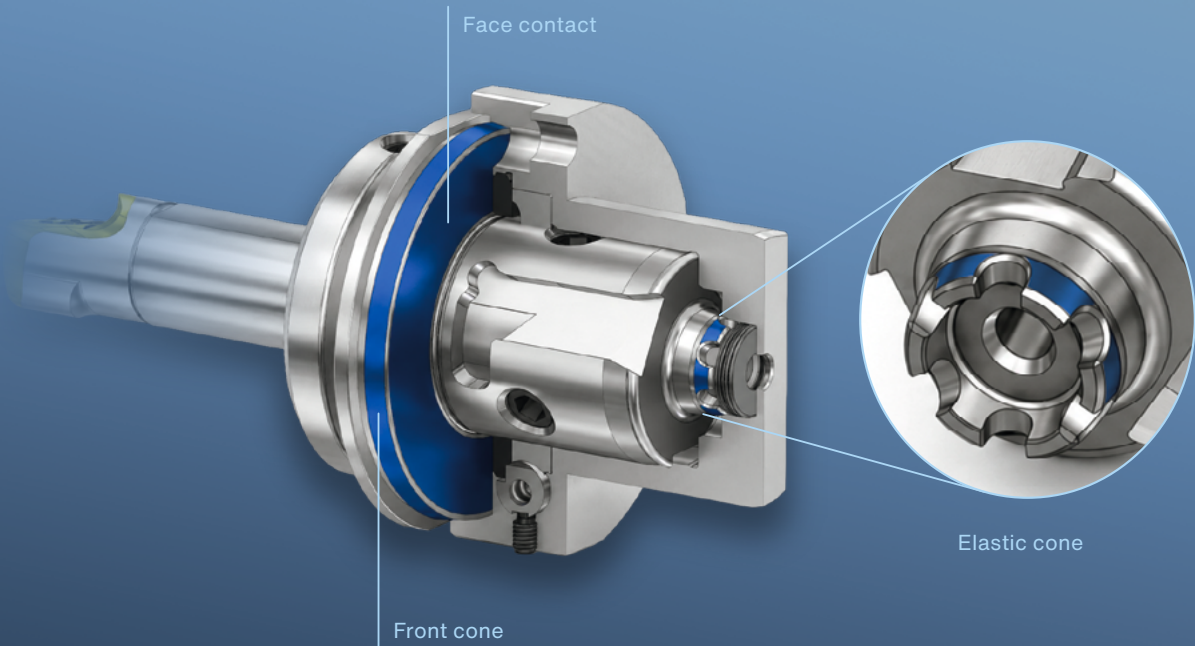
Via external surfaces.
The surfaces transmit the torque and at the same time ensure the defined tool orientation. This orientation is retained during the change.

VXP

Via the polygon, as with VX.
The polygon transmits the torque and is designed for high speeds and high torques in demanding milling operations.

STABLY SUPPORTED. FOR HIGH DEMANDS.

VXT and VXP use the patented Double-Cone Flex system. A second, elastically designed cone increases the support distance and enhances the stiffness and damping of the interface. This creates a stable basis for demanding machining processes.



Installation lock

✓ The defined installation position ensures a clear orientation of the adapter. VXT adapters cannot be inserted into VXP clamping units.

Reinforced clamping mechanism

✓ The VXP clamping mechanism achieves 10% more clamping force at the same tightening torque. An integrated empty-clamping protection protects the clamping unit if it is actuated accidentally without an adapter

Continue to use instead of replace

✓ Suitable VX adapters can continue to be used in VXT and VXP clamping units. Proven Varia accessories such as mounting block, presetting adapter and tool tags remain usable.

Technical properties

Tightening torque	Internal cooling	Change repeatability	Transmissible torque
6 Nm	up to 100 bar	± 0.002 mm	160 Nm for size 3, 200 Nm for size 4

Clamping units

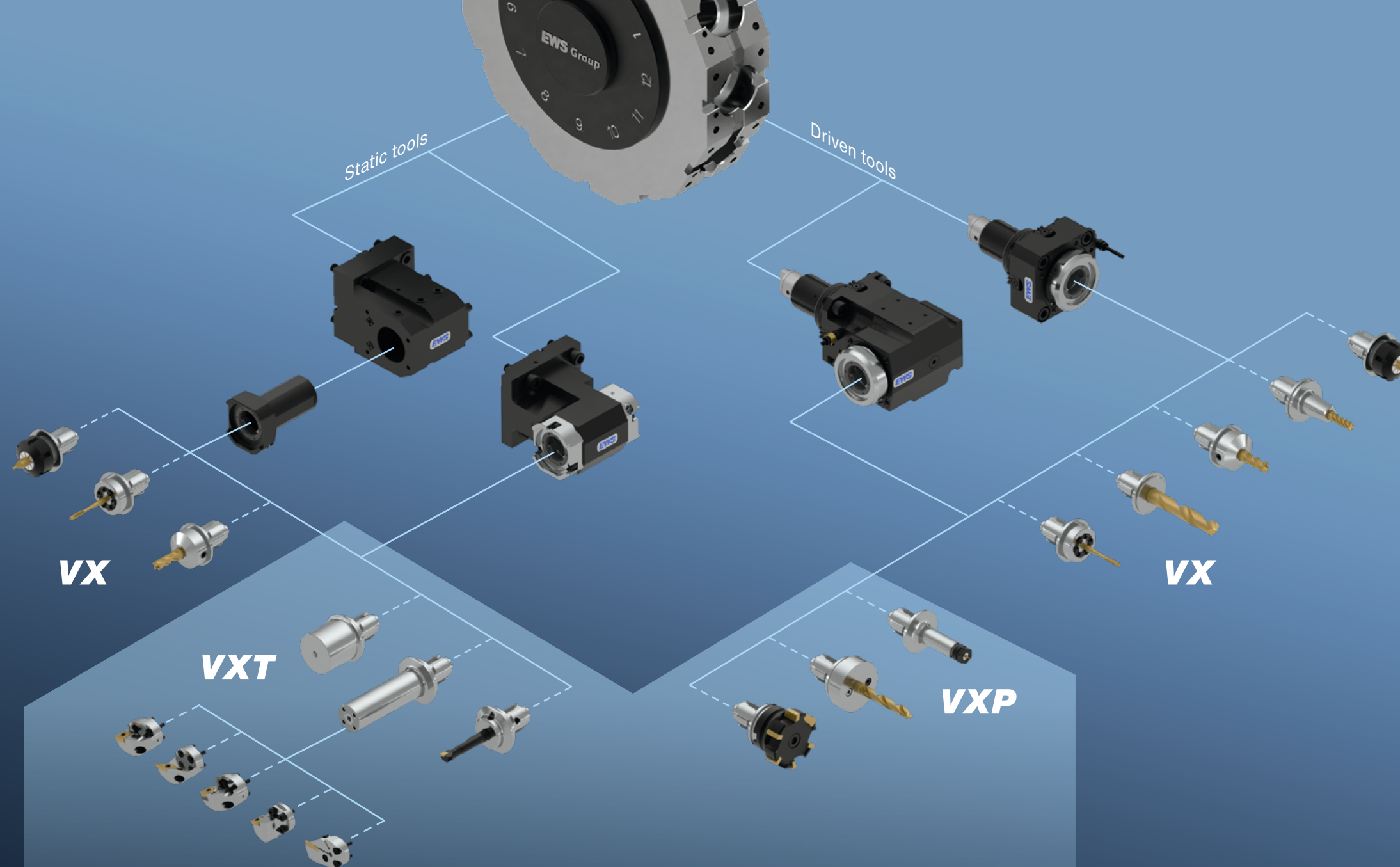
Position of the face contact	External dimensions
identical for VX, VXT and VXP	VXP same as VX; VXT +4 mm at the flange vs. VX

Adapter

VXP Adapter
Same external dimensions and overall length as VX adapters.



All Varia adapters in the adapter catalog



EWS.Varia NEXT

VXT

VXT adapters require VXT clamping units. Suitable VX adapters can continue to be used in them.

VXP

VXP adapters require VXP clamping units. Existing VX adapters can continue to be used in them.



More performance at the turret. Varia grows with it.

With increasing speeds and torques, the demands on the tool holder and interface increase. At the same time, installation space and accessibility remain crucial. EWS.Varia combines these requirements in one platform and specifically adds VXT and VXP to the proven VX base.

Proven base. Specifically expanded.

VX

The proven base

For drilling and milling operations.

VXT

Turning

For internal turning operations as well as static drilling operations.

VXP

Performance

For drilling and milling operations at high speeds and high torques.

DRILLING. MILLING. INTERNAL TURNING. ONE INTERFACE.

VX (Fig. 2 and Fig. 3)

Drilling and milling



- ✓ Centering and spot drilling
- ✓ Drilling and countersinking
- ✓ Tapping and thread forming
- ✓ Rough milling
- ✓ Finish milling and deburring

Varia combines drilling, milling, and internal turning operations on a common quick-change interface.

VXP (Fig. 2 and Fig. 3)

Performance milling



- ✓ Face milling with cutter head
- ✓ Rough milling with high torque requirements
- ✓ Milling with large tool overhang
- ✓ Finish and contour milling for high surface-finish requirements
- ✓ Milling with small tool diameters at high speed
- ✓ Thread milling
- ✓ High-speed reaming

VXT (Fig. 1)

Internal turning and static drilling operations



- ✓ Roughing
- ✓ Finishing
- ✓ Grooving
- ✓ Thread turning
- ✓ Drilling
- ✓ Tapping and thread forming
- ✓ Reaming
- ✓ Centering

VXT Static

VX and VXP Driven

Multiple holder
(Quattro)

Radial, Z-offset

Radial,
double-sided

Radial

Axial

Axial, axis-
offset

VXP for driven tools

Driven Varia units for BMT60 are available in axial and radial versions in various designs. On the workpiece side, Varia VXP is used, optionally with external or internal cooling.

Further versions to follow. Availability on request.



View VXP program
online

MANY MACHINE INTERFACES. ONE VARIA SYSTEM.

Turret interface, kinematics, travel paths and interference contours differ from machine to machine. Varia units are therefore designed to match the machine interface and the available installation space. Whether VDI or BMT, static or driven: The Varia interface and the quick change principle remain the same.

Machine interfaces at a glance:

- ✓ **Size 3** For example for VDI25/30 and BMT45/55. For compact to medium turrets.
- ✓ **Size 4** For example for VDI40 and BMT60/65. For larger turrets and higher performance requirements.
- ✓ **Size V5** For example for VDI50 and BMT75/85. For large turrets with correspondingly available installation space.

FROM QUICK CHANGE TO AN INTEGRATED SETUP PROCESS.

✓ PLAN

Digitally define turret layout and suitable Varia equipment.

✓ PREPARE

Mount, preset and clearly label tools.

✓ STAGE

Stage ready-to-use adapters in an organized and clearly identified manner.

Ready today for humanoid assistance

EWS.Varia already provides the foundation for humanoid assistance.

Only the compact Varia adapter is moved, the tool holder remains on the turret. 6 Nm tightening torque, one-handed operation and a change-over time of around 20 seconds reduce the force required and simplify handling.

T-Carrier, tool tags and the clear setup logic from EWS.Ready Safe and Go ensure structured staging and clear identification. This turns the quick change into an integrated setup process that supports operators today and can also integrate humanoid assistance in the future.



More about
EWS.Ready Safe and Go



AI-modified

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