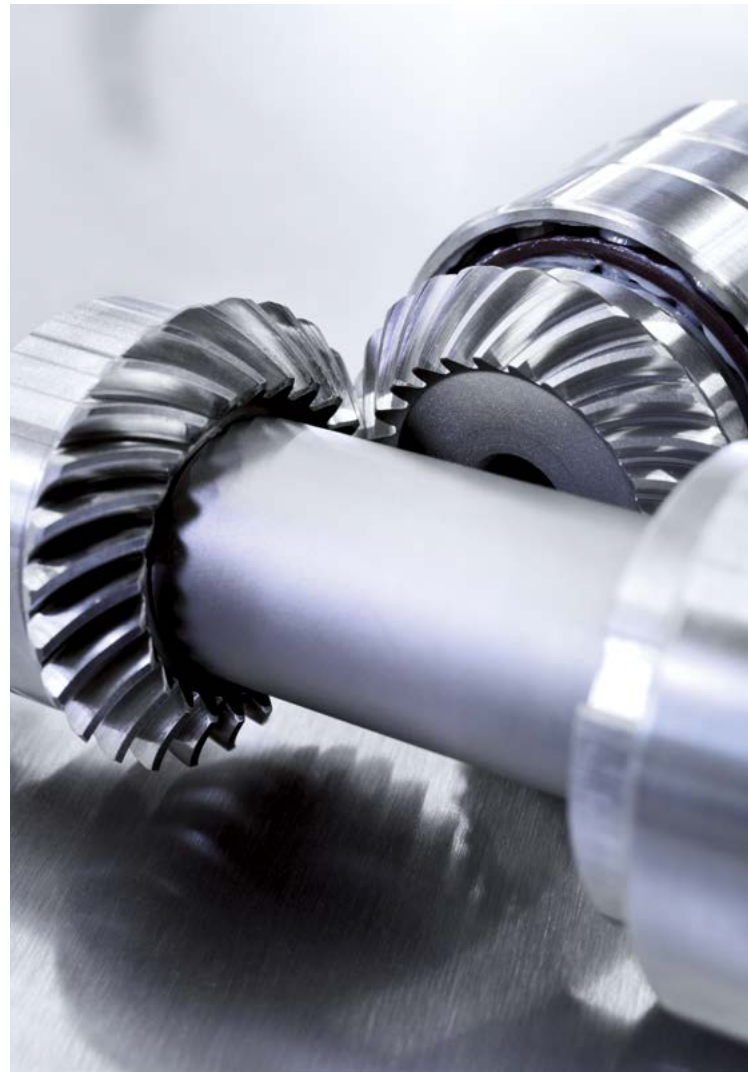


Tooling – state of the art and unique

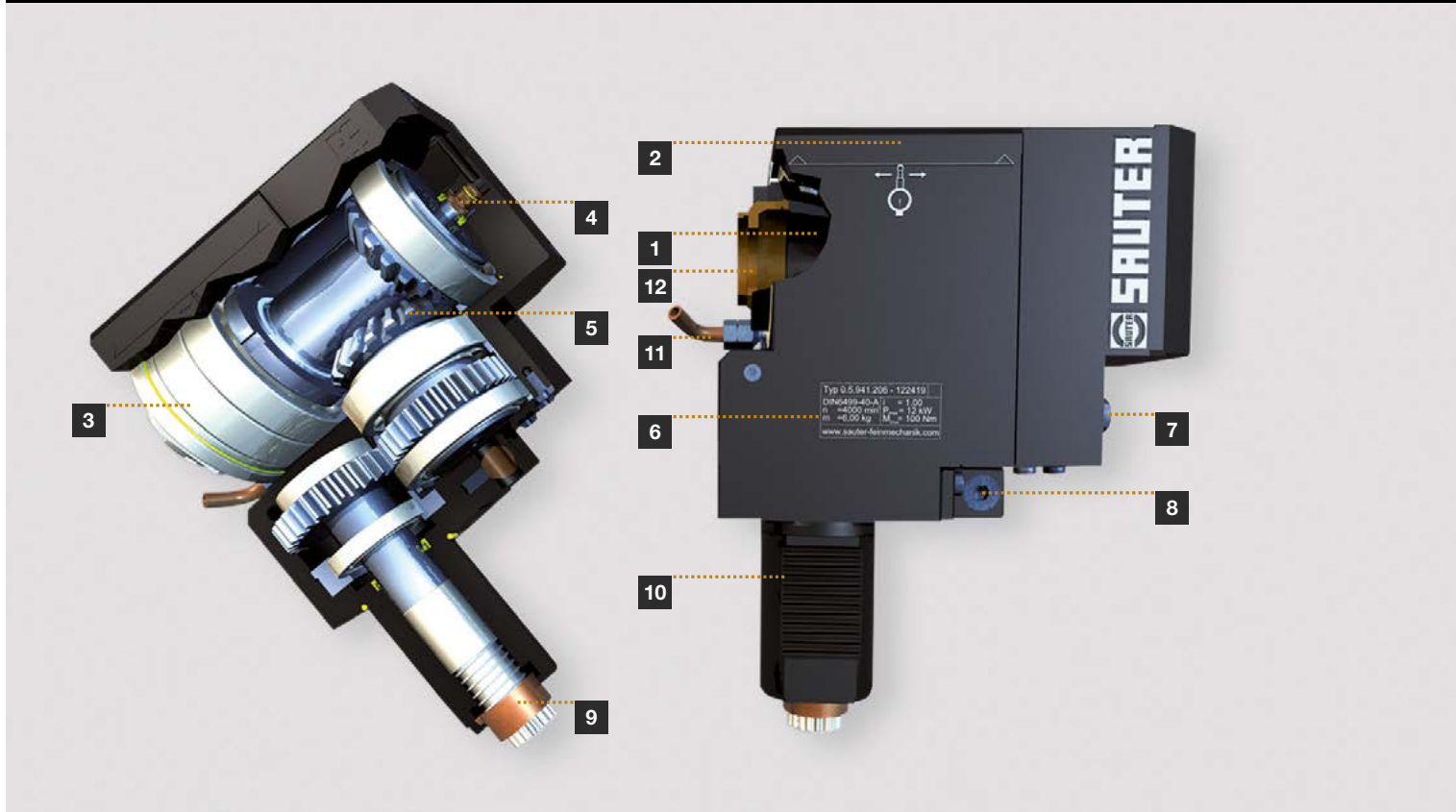


**SAUTER**





# From one single source – Sauter Tool Turrets and Sauter Tooling



## Sauter – the synonym for quality

Sauter is known throughout the world as a manufacturer of first class tool turrets.

To complement the turrets, we produce the corresponding tool holders and spindle units. Decades of experience and our comprehensive know-how guarantee outstanding quality and state of the art, market-oriented products. Don't settle for any compromises concerning the dependability of your production operations. We have the optimum solution for your individual requirements and will take care of you cooperatively – we always have.

## Twelve good reasons to specify Sauter

- 1 Highest possible rotational accuracy
- 2 Qualified datum surface for rapid alignment
- 3 Optimum pre-loaded bearing configurations for maximum rigidity
- 4 Sauter patented high-pressure internal coolant delivery system that can also be used dry
- 5 High-precision gear train of optimum power and performance
- 6 Laser etched identification plate with all relevant information
- 7 Independent external coolant connection
- 8 Sauter patented "rapid-set" spindle alignment device to minimize tool change and set-up time
- 9 Sauter patented spindle orientation detent for rapid tool drive engagement – Series #941
- 10 Universal mounting shank with double tooth rack for right-hand or left-hand operation
- 11 External coolant supply – can be individually fitted
- 12 Recessed collet clamping nut ensures maximum rigidity and an optimum interference free zone

All spindle units undergo stringent testing, including thermal testing and monitoring during a running-in procedure prior to delivery, to ensure guaranteed performance immediately upon being placed into service.

## Tooling for axial mount

right/left designation for spindle units

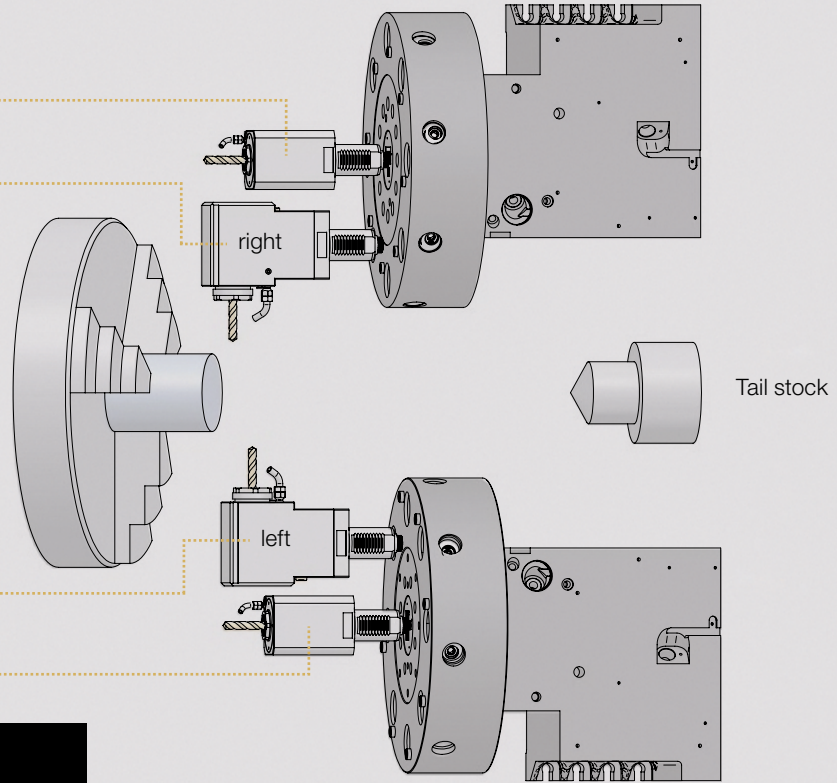
Straight spindle unit  
(axial processing)

Spindle unit 90°  
(radial processing)  
›right‹

Main Spindle

Spindle unit 90°  
(radial processing)  
›left‹

Straight spindle unit  
(axial processing)

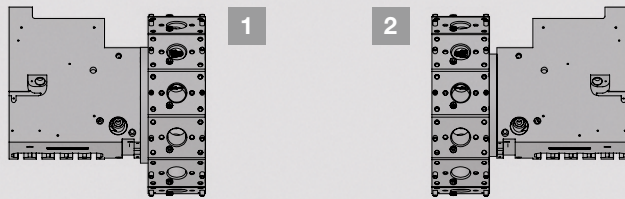


# Tool designation

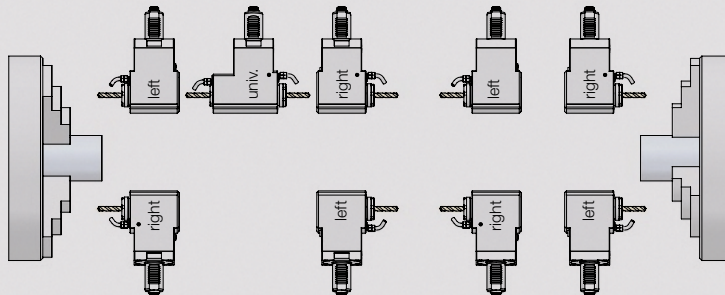
## Tooling for radial mount

right/left/universal designation for spindle units

Clamp on top  
(top tooth system)

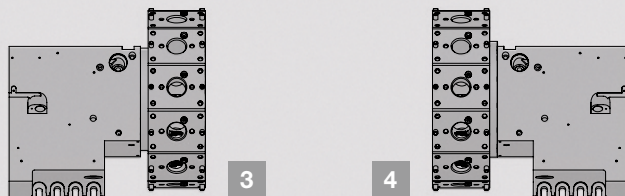


Main spindle



Sub spindle

Clamp on bottom  
(bottom tooth system)



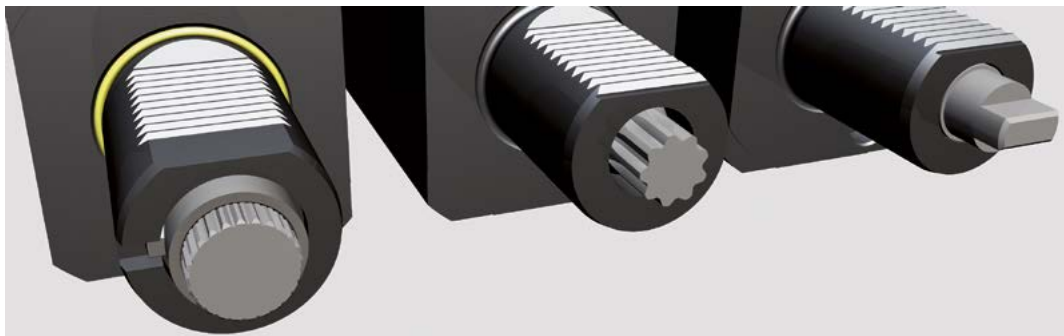


## From Standard to Special Tooling

### Sauter Tooling – always first choice

Sauter tool turrets are the prerequisite for fast, precise production. And, if the tooling is also sourced from Sauter, you have made the optimum choice. We know our tool turrets better than anyone else and, in parallel with this, develop perfectly matching spindle units and tool holders- a lead from which you as the user will benefit. Decide for perfected technology with highest quality. Perfection from one source.

### Tooling interfaces for Sauter tool turrets



#### \_ DIN 5480

For detailed information, see PI 29.3

#### \_ DIN 5482

For detailed information, see PI 14.2

#### \_ DIN 1809

For detailed information, see PI 48

\_ With patented spindle orientation detent



## Alignment Systems

### Alignment alternatives from Sauter

More and more the subject of reducing setup times comes to the foreground. The classic VDI-Interface is considerably improved by using the Sauter patented "rapid set" alignment device. The tool changing accuracy is again clearly increased with the high precision interface Trifix®. You optimize your processes with Sauter alignment devices.



#### \_ Sauter alignment device

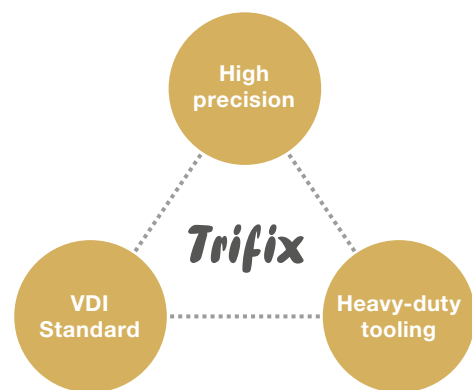
- \_ Repeat accuracy less than 0,02 mm measured on the datum surface
- \_ Single-handed manipulation
- \_ Excellent alignment properties



#### \_ Trifix®

- \_ Repeat accuracy less than 6 µm with 200 mm projection
- \_ High positioning accuracy from one station to another of 0.02 mm\*
- \_ Completely pre-set power tooling and tool holders
- \_ Spindle units and tool holders for heavy duty machining fitted with additional screws for rigid fastening
- \_ Existing standard VDI-Tooling can be used

\* measured within one turret and at the alignment surface.





## Modular quick change systems

### For every requirement

With the different Sauter quick change systems you have your individual solution for every requirement. By presetting the adaptors and tooling outside of the machine, fast changeovers can be made without individual alignment and avoiding unnecessary machine idle time.

Profit from the advantages of our quick change systems.



#### \_ Modifix®

- \_ Always flexible, using it as a standard tooling with collet chuck or modular elements
- \_ Fast exchange of adaptors by using preset tools
- \_ Individually applicable adaptors



#### \_ Solidfix®

- \_ Extremely easy handling due to single-handed manipulation without special tools
- \_ Eject locking feature due to safety bayonet catch
- \_ Highest concentricity and repeat accuracy
- \_ Compact design with minimum distance to the bearings therefore maximum rigidity



#### \_ SAUTER CAPTO™

- \_ Interface according to ISO Norm 26623
- \_ Extreme stability and rigidity
- \_ Short design
- \_ Easy handling



#### \_ HSK

- \_ Interface according to DIN 69063 C
- \_ High rigidity, repeat and tool exchange accuracy
- \_ Easy handling without special tools



sauter-feinmechanik.com



Sauter Feinmechanik GmbH  
Carl-Zeiss-Strasse 7 · 72555 Metzingen · Germany  
Phone +49 7123 926-0 · Fax +49 7123 926-190  
info@sauter-feinmechanik.com

Sauter innovation factory: Mit uns dreht die Welt!