



MISSION: PRECISION

HYPERTURN 65 DT





MISSION: PRECISION

HYPERTURN 65 TT



PRODUCT RANGE TURNING

HYPERTURN POWERMILL

CNC TURNING-MILLING CENTRES WITH POWERFUL MILLING SPINDLE AND TOOL MAGAZINE



HYPERTURN 200 PM



HYPERTURN 100 PM



HYPERTURN 65 PM

HYPERTURN

CNC HIGH-PERFORMANCE TURNING CENTRES WITH TURRETS INCLUDING LIVE TOOLS AND Y-AXIS



HYPERTURN 110



HYPERTURN 95



HYPERTURN 65 TT



HYPERTURN 65 DT



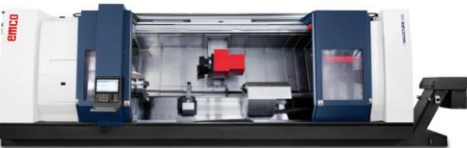
HYPERTURN 45 G3



HYPERTURN 45 G2

MAXXTURN

CNC UNIVERSAL TURNING CENTRES WITH MILLING DRIVE AND Y-AXIS



MAXXTURN 200



MAXXTURN 110



MAXXTURN 95



MAXXTURN 65



MAXXTURN 65 G2



MAXXTURN 45



MAXXTURN 25

EMCO VERTICAL

CNC VERTICAL TURNING CENTRES



EMCO VERTICAL VT 400



EMCO VERTICAL VT 260



EMCO VERTICAL VT 160

EMCOTURN

CNC TURNING MACHINES WITH MILLING DRIVE



EMCOTURN E65



EMCOTURN E45



EMCOTURN E25

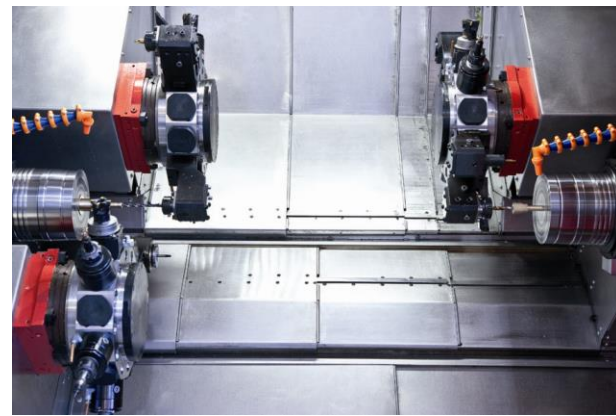
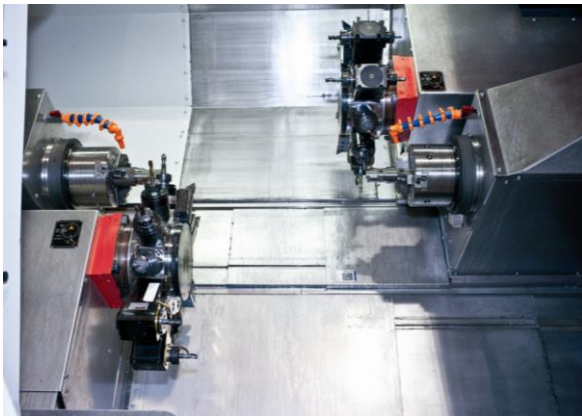


HYPERTURN 65

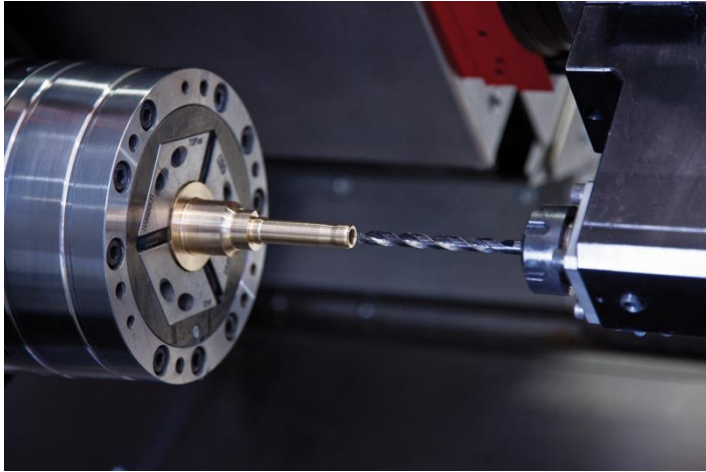
HT 65 Duoturn



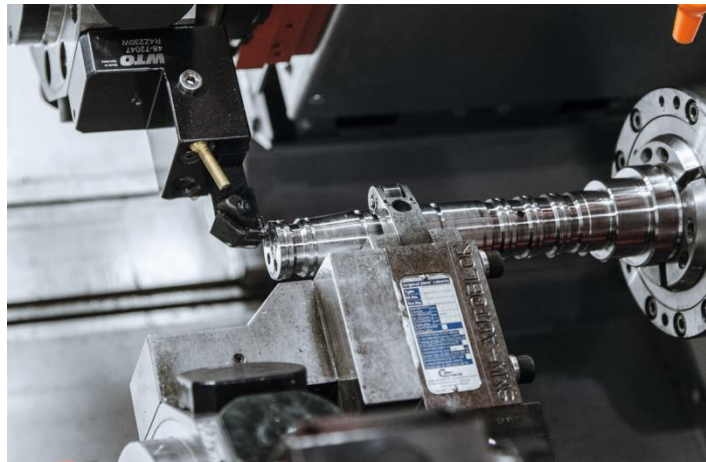
HT 65 Tripletturn



HYPERTURN 65

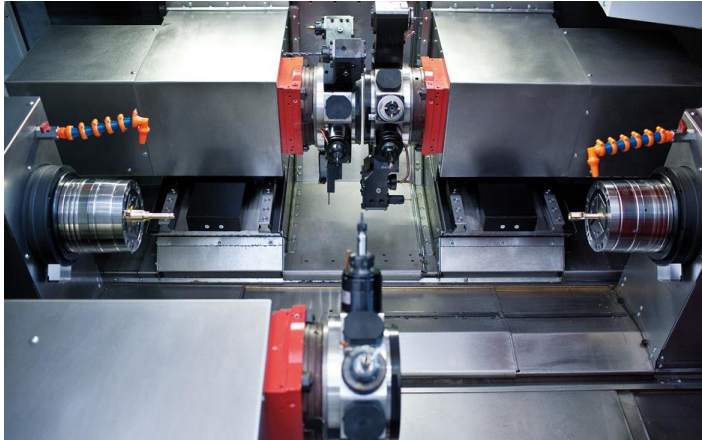


- ✓ Powerful main spindle with large bar capacity of up to 95 mm



- ✓ Powerful counter spindle for complete machining

HYPERTURN 65

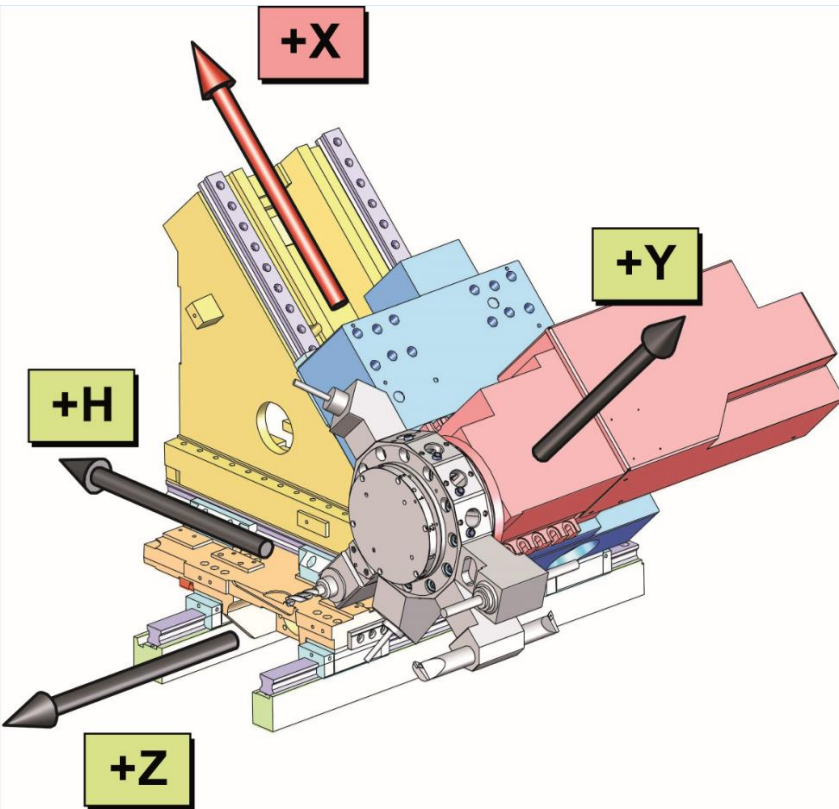


- 3 tool turrets with up to **48 tools**



- Up to **36 driven tools** for complete machining

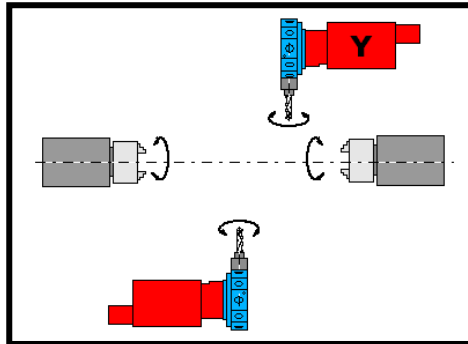
HYPERTURN 65



Up to 3 Y-axes for complex milling and drilling operations

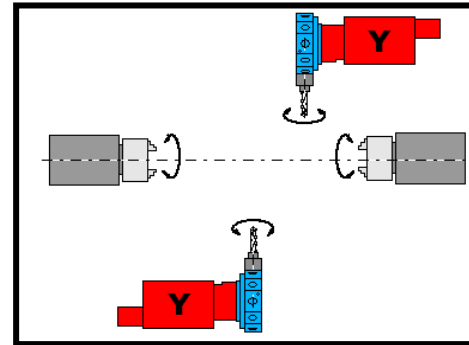
Versions

HYPERTURN 65-1000 DT (SM2Y)



- / Spindle clearance 1050 mm
- / Main spindle A2-6 (A2-8)
- / Counter spindle A2-6
- / C-axis at main spindle
- / C-axis at counter spindle
- / 2x 12-fold turret
- / 2x 12 driven
- / **Y-axis +50/-50 mm**

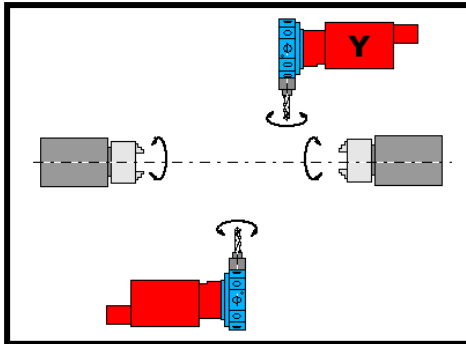
HYPERTURN 65-1000 DT (SM2Y2)



- / Spindle clearance 1050 mm
- / Main spindle A2-6 (A2-8)
- / Counter spindle A2-6
- / C-axis at main spindle
- / C-axis at counter spindle
- / 2x 12-fold turret
- / 2x 12 driven
- / **2x Y-axes +50/-50 mm**

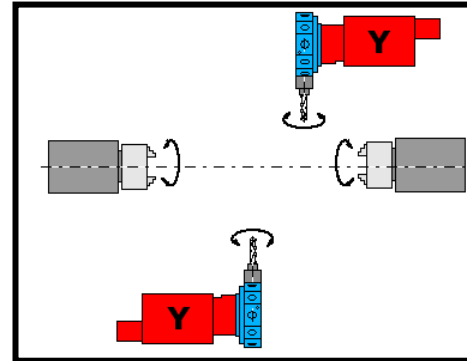
Versions

HYPERTURN 65-1300 DT (SM2Y)



- / Spindle clearance 1300 mm
- / Main spindle A2-6 (A2-8)
- / Counter spindle A2-6
- / C-axis at main spindle
- / C-axis at counter spindle
- / 2x 12-fold turret
- / 2x 12 driven
- / **Y-axis +50/-50 mm**

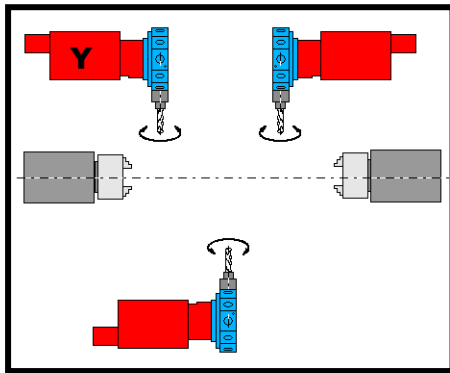
HYPERTURN 65-1300 DT (SM2Y2)



- / Spindle clearance 1300 mm
- / Main spindle A2-6 (A2-8)
- / Counter spindle A2-6
- / C-axis at main spindle
- / C-axis at counter spindle
- / 2x 12-fold turret
- / 2x 12 driven
- / **2x Y-axes +50/-50 mm**

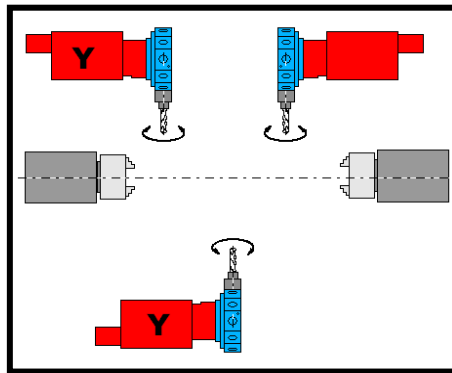
Versions

HYPERTURN 65-1300 TT (SM3Y)



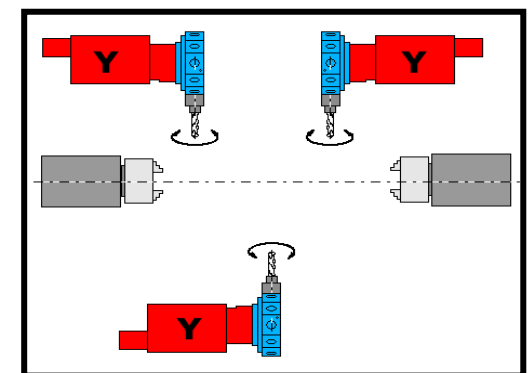
- / Spindle clearance 1300 mm
- / Main spindle A2-6 (A2-8)
- / Counter spindle A2-6
- / C-axis at main spindle
- / C-axis at counter spindle
- / 3x 12-fold turret
- / 3x 12 driven
- / **Y-axis +50/-50 mm**

HYPERTURN 65-1300 TT (SM3Y2)



- / Spindle clearance 1300 mm
- / Main spindle A2-6 (A2-8)
- / Counter spindle A2-6
- / C-axis at main spindle
- / C-axis at counter spindle
- / 3x 12-fold turret
- / 3x 12 driven
- / **2x Y-axes +50/-50 mm**

HYPERTURN 65-1300 TT (SM3Y3)

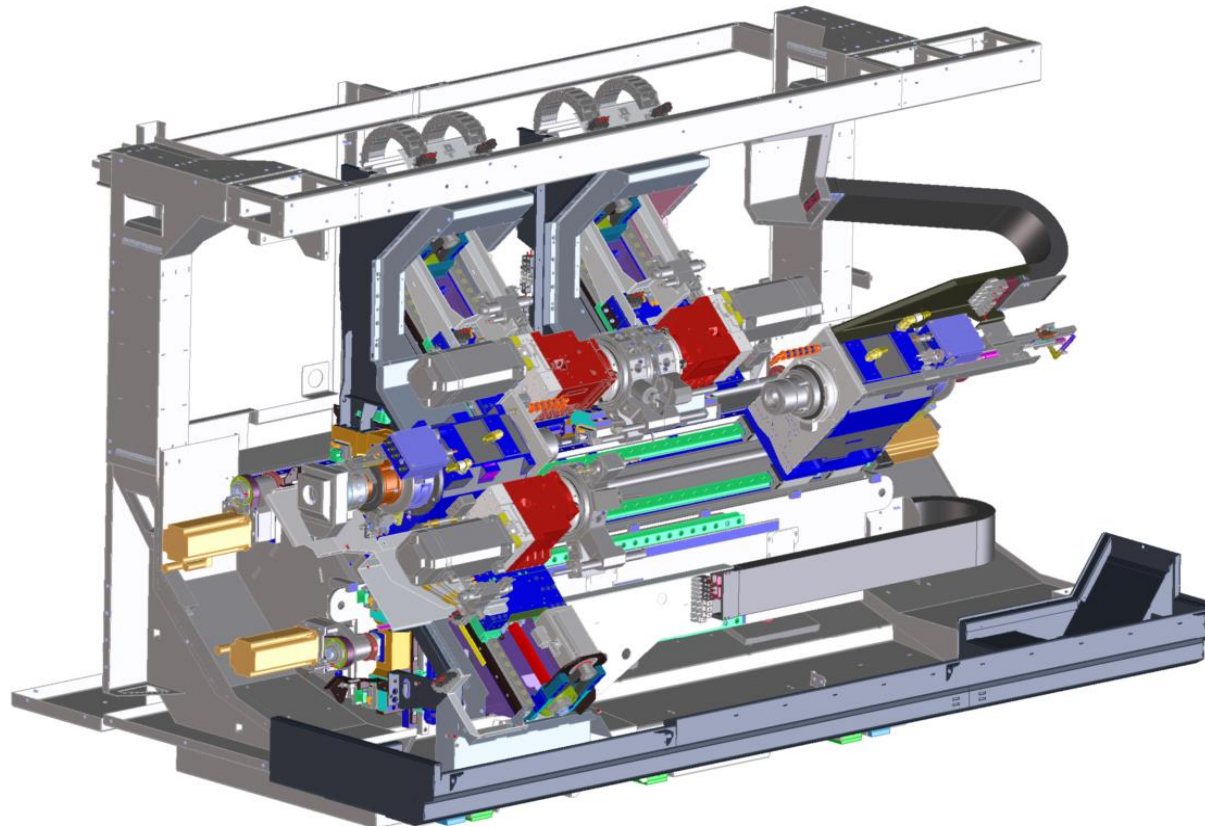


- / Spindle clearance 1300 mm
- / Main spindle A2-6 (A2-8)
- / Counter spindle A2-6
- / C-axis at main spindle
- / C-axis at counter spindle
- / 3x 12-fold turret
- / 3x 12 driven
- / **3x Y-axis +50/-50 mm**

Key data

Work area		Turret VDI30/40 (BMT55)	
Spindle opening	Ø 65 (77/95) mm	Number of positions	2 or 3x 12
Travel X / Z / Y	260 / 800-1.050 / +/- 50 mm	Driven tools	2 or 3x 12
Spindle clearance	1.050 / 1.300 mm	Max. power driven tools	6,7 (10) kW
Turning diameter	Ø 500 mm	Max. torque driven tools	25 (30) Nm
Main spindle/counter spindle		Speed driven tools	5.000 / 4.500 (12.000) rpm
Max. speed	5.000 (4.000 / 3.500) rpm	Dimensions/weight	
Drive power	29 (37) / 29 kW	Height of turning axis	1.300 mm
Max. torque	250 (360) / 250 (280) Nm	Total height	2.360 mm
Spindle connection (DIN 55026)	A2-6 (A2-8)	Required space (incl. chip conveyor) L x D	5.060 / 5.300 x 2850 mm
Feed drive		Total weight	Ca. 9.500 kg
Eilgang X / Z / Y	30 / 30 / 12 m/min		
Vorschubkraft X / Z / Y	5.000 / 8.000 / 7.000 N		

Machine structure

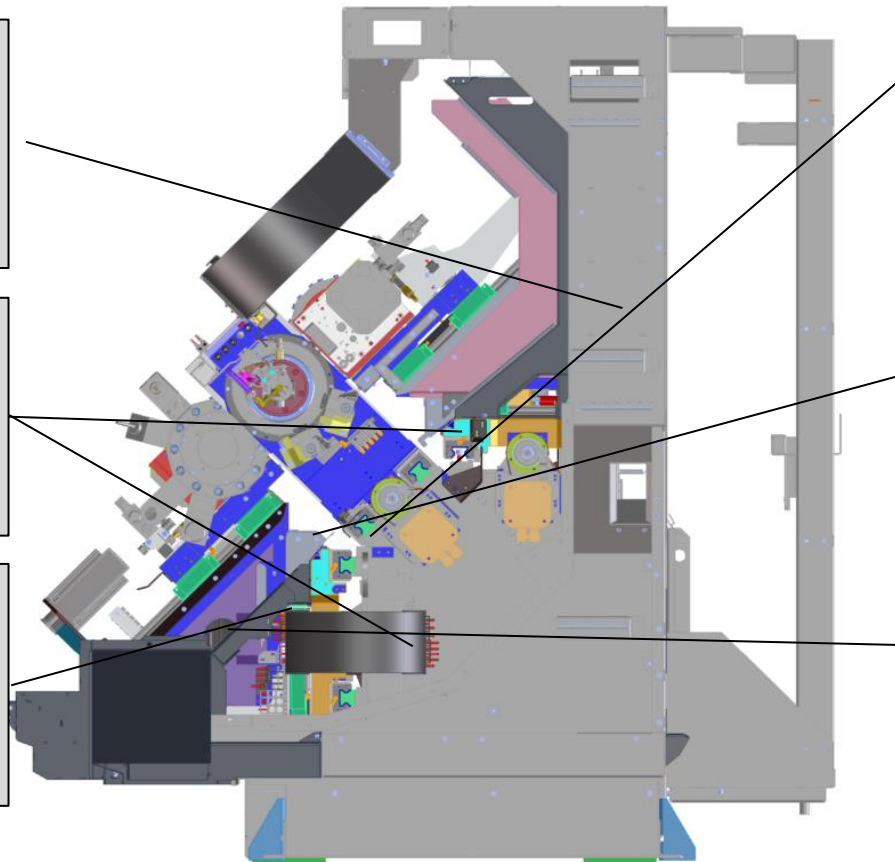


Machine structure

X1/X2 guide
Roller guide
Size: 35
Distance: 266 mm
Spindle: \varnothing 40 x 20 mm

Y1/Y2/Y3 guide
Roller guide
Size: 35
Distance: 266 mm
Spindle: \varnothing 40 x 10 mm

X3 guide
Roller guide
Size: 35
Distance: 266 mm
Spindle: \varnothing 40 x 20 mm

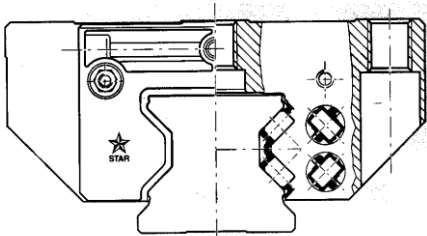
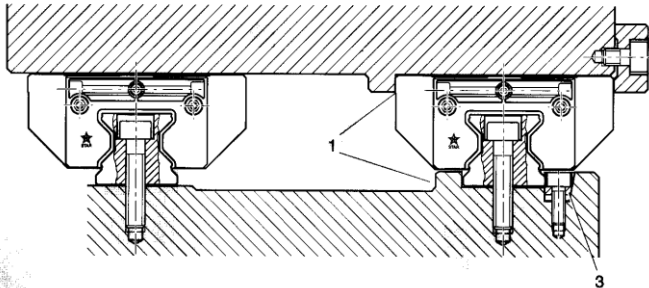


Z1/Z2 guide
Roller guide
Size: 45
Distance: 365 mm
Spindle: \varnothing 40 x 20 mm

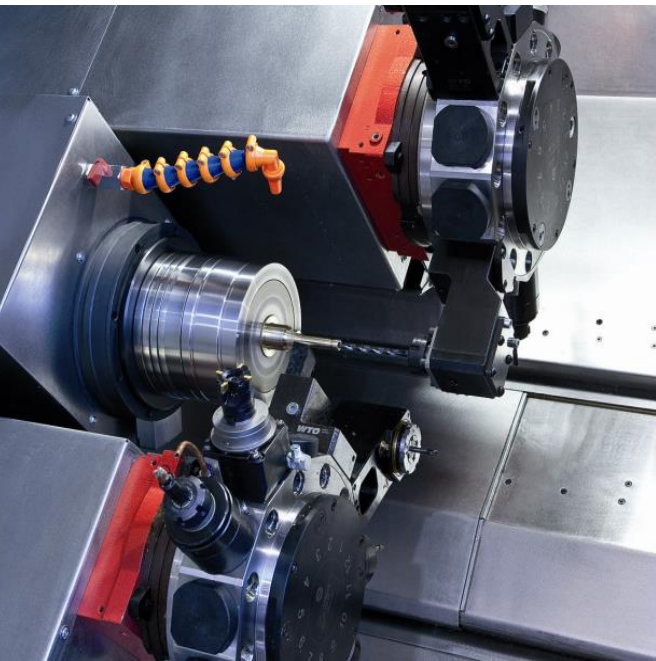
Z4 guide (GSP)
Roller guide
Size: 45
Distance: 208 mm
Spindle: \varnothing 40 x 20 mm

Z3 guide
Roller guide
Size: 45
Distance: 365 mm
Spindle: \varnothing 40 x 20 mm

Pre-stressed roller guides



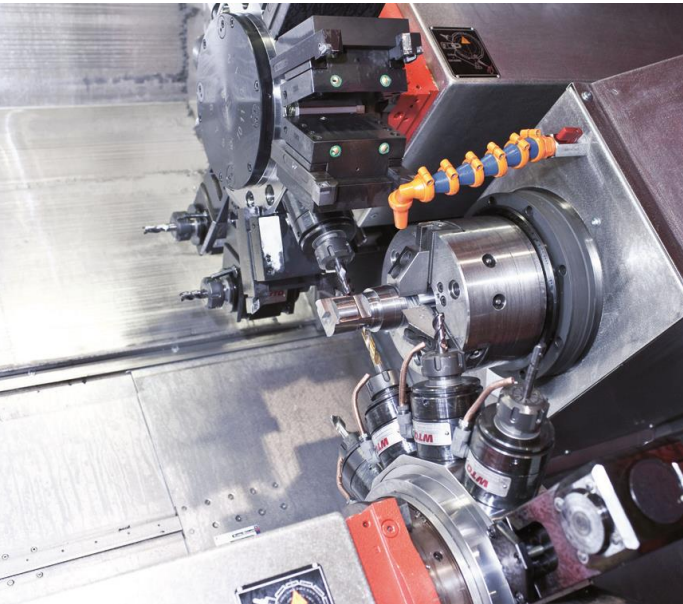
- ✓ Higher rapid traverses
- ✓ Higher rigidity + greater precision
- ✓ Longer lifespan
- ✓ Pre-stressed – backlash-free
- ✓ Minimal lubrication needed
- ✓ Built-in complete sealing
- ✓ No “Stick-Slip”-effect
- ✓ Better parts quality



Main spindle

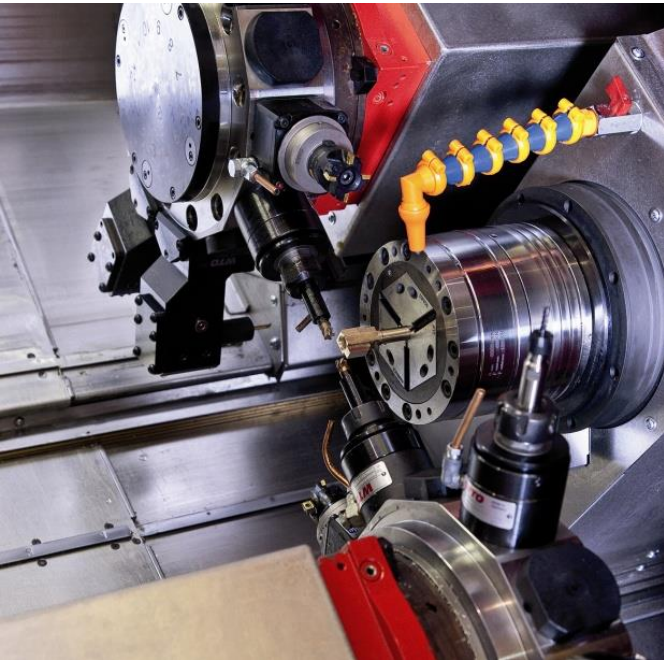
- / Thermo-symmetrical design
- / Solid cast construction
- / Integrated spindle motor (ISM)
- / Water-cooled
- / Large speed range 5000 min⁻¹
- / High drive power 29 kW
- / Spindle connection A2-6 (A2-8)

Main spindle



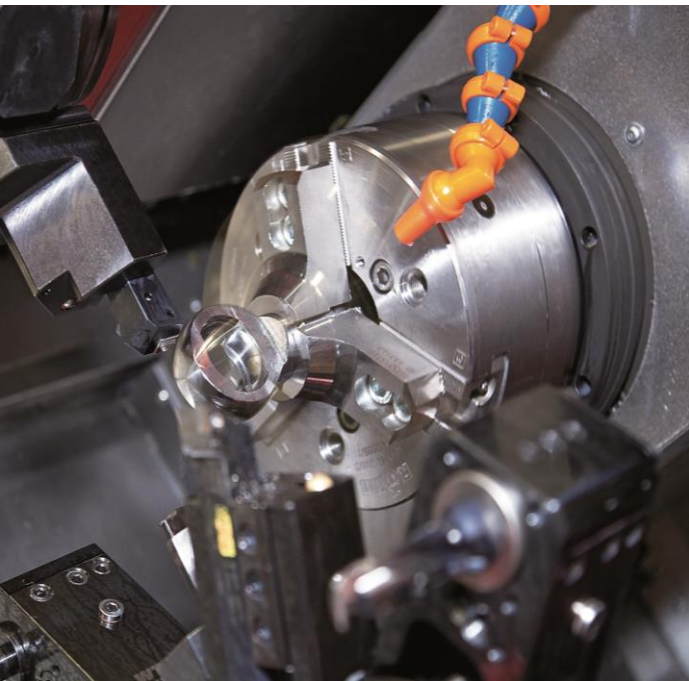
- ✓ Hydraulic hollow clamping cylinder
ø 65 mm
- ✓ Optional BigBore with passage
ø 77 mm
- ✓ Optional SuperBigBore with
passage ø 95 mm
- ✓ C-axis for contour milling
- ✓ Direct rotary encoder
- ✓ Programmable clamping stroke
monitoring

Counter spindle



- / Mounted on roller guides
- / Thermo-symmetrical design
- / Integrated spindle motor (ISM) – 29kW
- / Water-cooled
- / Large speed range 0 – 5000 rpm
- / Spindle connection A2-6

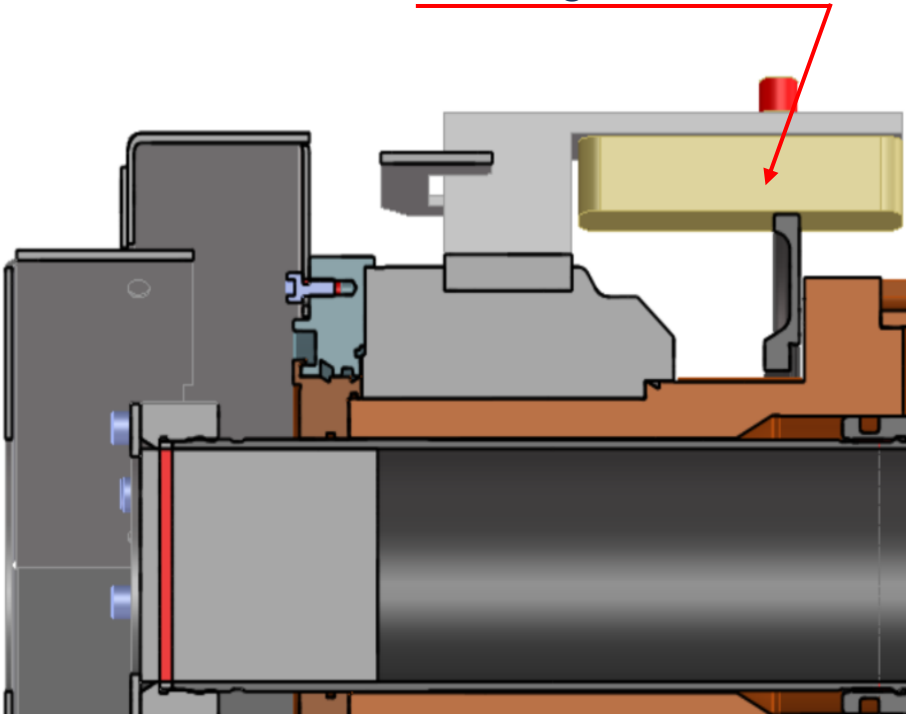
Counter spindle



- / Hydraulic full clamping cylinder
- / Direct rotary encoder
- / Built-in part ejector
- / Coolant-flooded
- / Programmable clamping stroke monitoring
- / C-axis for contour milling

Clamping stroke monitoring

Analogue



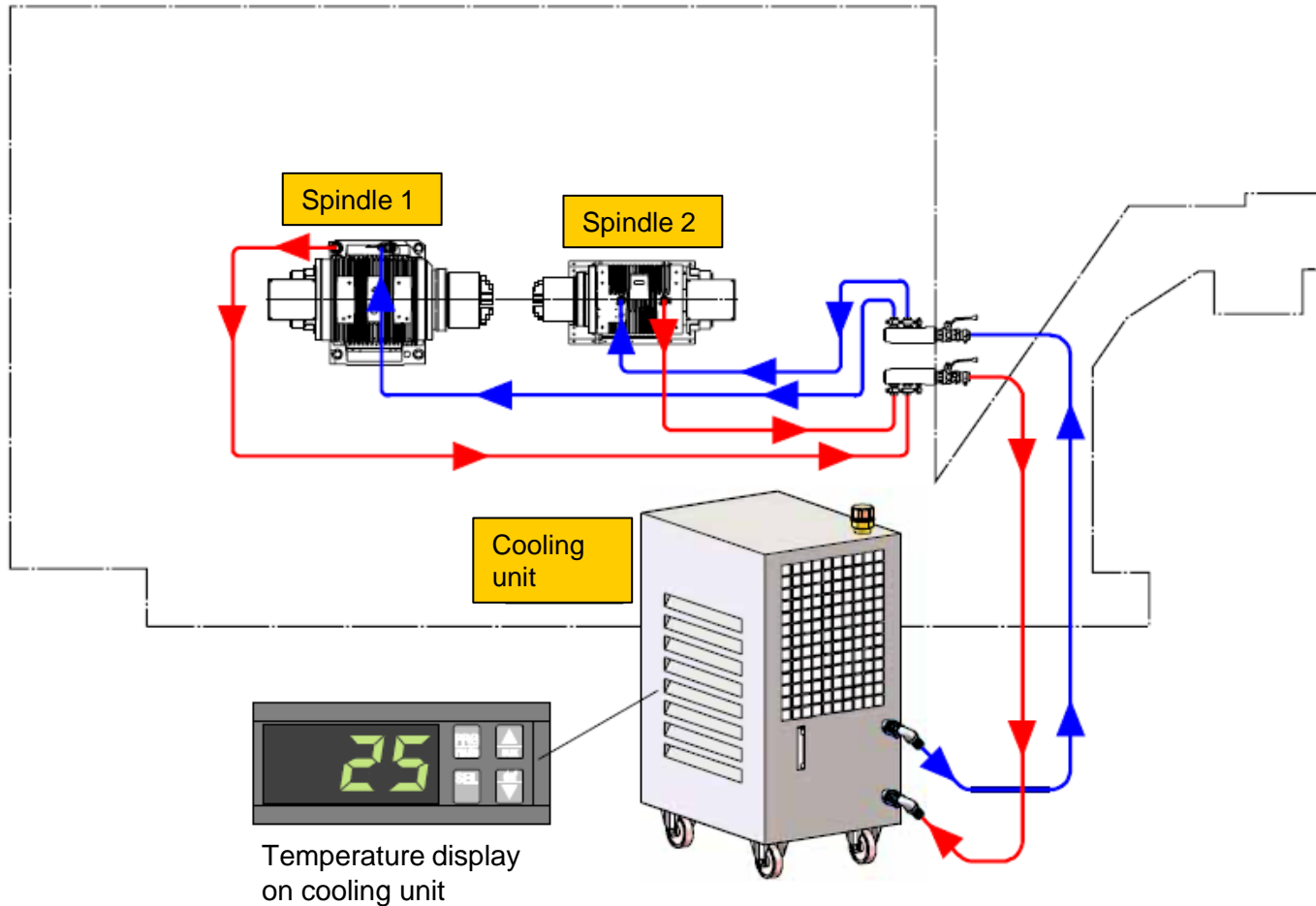
- / No screws to adjust
- / Nothing to adjust mechanically
- / No access needed
- / Simple handling
- / No retrofitting
- / Easy to activate on the control → 2 keys

AUX-ON

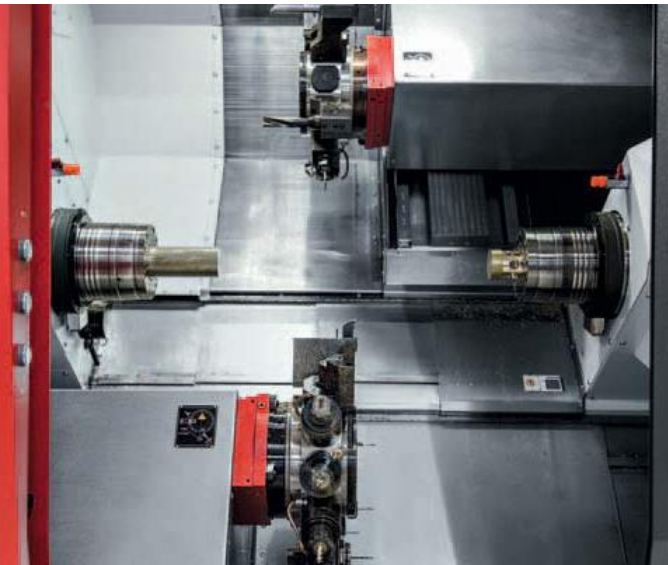
+

Chuck open/ close

Spindle cooling system

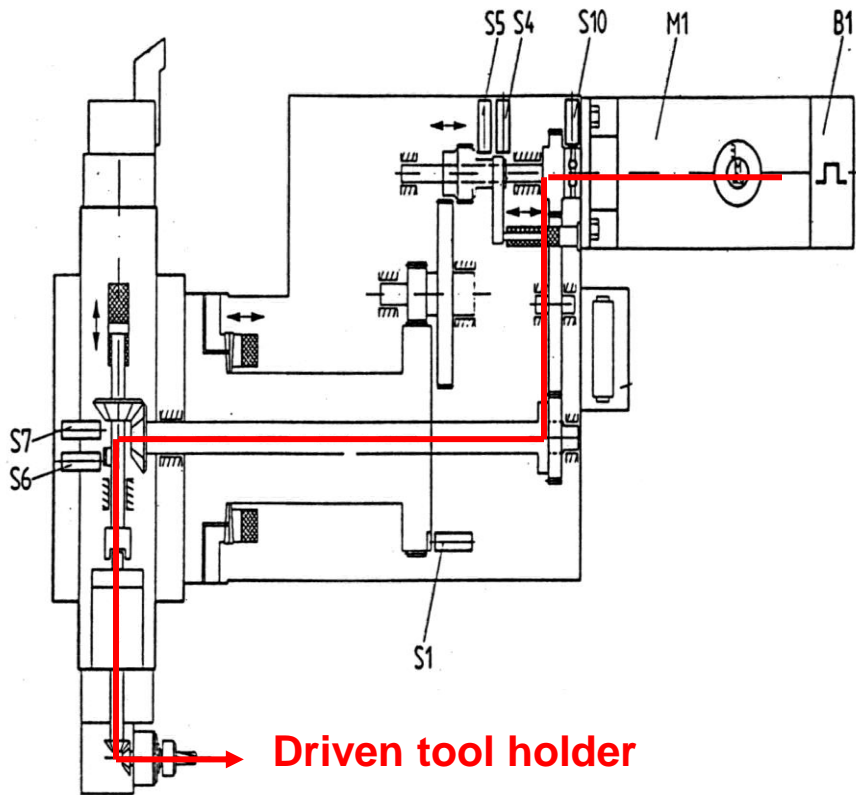


Tool turret - VDI



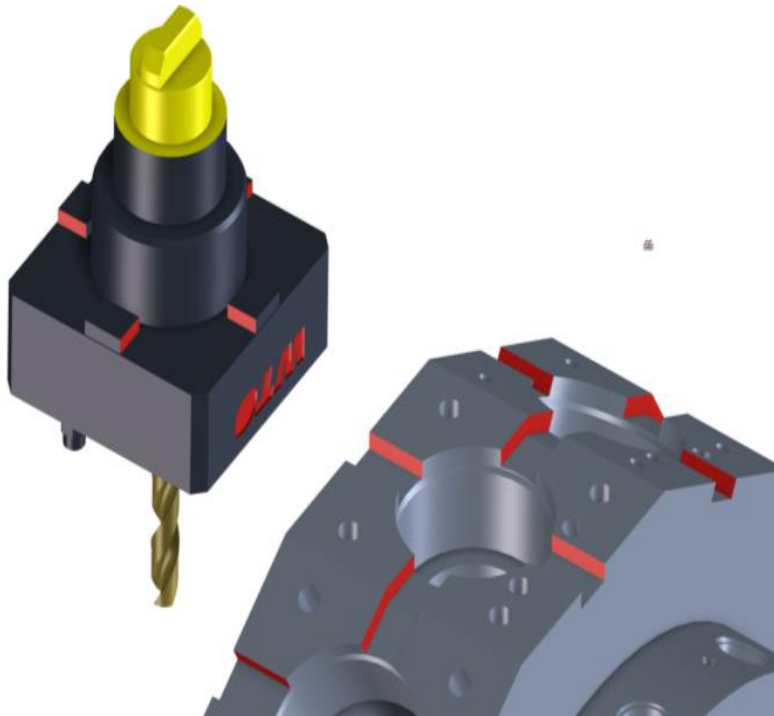
- / 12-fold turret VDI 30 (40) radial
- / Combination holders in connection to the Y-axis allow for multiple mounting
- / Servo-controlled
- / Controllable swivel speed
- / Internal coolant supply up to 25 bar
- / Sealing air impinged

Tool turret - VDI



- ✓ 12 x driven tool positions
- ✓ Max. speed: 5000 rpm
- ✓ Max. power: 6.7 kW
- ✓ Max. torque: 25 Nm
- ✓ Drive coupling DIN 5480

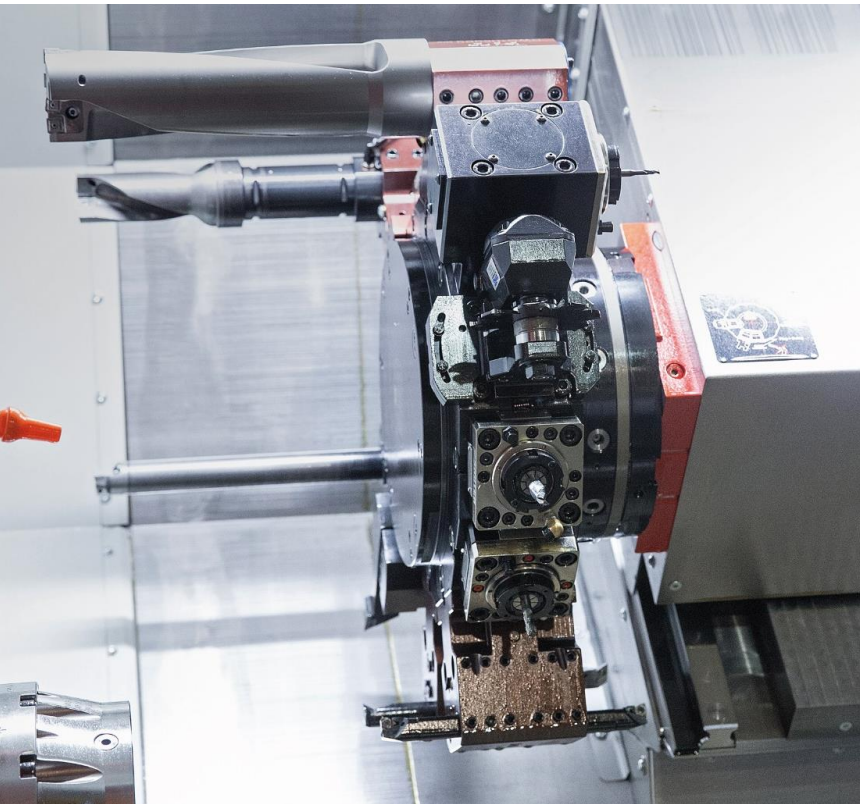
Tool turret - BMT



Repeatability < 0.005 mm
Position accuracy < 0.01 mm

- / 12-fold turret BMT55-P radial
- / Water-cooled direct drive
- / Multiple mounting through combination holder in connection with Y-Axis
- / Controllable swivel speed
- / Internal coolant supply up to 50 bar
- / Sealing air impinged

Tool turret - BMT



- / 12 x driven tool positions
- / Max. speed: 12000 rpm
- / Max. power: 10 kW
- / Max. torque: 30 Nm

Multiple tool holders

All 180° convertible



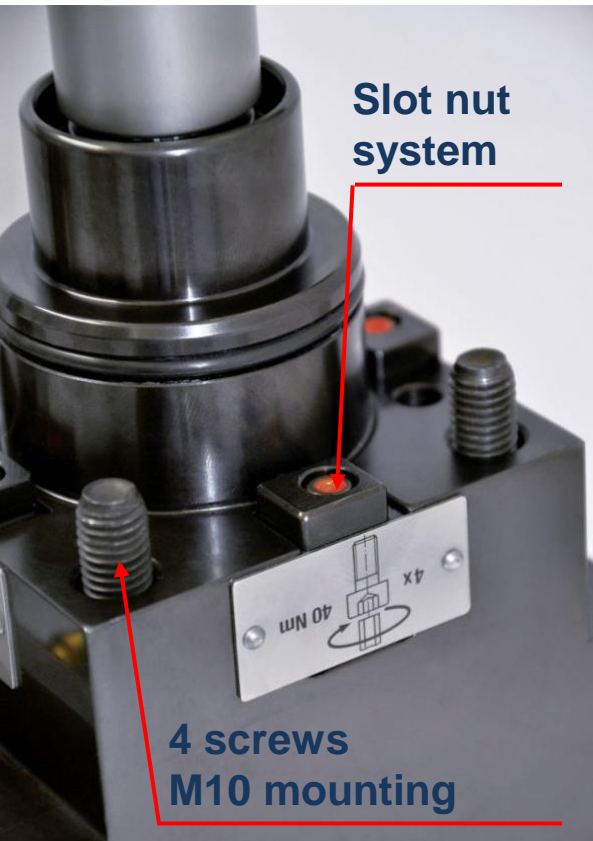
Tool holders by Eppinger

Moveable compensating coupling



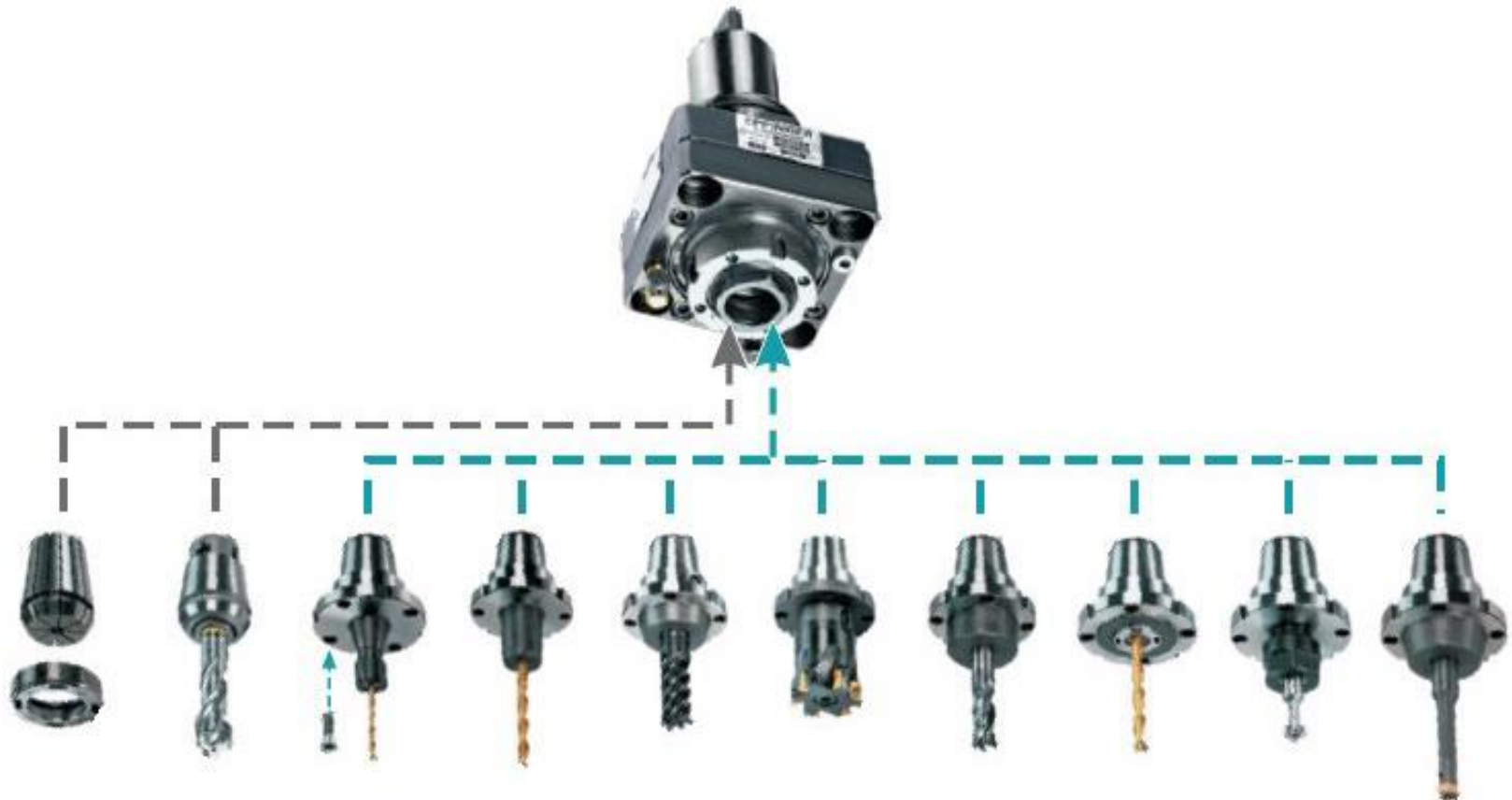
- / Suitable for 12.000 min-1
- / No offset tool drive – coupling
- / Minimization of radial forces on bearings
- / No vibrations
- / Less temperature and noise forming
- / Easy exchange of coupling
- / Longer lifespan of the tool
- / Better torque transmission

Tool holders by Eppinger

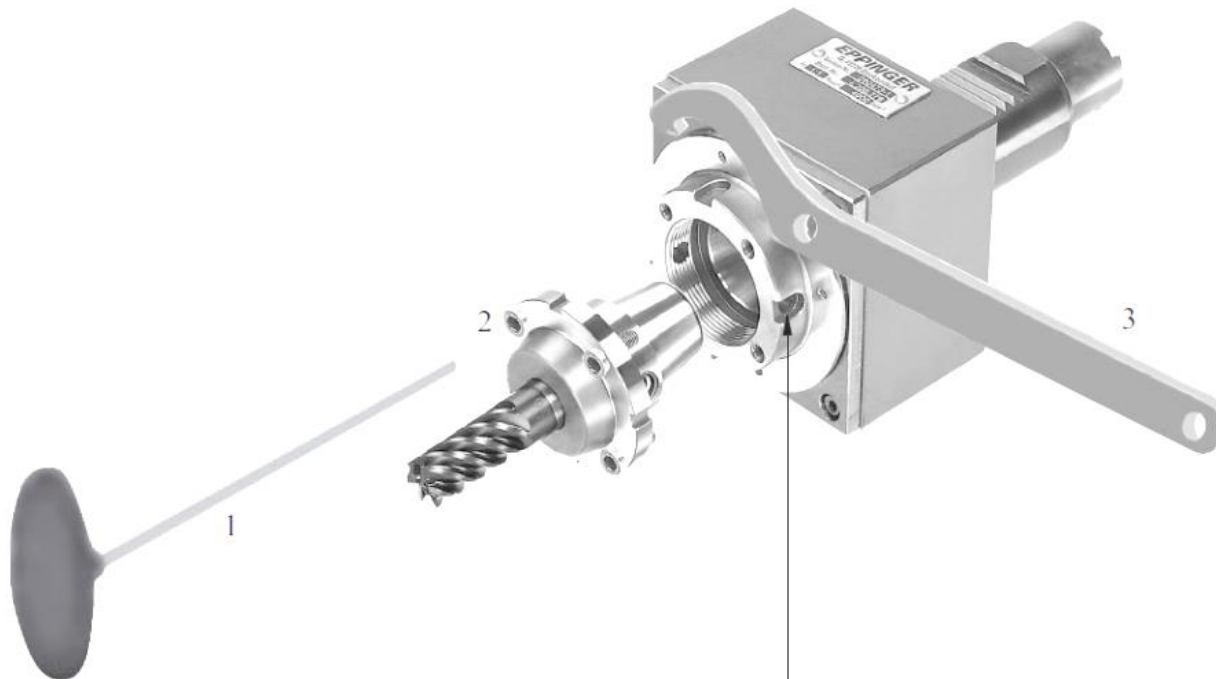


- / Set-up optimization – preset slot nuts
- / High accuracy in all stations:
- / Repeatability < 0.005 mm
- / Position accuracy < 0.01 mm
- / Mountable left or right
- / Backlash-free join ability without shaft centering
- / High stability → holding force ca. 5 t

Quick change adaptors PRECI-FLEX[®] (Eppinger)



Quick change adaptors PRECI-FLEX[®] (Eppinger)



Tool change without removing adaptor

CNC control



- ✓ Siemens 840D sl or Fanuc 31 iB
- ✓ 22" Touch screen
- ✓ emcoNNECT user surface for maximum connectivity



emcoNNECT
YOUR GUIDE IN TECHNOLOGY

Control - Sinumerik 840D sl



- / Sinumerik standard language with programGuide
- / Animated input assistant
- / Comprehensive technology cycles
- / New: trochoid milling
- / Plunge, gravure, thread hole milling, ...
- / Powerful 3D CNC simulation

In favor of EMCO...

- ✓ Solution Provider: complete processes and solutions, not only machines
- ✓ Turning and milling machines with customizable automation concepts
- ✓ Customer proximity: flexible, regional service and spare parts supply
- ✓ European technology and production

beyond standard /