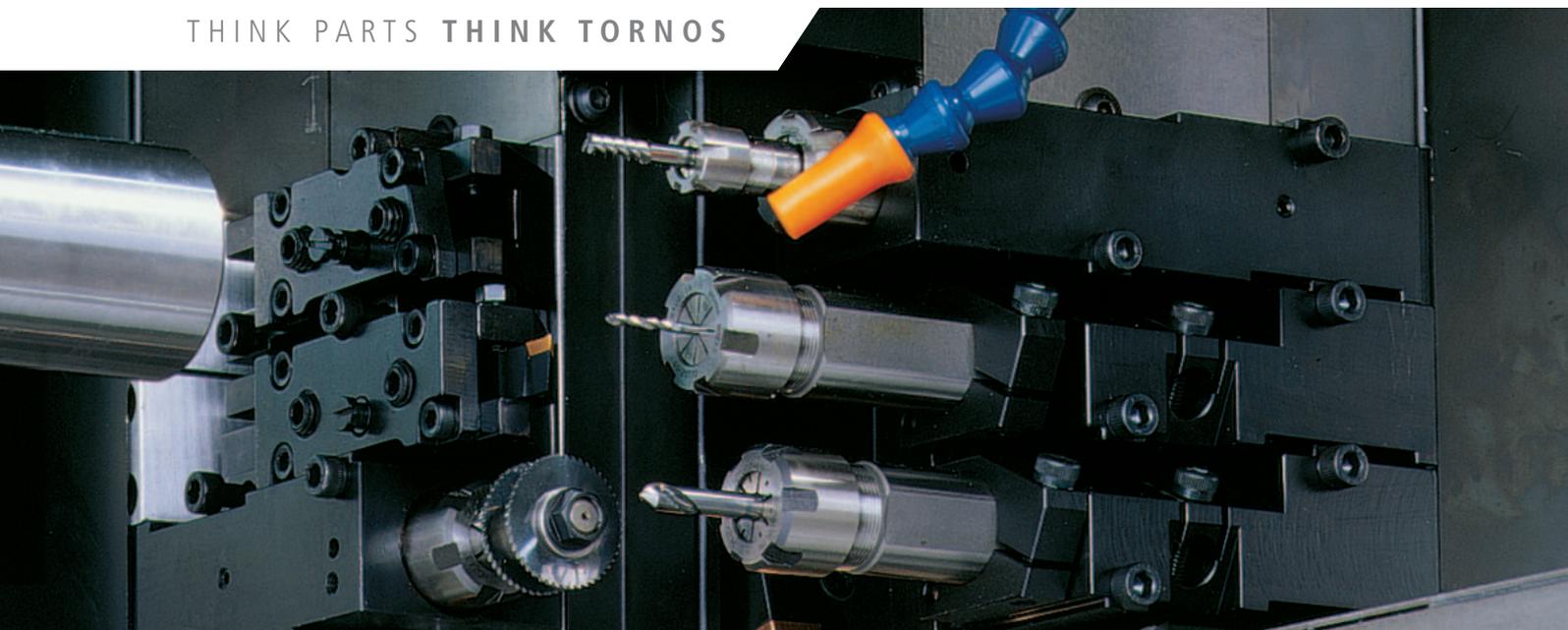




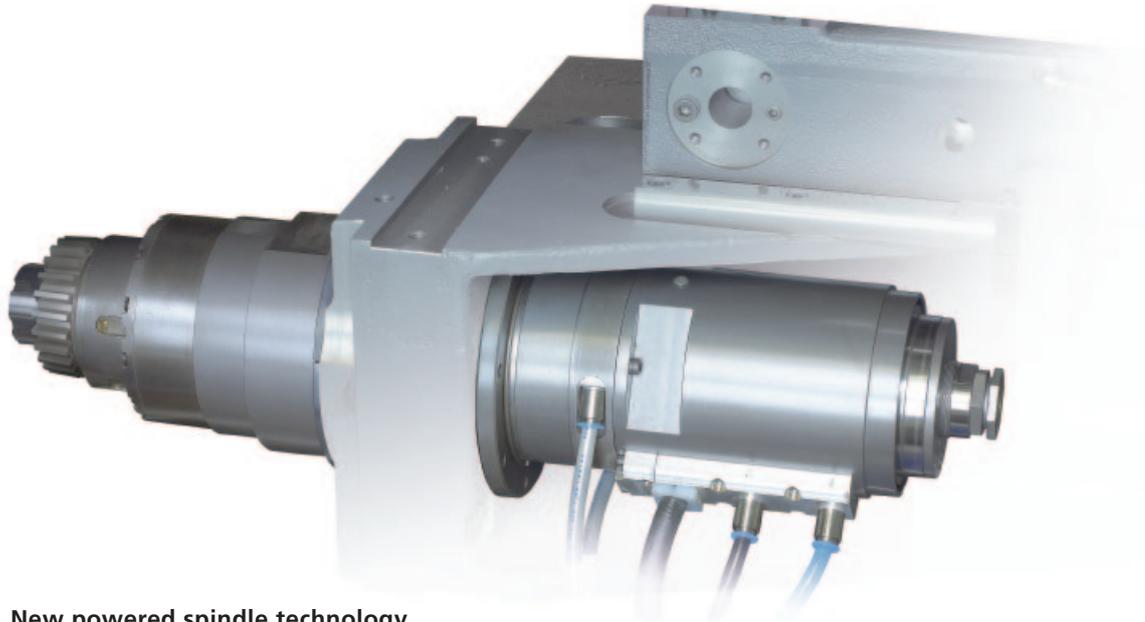
THINK PARTS THINK TORNOS



EvoDECO 16a/16e

The transition between two product generations – for bars from 2 to 16 mm

POWERED SPINDLE TECHNOLOGY



New powered spindle technology

- Identical spindle and counter spindle with synchronous motors
- Integrated chiller unit
- Increase in power and torque on the main spindle and counter spindle
- Reduction in downtime (stoppage, indexing, acceleration, deceleration) – 0 to 8,000 rpm in 0.45 seconds
- Elimination of noise and reduction in maintenance
- 10 axes (+ 2 C axes) managed simultaneously, perfectly interpolar between axes
- Floor space: 2130 mm (L) x 1390 mm (w)



MAJOR TECH

Over 1500 DECO 13a, throughout the world.
Successes: 4 independent tool systems and kinematics allowing simultaneous bar and secondary operation work: updated technology for EvoDECO 16a.

NOLOGICAL DEVELOPMENT OF THE DECO PLATFORM

Complete basic equipment

- Rotating guide bush
- Rotating tool motors
- C1 + C4 axes
- Interpolation in polar coordinates
- Clamping force fine adjustment
- Pneumatic workpiece ejector
- Collet cleaning with oil
- Automatic centralised lubrication cycle
- Cooling pump with self-cleaning filter
- Timer for preheating cutting oil
- Feeder and connecting tube interface
- Fire extinguisher interface
- TB-DECO + ADV



New fixed tool holder



New rotating tools

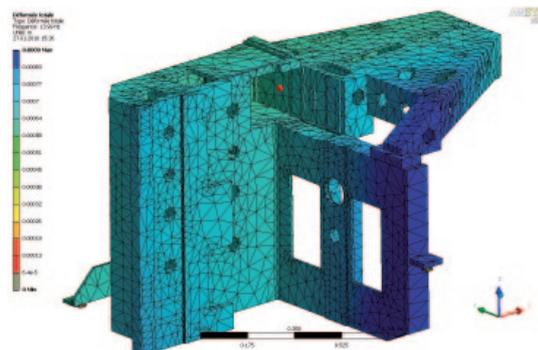
Working without a guide bush

- Workpiece length up to 50 mm (min. bar scrap 41 mm)



Increased rigidity

- Optimised machining performance (speed and feeds) for increased productivity
- Higher quality finishes
- Increased machining precision
- Increased tool service life



A NEW CONCEPT



- New design and increased rigidity
- Optimised performance
- Productivity gains
- Motorised spindle at 12,000 rpm
- Thermal performance optimised up to 10 axes (+ 2 C axes) managed simultaneously and perfectly inter polar between axes

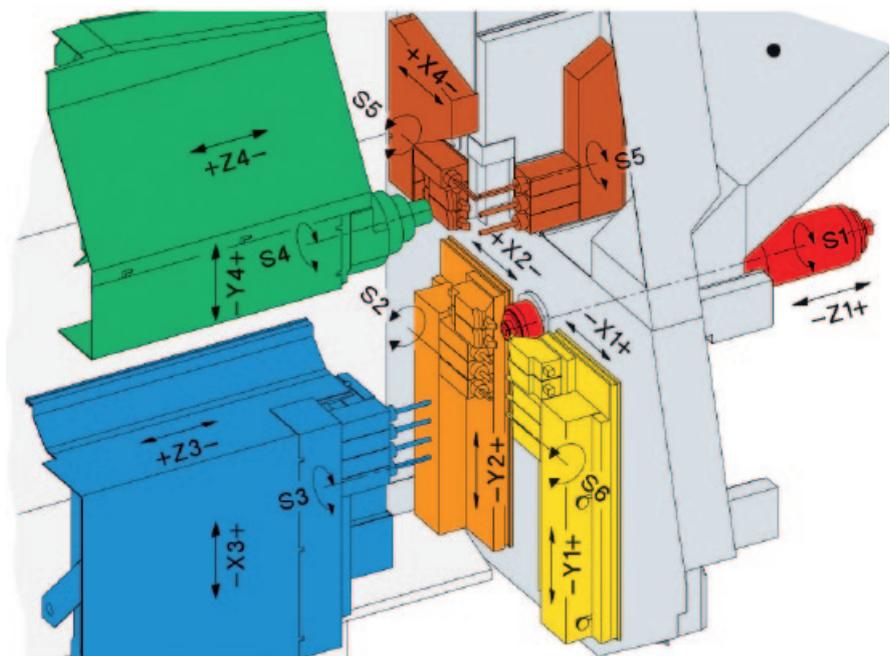
PROGRAMMING



Best kinematic performance on the sliding headstock machine market

10 AXIS KINEMATIC VERSION

- S1**
Main spindle
– sliding headstock
(Z1 axis)
- S2**
Rotating spindle
(X2/Y2 axes)
- S3**
Rotating spindle
– end attachment
(X3/Z3 axes)
- S4**
Counter spindle
(Y4/Z4 axes)
- S5**
Rotating spindle and
secondary operation
(transverse and
longitudinal)
(X4 axis)
- S6**
Rotating spindle
(X1/Y1 axes)



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	EvoDECO 16a	EvoDECO 16e
	10 linear axes + 2 C axes, 4 independent tool systems	8 linear axes + 2 C axes, 3 independent tool systems
MAIN SPINDLE (Z1/S1/C1)		
Max. bar capacity	16 mm	16 mm
Standard workpiece length with rotating guide bush	180 mm	180 mm
Spindle rotational speed	0-12,000 rpm	0-12,000 rpm
Spindle power	9,8 (12) kW	9,8 (12) kW
Max. constant torque	12,1 (15,8) Nm	12,1 (15,8) Nm
Spindle stoppage time 0-8000 rpm	0,4 sec	0,4 sec
Mild steel drilling capacity	10 mm	10 mm
Mild steel tapping capacity	M10	M10
GUIDE BUSH HOLDER (X1/Y1/S2) (X2/Y2/S6)		
Number of tool positions on guide bush	10 (2x5)	10 (2x5)
Turning tool section	12 x 12 (12,7x12,7)	12 x 12 (12,7x12,7)
Positions for rotating tools	6 (2 x 3)	6 (2 x 3)
Rotating tool speed of rotation	100-10,000 rpm	100-10,000 rpm
Rotating tool power	0,55 (1,1) kW	0,55 (1,1) kW
Rotating tool/steel drilling capacity	8 mm	8 mm
Rotating tool/steel tapping capacity	M6	M6
END ATTACHMENT (X3/Y3/S3)		
Number of tool positions	4	x
Positions for rotating tools	3	x
Rotating tool speed of rotation	100-10,000 rpm	x
Rotating tool power	0,55 (1,1) kW	x
Rotating tool/steel drilling capacity	8 mm	x
Rotating tool/steel tapping capacity	M6	x
COUNTER SPINDLE (Z4/Y4/S4/C4)		
Max. bar capacity	16 mm	16 mm
Insertion length of workpiece into spindle	150 mm	150 mm
Spindle rotational speed	0-12,000 rpm	0-12,000 rpm
Spindle power	9,8 (12) kW	9,8 (12) kW
Max. constant torque	12,1 (15,8) Nm	12,1 (15,8) Nm
Stoppage time 0-8000 rpm	0,4 sec.	0,4 sec.
Mild steel drilling capacity	10 mm	10 mm
Mild steel tapping capacity	M10	M10
SECONDARY OPERATION (X4/S5)		
Number of tool positions	6	6
Positions for rotating tools	6	6
Rotating tool speed of rotation	100-10,000 rpm	100-10,000 rpm
Rotating tool power	1,5 (2,2) kW	0,55 (1,1) kW
Rotating tool/steel drilling capacity	8 mm	8 mm
Rotating tool/steel tapping capacity	M6	M6
Max. total number of tools	27	22
Operation/secondary operation tool distribution	19/8	14/8

PNC-DECO PARALLEL NUMERICAL CONTROL

Control type	Fanuc 16i TB	Motor type (axes and spindles)	synchronous (AC)
Number of simultaneous axes	all axes	Axis resolution	0,1 µm
Number of axes that can be interpolated	all axes	Colour screen and mobile operator console	
Encoder/axis motor technique	absolute serial	ISO language programming software	TB-DECO + ADV

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