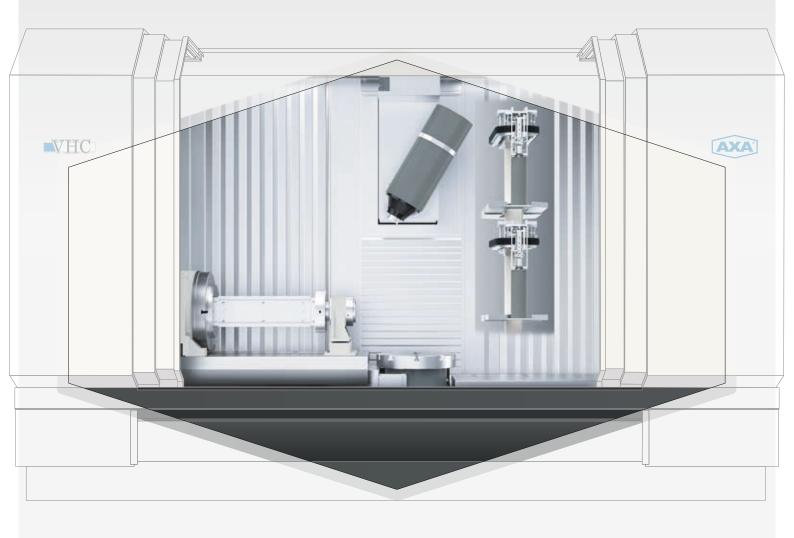
## **Original components**



Producing success.
With AXA uniqueness.









# Uniqueness

made by AXA

## **High performance components** from AXA

Since 1965, AXA Entwicklungs- und Maschinenbau has stood for innovative and reliable machine tools as well as an extensive vertical range of manufacture. However, we not only manufacture the machine beds and cladding ourselves, but also the important core components such as the main spindles, tilting spindle heads, tool changers, rotary tables, tailstocks and counter bearings as well as complex clamping devices.

This means: we can precisely fulfil your wishes for every component

of your machine – we focus on your ideas and always offer you the right concept.

The best prerequisites for your business success.

### **AXA** original components

- Rotary tables
- Tailstocks and counter bearings
- Main spindle drives
- Tool changing systems



## All important components included

We not only build your machine. We also equip it so that the machining of your workpieces is perfectly coordinated. Depending on your requirements, we integrate our

AXA original components – from rotary tables and counter bearings to tool changing systems and clamping technology – so that your production runs optimally.



Separately driven rotary tables in synchronous operation for inclusion of a clamping bridge – Also a repositionable pick up station on the left for pendulum operation or on the right for long bed operation



## Rotary tables for milling, drilling and turning

Regardless whether it is in positioning operation for milling and drilling, in simultaneous operation for rotary and multi-processing or for fast turning production processes: AXA rotary tables ensure that everything runs smoothly within your production process. You can

choose from a wide variety of different construction forms and sizes. Of course we are pleased to advise you and are able to integrate the rotary tables according to your individual requirements.

### Design

- NC-rotary tables with worm gear
- Highly dynamic NC-rotary tables with torque direct drive
- Swivelling rotary tables as entrance into
   5-axis machining
- Integrated hydraulic clamping on rotary tables with multipassage-rotating union
- Rotary tables can be moved by an NC axis in the working area for flexible adjustment to the length of the workpiece
- Individual, customer-specific special solutions

### **Benefits**

- Robust, stabile, reliable, durable
- High torques in positioning and turning operation
- Large passages for bar loading
- High precision by high-definition, direct measuring systems
- Compact design for quick and perfect integration into AXA machines
- Mechanics, electronics and software made by AXA
- Basic bodies and face plates from top-quality grey cast
- Flexible to adapt





## We'll get your production up to speed





Rotary tables can be moved by an NC axis in the working area for flexible adjustment to the length of the workpiece







Milling and turning in one clamping: 5-side and 5-axis processing of large volume workpieces by a tilting spindle head and rotary table with a faceplate diameter of 2800 mm

NC rotary table integrated into the machine table – Also allows the clamping and processing of long workpieces when the rotary table is inactive



## **NC-rotary tables / Swivelling rotary table**

Туре		RTA 2 300	RTA 3 400	RTA 3 520	RTA 3 630		RTA 4 520	RTA 4 630	RTA 4 800	RTA 4 1000	RTA 5 800
Base											
Face plate Weight	[mm] [kg]	300 165	400 320	520 360	630 410	[mm] [kg]	520 470	630 540	800 660	1000 780	800 840
Centre height (horizontal rotation axis)	[mm]	200	250	280	330	[mm]	280	330	-	-	420
Overall height (vertical rotation axis)	[mm]	240	280	280	280	[mm]	295	295	295	295	295
Max. table inside diameter Permitted mass moment of inertia (consisting of workpiece, equipment and face plate <sup>2</sup> )	[mm] [kgm²]	100 4	140 <sup>4</sup> 40	140 <sup>4</sup> 40	140 <sup>4</sup> 40	[mm] [kgm²]	200 <sup>4</sup> 150	200 <sup>4</sup> 150	200 <sup>4</sup> 150	200 <sup>4</sup> 150	200 <sup>3</sup> 400
Accuracy measuring system <sup>5</sup> (direct / indirect)	["]	± 5 / ± 15	± 5 / ± 15	± 5 / ± 15	± 5 / ± 15	["]	± 5 / ± 15	± 5 / ± 15	± 5 / ± 15	± 5 / ± 15	± 5 / -
Max. operating pressure	[bar]	63	63	63	63	[bar]	63	63	63	63	63
Torque	1 1	1	1	1		1 1		ı	ı	1	
Max. torque (by main drive)	[Nm]	300	900	900	900	[Nm]	1600	1600	1600	1600	2200
Max. tangential moment (by hydraulic clamping)	[Nm]	2800	6000	6000	6000	[Nm]	10000	10000	10000	10000	10000
<b>Transport weight</b>											
Max. loading (with vertical rotation axis <sup>1</sup> )	[kg]	1000	1500	1500	1500	[kg]	3000	3000	3000	3000	6000
Max. loading (with horizontal rotation axis 1)	[kg]	300	500	500	500	[kg]	1200	1200	-	-	1600
Speed range											
Max. rapid speed range (intermittent duty mode)	[rpm]	11,0	8,0	8,0	8,0	[rpm]	6,7	6,7	6,7	6,7	5,0
Max. permanent speed range (constant operation with low stress)	[rpm]	2,0	2,0	2,0	2,0	[rpm]	2,0	2,0	2,0	2,0	1,0

<sup>&</sup>lt;sup>1</sup> Permitted transport weight also limited by installation situation, machine and kind of application

<sup>&</sup>lt;sup>2</sup> Adaptation of acceleration and speed parameter dependent on mass moment of inertia

<sup>3</sup> Optional with special measuring system
4 Only with indirect measuring system or with special measuring system

1 Only with indirect measuring system or with special measuring system.

For all specifications centred, balanced loading is required!

<sup>&</sup>lt;sup>5</sup> Other measuring system accuracies on request!



## **NC-rotary tables / Swivelling rotary table**

						1		
Туре		RTA 5 1000	RTA 5 1100x1100	RTA 6 1500		RTA 8 2300	RTA 8 2800	SRTA 2 300
Base								
Face plate	[mm]	1000	1100 x 1100	1500	[mm]	2300	2800	300
Weight	[kg]	1000	1650	2700	[kg]	6500	8000	350
Centre height (horizontal rotation axis)	[mm]	-	-	-	[mm]	-	-	200
Overall height (vertical rotation axis)	[mm]	295	370	380	[mm]	460	500	328
Max. table inside diameter	[mm]	200 <sup>3</sup>	200 <sup>3</sup>	370 <sup>3</sup>	[mm]	370 <sup>3</sup>	370 <sup>3</sup>	100 4
Permitted mass moment of inertia (consisting of workpiece, equipment and face plate <sup>2</sup> )	[kgm²]	400	400	2000	[kgm²]	8000	8000	n.i.
Accuracy measuring system <sup>5</sup> (direct / indirect)	["]	± 5 / -	± 5 / -	± 5 / -	["]	± 2,5 / -	± 2,5 / -	± 5 / ± 15
Max. operating pressure	[bar]	63	63	63	[bar]	63	63	120
Torque								
Max. torque (by main drive)	[Nm]	2200	2200	3500	[Nm]	7500	7500	n.i.
Max. tangential moment (by hydraulic clamping)	[Nm]	10000	10000	18000	[Nm]	40000	40000	2800
Transport weight								
Max. loading (with vertical rotation axis 1)	[kg]	6000	6000	10000	[kg]	18000	18000	1000
Max. loading (with horizontal rotation axis 1)	[kg]	-	-	-	[kg]	-	-	200
Speed range			1				1	
Max. rapid speed range (intermittent duty mode)	[rpm]	5,0	5,0	6,0	[rpm]	4,5	4,5	11,0
Max. permanent speed range (constant operation with low stress)	[rpm]	1,0	1,0	1,0	[rpm]	1,0	1,0	2,0

<sup>&</sup>lt;sup>1</sup> Permitted transport weight also limited by installation situation, machine and kind of application

<sup>&</sup>lt;sup>2</sup> Adaptation of acceleration and speed parameter dependent on mass moment of inertia

<sup>3</sup> Optional with special measuring system
4 Only with indirect measuring system or with special measuring system

For all specifications centred, balanced loading is required!

<sup>&</sup>lt;sup>5</sup> Other measuring system accuracies on request!



## **NC-rotary tables fast turning** for drilling and turning applications

Гуре		RTA 3TD 300	RTA 3TD 400	RTA 3TD 520	RTA 4TD 520/630		RTA 4TD 800	RTA 5TD 850	RTA 5TD 1000	RTA 5TD 1250	RTA 1600/
Base				· ·							
ace plate	[mm]	300	400	520	520 / 630	[mm]	800	850	1000	1250	160
Veight Centre height horizontal rotation axis)	[kg] [mm]	340 250	380 250	430 280	530 / 595 280 / 330	[kg] [mm]	725 -	840	1000	1650	416
Overall height vertical rotation axis)	[mm]	335	335	335	380	[mm]	380	170 (from flange plate) / 470	170 (from flange plate) / 470	170 (from flange plate) / 470	
lax. table inside diameter	[mm]	80	80	80	110	[mm]	110	200	200	200	
ccuracy measuring system <sup>3</sup> bsolute)	["]	± 5	± 5	± 5	± 5	["]	± 5	± 3	± 3	± 3	
lax. operating pressure	[bar]	43	43	43	43	[bar]	43	43	43	43	
orque											ı
lax. torque oy main drive)	[Nm]	500	500	500	700	[Nm]	700	2000	2000	2000	
orque curve											
or 0 rpm	[Nm]	500	500	500	-	[Nm]	-	-	-	-	
or 300 rpm or 500 rpm	[Nm] [Nm]	250 80	250 80	250 80	-	[Nm] [Nm]	-	-	-	-	
or 0 rpm	[Nm]	-	-	-	700	[Nm]	700	-	-	-	
or 300 rpm or 350 rpm	[Nm] [Nm]	-	-	-	500 300	[Nm] [Nm]	500 300	-	-	-	
or 550 thin	[INIII]	-	-	-	300	[INIII]	300	-	-	-	
rom 0 to 150 rpm	[Nm]	-	-	-	-	[Nm]	-	2000	2000	2000	
or 250 rpm or 300 rpm	[Nm] [Nm]	-	-	-	-	[Nm] [Nm]	-	1000	1000	1000	
lax. tangential moment by hydraulic clamping)	[Nm]	4000	4000	4000	6000	[Nm]	6000	10000	10000	10000	
ositioning operation											
lax. loading vith vertical rotation axis 1)	[kg]	800	800	800	1500	[kg]	1500	3000	3000	3000	
lax. loading vith horizontal rotation axis 1)	[kg]	300	300	300	800	[kg]	-	-	-	-	
ermitted mass moment of inertia onsisting of workpiece, quipment and face plate <sup>2</sup> )	[kgm²]	80	80	80	300	[kgm <sup>2</sup> ]	300	1000	1000	1000	
lax. speed range	[rpm]	20	20	20	20	[rpm]	20	20	20	20	
urning operation											ı
ax. loading ith vertical rotation axis ¹)	[kg]	250	250	250	500	[kg]	500	1500	1500	1500	
ax. loading	[kg]	150	150	150	250	[kg]	-	-	-	-	
vith horizontal rotation axis 1) ermitted mass moment of inertia onsisting of workpiece,	[kgm²]	20	20	20	80	[kgm²]	80	300	300	300	
quipment and face plate <sup>2</sup> )  Max. speed range	[rpm]	500	500	500	350	[rpm]	350	300	300	300	

<sup>&</sup>lt;sup>1</sup> Permitted transport weight also limited by installation situation, machine and kind of application <sup>2</sup> Adaptation of acceleration and speed parameter dependent on mass moment of inertia

For all specifications centred, balanced loading is required!

<sup>&</sup>lt;sup>3</sup> Other measuring system accuracies on request!



## **NC-rotary tables fast turning** for milling applications

ype		RTA 4TF 520	RTA 4TF 630	RTA 4TF 800	RTA 4TF 1000		RTA 5TF 850	RTA 5TF 1000	RTA 5TF 1250	RTA 6TF 1600	
ase											
ace plate	[mm]	520	630	800	1000	[mm]	850	1000	1250	1600	
/eight entre height norizontal rotation axis)	[kg] [mm]	530 280	595 330	595	885	[kg] [mm]	840 450	1000	1650	4210	
verall height vertical rotation axis)	[mm]	380	380	380	380	[mm]	470	470	470	590	
lax. table inside diameter	[mm]	110	110	110	110	[mm]	200	200	200	200	
ccuracy measuring system <sup>3</sup> absolute)	["]	± 5	± 5	± 5	± 5	["]	± 5	± 5	± 5	± 2,5	
lax. operating pressure	[bar]	40	40	40	40	[bar]	40	40	40	60	
orque	1 1		1	1		1	1	1	ı	ı	
lax. torque by main drive)	[Nm]	700	700	700	700	[Nm]	2000	2000	2000	3200	
orque curve											
or 0 rpm	[Nm]	-	-	-	-	[Nm]	-	-	-	-	
or 300 rpm or 500 rpm	[Nm] [Nm]	-	-	-	-	[Nm] [Nm]	-	-	-	-	
or 0 rpm	[Nm]	-	-	-	-	[Nm]	-	-	-	-	
or 300 rpm	[Nm]	-	-	-	-	[Nm]	-	-	-	-	
or 350 rpm	[Nm]	-	-	-	-	[Nm]	-	-	-	-	
rom 0 to 150 rpm	[Nm]	-	-	-	-	[Nm]	-	-	-	-	
or 250 rpm or 300 rpm	[Nm] [Nm]	-	-	-	-	[Nm] [Nm]	-	-	-	-	
lax. tangential moment by hydraulic clamping)	[Nm]	6000	6000	6000	6000	[Nm]	10000	10000	10000	10000	
ositioning operation											
lax. loading with vertical rotation axis 1)	[kg]	2000	2000	2000	2000	[kg]	5000	5000	5000	6000	
lax. loading vith horizontal rotation axis 1)	[kg]	800	800	-	-	[kg]	1500	-	-	-	
ermitted mass moment of inertic consisting of workpiece, quipment and face plate <sup>2</sup> )	a [kgm²]	300	300	300	300	[kgm²]	1000	1000	1000	2500	
lax. speed range	[rpm]	20	20	20	20	[rpm]	20	20	20	10	
urning operation	1 1		ı	1		1 1	1		1	ı	
ax. loading vith vertical rotation axis ¹)	[kg]	-	-	-	-	[kg]	-	-	-	-	
lax. loading vith horizontal rotation axis 1)	[kg]	-	-	-	-	[kg]	-	-	-	-	
ermitted mass moment of inertial consisting of workpiece, quipment and face plate 2)	a [kgm²]	-	-	-	-	[kgm²]	-	-	-	-	
fax. speed range	[rpm]	-	-	-	-	[rpm]	-	-	-	-	

<sup>&</sup>lt;sup>1</sup> Permitted transport weight also limited by installation situation, machine and kind of application <sup>2</sup> Adaptation of acceleration and speed parameter dependent on mass moment of inertia

For all specifications centred, balanced loading is required!

<sup>&</sup>lt;sup>3</sup> Other measuring system accuracies on request!



## Tailstocks and counter bearings

Keep on the right track to process longer and heavier workpieces thanks to our robust tailstocks and counter bearings.

Originally developed for working with rotary tables on AXA machine tools, this can simply be integrated into other machines and many varied fields of application. You can also find driveless rotary tables in our product range as the particularly stable version of the hydraulically clamped counter bearing. Due to its robust construction, it is especially recommended for use with large and heavy clamping bridges.

### Design

- Tailstocks in various sizes and with different spindle strokes
- Tailstock sleeves with morse taper for use different centre points
- Tailstock sleeves available adjustable by hand wheel, hydraulics or pneumatics
- Hydraulically clamped counter bearing in various sizes
- Rotating union for counter bearing to supply the clamping circuits of a clamping bridge
- Hydraulically clamped rotary tables without drive as especially stable counter bearing
- Centre height adjusted to the rotary table
- Counterbearings and tailstocks slide on guides to adjust to the workpiece length

### **Benefits**

- Extremely robust design
- Flexible in use
- Individual customer construction
- Basic bodies from top-quality grey cast iron
- Optimal for use with large and heavy clamping bridge





## **Tailstocks and counter bearings**





Left working area: fixed arrangement of rotary table and counterbearing for inclusion of a clamping bridge
Right working area: flexible solution with rotary table and sliding tailstock and clamping elements to adjust to the workpiece length

By the rotary table on the left and the tailstock on the right, the workpieces are automatically rotated into position for the centre clamping device







The workpiece is rotated into position by means of a rotary table and tailstock

Tailstock movable above the machine table

Two NC rotary tables working in synchronous operation ensure torsionally stiff suspension of the long clamping bridge



ly varied.

## Main spindle drives

The main spindle makes up one of the most important components in a machine tool. It goes without saying that we design and manufacture these complex, electromechanical system components ourselves.

The requirements placed on modern drives are extreme-

We constantly strive to completely fulfil these wishes and demands. Each spindle undergoes a test run designed for the spindle type on the test benches developed internally by AXA. We have been mastering this task successfully for decades, confirmed by our customers.

### Design

- Directly driven spindles, belt-driven spindles or geardriven spindles as special solution
- Water or air cooled motors in asynchronous or synchronous design
- Various standard and special solutions of taper for the main spindle
- Combined milling and turning machining by additionally placed turning tool holder on the main spindle
- Spindle adaption for pick up of angular heads and multi-spindle heads or high-speed spindles by simple torque support or threepoint support

### **Benefits**

- High drive performance
- High and constant torque right up to breakpoint speed
- Large speed ranges with stepless regulation
- Quick start-up and braking processes
- Possibility of angular positioning
- Complete spindle service from development up to service
- Short reaction times and reliable spare part and exchange service thanks to in-house manufacturing



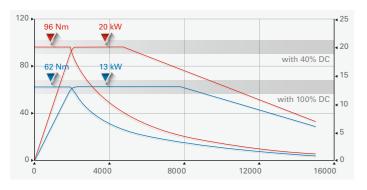


Drive No. 140

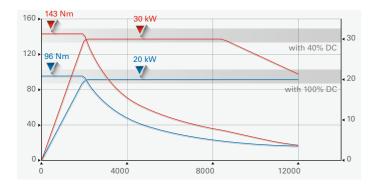
Drive No. 161

Drive No. 163

## **Diagrams – Spindle configurations**



<b>Particulars</b>	Drive No. 100
Drive type	AC-hollow shaft motor
Max. torque	96 Nm with 40% DC 62 Nm with 100% DC
Max. power	20 kW with 40% DC 13 kW with 100% DC
Breakpoint speed	2000 rpm
Optional N <sub>max</sub>	15000 rpm
Tool holding fixture	SK 40, opt. BT 40, HSK A63, C6



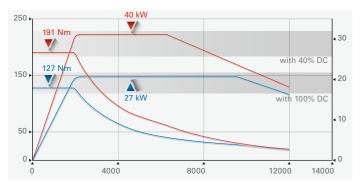
Drive type	AC-hollow shaft motor
Max. torque	143 Nm with 40% DC
	96 Nm with 100% DC
Max. power	30 kW with 40% DC
	20 kW with 100% DC
Breakpoint speed	2000 rpm
Optional N <sub>max</sub>	12000 rpm
Tool holding fixture	SK 40, opt. BT 40, HSK A63, C6

Drive No. 110

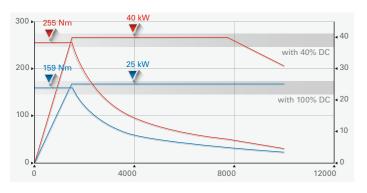
Drive No. 111

**Particulars** 

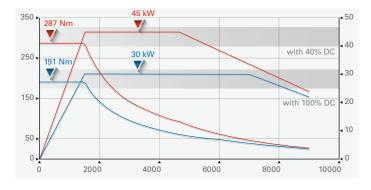
**Particulars** 



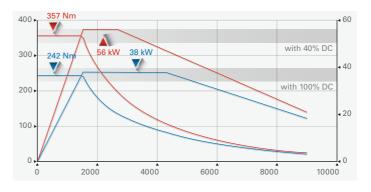
Drive type	AC-hollow shaft motor
Max. torque	191 Nm with 40% DC
	127 Nm with 100% DC
Max. power	40 kW with 40% DC
	27 kW with 100% DC
Breakpoint speed	2000 rpm
Optional N <sub>max</sub>	12000 rpm
Tool holding fixture	SK 40, opt. BT 40, HSK A63, C6

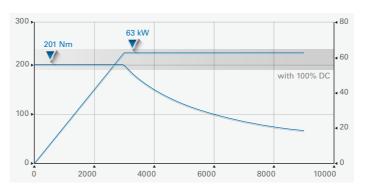


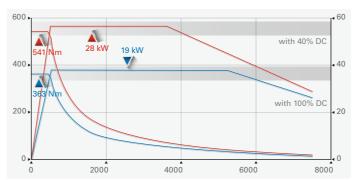
<b>Particulars</b>	Drive No. 113
Drive type	AC-hollow shaft motor
Max. torque	255 Nm with 40% DC
Max. power	159 Nm with 100% DC 40 kW with 40% DC
, , , , , , , , , , , , , , , , , , ,	25 kW with 100% DC
Breakpoint speed	1500 rpm
Optional N <sub>max</sub>	10000 rpm
Tool holding fixture	SK 40, opt. BT 40, HSK A63, C6

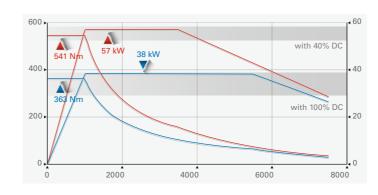


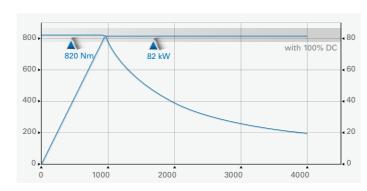
Particulars	Drive No. 131
Drive type	AC-hollow shaft motor
Max. torque	287 Nm with 40% DC
	191 Nm with 100% DC
Max. power	45 kW with 40% DC
	30 kW with 100% DC
Breakpoint speed	1500 rpm
Optional N <sub>max</sub>	9000 rpm
Tool holding fixture	SK 50, opt. BT 50, HSK A100, C8











<b>Particulars</b>	Drive No. 133
Drive type	AC-hollow shaft motor
Max. torque	357 Nm with 40% DC 242 Nm with 100% DC
Max. power	56 kW with 40% DC
Breakpoint speed	38 kW with 100% DC 1500 rpm
Optional N <sub>max</sub>	9000 rpm
Tool holding fixture	SK 50, opt. BT 50, HSK A100, C8

	I
Drive type	Synchronous hollow shaft motor
Max. torque	-
	201 Nm with 100 % DC
Max. power	-
	63 kW with 100% DC
Breakpoint speed	3000 rpm
Optional N <sub>max</sub>	9000 rpm
Tool holding fixture	SK 50, opt. BT 50, HSK A100, C8

**Particulars** 

**Particulars** 

**Particulars** 

	l
Drive type	AC-hollow shaft motor
Max. torque	541 Nm with 40% DC
	363 Nm with 100% DC
Max. power	28 kW with 40% DC
	19 kW with 100% DC
Breakpoint speed	500 rpm
Optional N <sub>max</sub>	7500 rpm
Tool holding fixture	SK 50, opt. BT 50, HSK A100, C8

Drive type	AC-hollow shaft motor
Max. torque	541 Nm with 40% DC
	363 Nm with 100% DC
Max. power	57 kW with 40% DC
	38 kW with 100% DC
Breakpoint speed	1000 rpm
Optional N <sub>max</sub>	7500 rpm
Tool holding fixture	SK 50, opt. BT 50, HSK A100, C8

Particulars	Drive No. 182
Drive type	Synchronous hollow shaft motor
Max. torque	-
	820 Nm with 100% DC
Max. power	-
	82 kW with 100% DC
Breakpoint speed	950 rpm
Optional N <sub>max</sub>	4000 rpm
Tool holding fixture	SK 50, opt. BT 50, HSK A100, C8



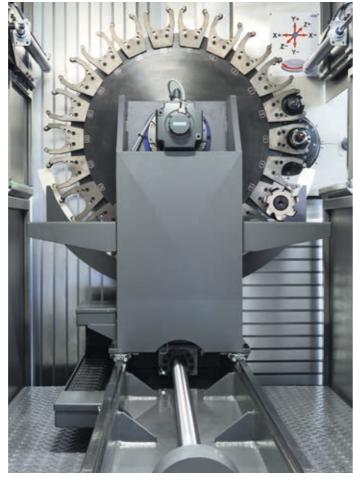
# Tool magazines and tool changing systems by AXA

The correct tool changing system is inseparably linked to the machine tool. Given the large number of different machining scenarios, it is always necessary to select the optimum tool changing system. We design and manufacture this important core component ourselves and can therefore always offer our customers the best concept for them.

Learn more about our systems:

- Disc-type magazine
- Chain magazine
- Expandable chain magazine XTS
- Pick up stations

Tool change takes place behind working area cladding

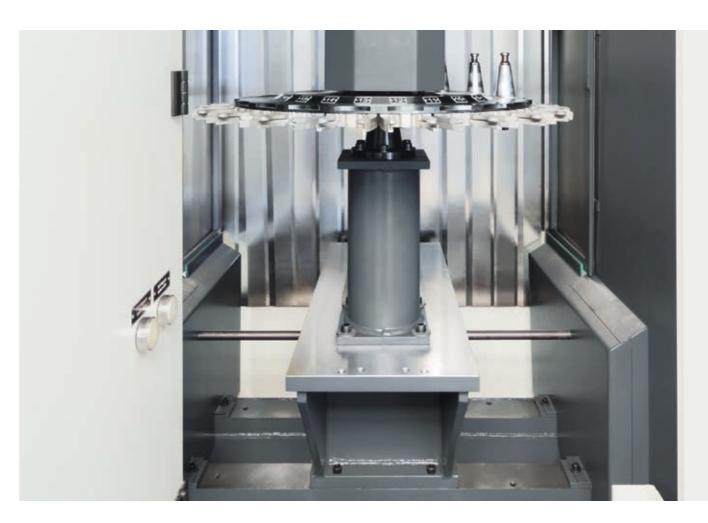


The centrally assembled disc-type magazine is accessible from both working areas –The disc-type magazine can be moved forward to exchange the tools

## Disc-type magazines as vertical and horizontal solution

### **Features**

- Fixed location coded tool management enables better monitoring for the operator
- Support of various tool holding systems such as SK, BT, HSK
- Tool magazine is protected outside of working area
- Set-up of the magazine with tools during machining possible
- Tool change takes place behind working area cladding
- Up to 30 tool pockets



Vertical disc-type magazine - Easily accessible from the front and exchange of the tools during machining possible



## Chain magazines as vertical and horizontal solution

### **Features**

- Simple and very robust stationary placed tool changer
- Magazine protected in rear part of machine
- Stationary tool magazine layout allows for long tool chains without any negative effect on machine dynamics and precision
- Fixed location coded tool management for better operator monitoring
- Tool pre-selection by double gripping system during machining
- Support of various tool holding systems such as SK, BT, HSK, CAPTO
- Set-up of the magazine with tools during machining possible





The tool magazine is protected outside of working area



Tool pre-selection during machining and short tool change time by double gripping system



## XTS: flexible expandable tool magazine

### **Features**

- Tool magazine is protected outside of working area
- Set-up of the magazine with tools during machining possible
- Tool change takes place behind working area cladding, in this case no risk of collision with the workpiece during the tool change process
- Tool changer with double gripping system from XTS magazine has its own drive and moves at up to 120 m/min to the spindle position for the tool change
- Any number of tool pockets are possible by several compact XTS towers
- Fixed location coded tool management enables better monitoring for the operator
- Tool pre-selection by double gripping system during machining
- Support of various tool holding systems such as SK, BT, HSK, CAPTO
- Tool pockets within a tower or magazine can also be expanded at any point in time in the future







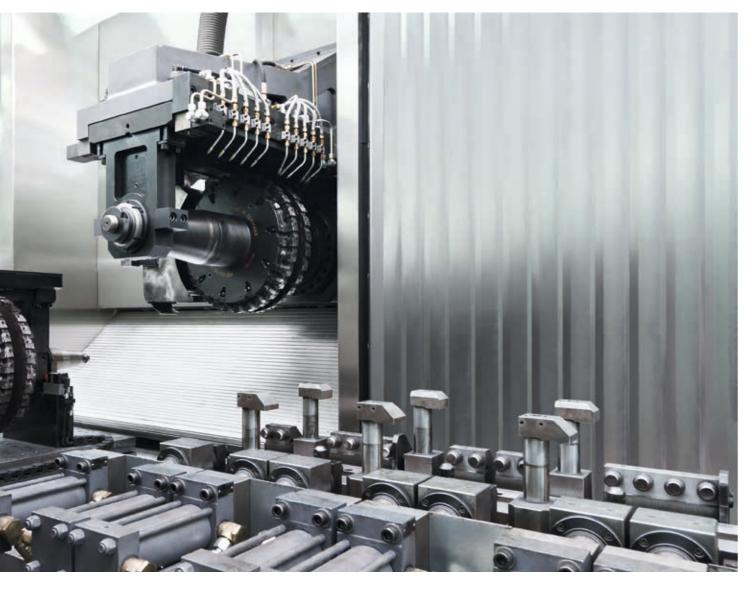
If there is more than one XTS tower then the tool magazine is loaded from the back rather than from the side



## **Pick up stations**

### **Features**

- Tool range can be flexibly and subsequently extended
- Optimal solution for special tools, angle heads or multi-spindle heads
- Pick up stations can be removed
- Fixed mounting in the working area of the machine
- Spindle changes the tool directly from the pick up magazine







Vertical pick up magazine – Firmly integrated into the working area or optionally moved out of the working area



Repositionable pick up station for additional tools, on the left for pendulum operation or on the right for long bed operation

Horizontal pick up magazine – The tools are picked up in the spindle using an SK 60 cone and stabilised by means of a counter bearing

### **Product overview**



### Gantry machining centre for 5-side-machining in mould making for large-scale workpieces

2300 - 2940 mm (vertical) X-travel: 2000 - 2640 mm (horizontal)

Y-travel: 1400 - 1600 mm Z-travel: 900 mm 27 - 56 kW





### **Gantry machining centres in compact** design with vertical spindle or swivel head for 5-side-machining

X-travel: 2360 - 3900 mm 1200 - 2940 mm Y-travel: 500 - 1100 mm Z-travel: Spindle power 20 - 63 kW





Travelling column machining centres with vertical spindle or swivel head for 5-side-, long bed and pendulum machining

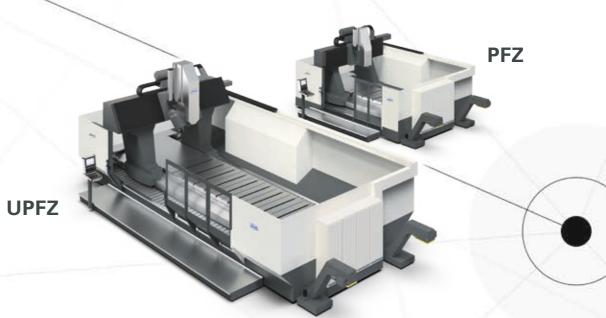
X-travel: 1200 - 12000 mm Y-travel: 500 - 1000 mm 600 - 1000 mm Z-travel: Spindle power: 20 - 81 kW



Vertical travelling column machining centres in compact design in short bed version, with pendulum machining or with swivel rotary table

X-travel: 750 - 1200 mm - 2 x 750 / 2 x 900 mm

500 - 600 mm Y-travel: 700 mm Z-travel: Spindle power: 20 - 40 kW



### Large gantry machining centres with vertical spindle or swivel head for 5-side-machining

2000 - 12000 mm X-travel: Y-travel: 1500 - 4000 mm 650 - 1200 mm Z-travel: Spindle power: 20 - 57 kW

## AXA Entwicklungs- und Maschinenbau GmbH

Post Office Box 12 60 48621 Schöppingen Münsterstraße 57 48624 Schöppingen Germany

Tel. +49 2555 87 - 0 Fax +49 2555 1496 www.axa-maschinenbau.de mail@axa-maschinenbau.de

### **AXA Subsidiary South**

Rudolf-Wanzl-Straße 9 89340 Leipheim Germany

Tel. +49 8221 20782 - 0 Fax +49 8221 20782 - 20 nl.sued@axa-maschinenbau.de

### **AXA Subsidiary East**

Auerswalder Höhe 3 09244 Lichtenau / Chemnitz Germany

Tel. +49 37208 6995 - 0 Fax +49 37208 6995 - 21 nl.ost@axa-maschinenbau.de

### AXA CNC-stroje, s.r.o.

Na Cintlovce 1580/5 26801 Hořovice Czech Republic

Tel. +420 311 516420 Fax +420 311 516410 info@axacnc.cz

