

A passion for precision

Groundbreaking products at a glance



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More than just a promise

The SCHIESS warranty of confidence is more than a mere promise. For the people behind the legendary SCHIESS quality, meeting high standards is part of their everyday routine. Generations of designers, engineers, technicians and fitters have shaped the growth of this pioneer in the manufacture of heavy-duty machines and laid the foundations for the company's strong reputation around the world. With a tradition for precision workmanship and attention to detail which has survived to the present day, each machine is adjusted and manufactured by craftsmen in Aschersleben to satisfy specific customer requirements depending on the respective field of application.

A SCHIESS machine always lies at the heart of the production process for our customers. Our machines operate accurately and reliably for decades, even under the toughest of conditions. That goes to prove what SCHIESS employees regard as their main objective and are passionate about: their responsibility for the success of their customers.

These portal turning/milling centers in table and gantry design are among the largest and most innovative machine tools in the world.

VERTIMASTER 3 - 12

Due to their modular design and flexible system configuration, these machines can be adapted by SCHIESS experts to meet customer requirements with optimum economy. Any combination of manufacturing processes such as turning, drilling and milling can be realized. With the addition of the relevant accessories, grinding and boring can also be performed by our turning and milling centers. The VERTIMASTER series is equipped with the most up-to-date drive and control engineering for the highest possible precision and optimal performance.



Your benefits:

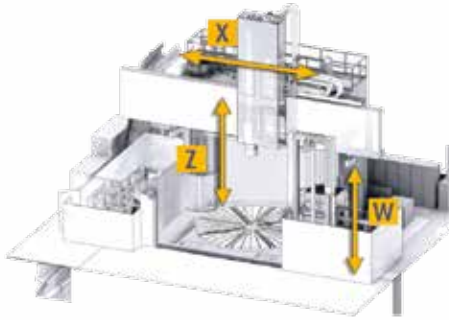
- ⊗ Modular construction, therefore optimum adaptation to all machining tasks
- ⊗ Frame assemblies of high-quality castings with excellent properties for vibration damping
- ⊗ Wear-free, hydrostatic guides for long term precision
- ⊗ Rams with Masterhead-System, technology-oriented and flexible for all customer requirements
- ⊗ Highest drive performance and maximum torque

Steam turbine housing



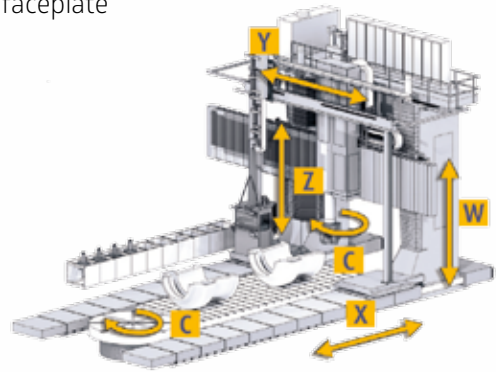
VT

Vertical turning lathe



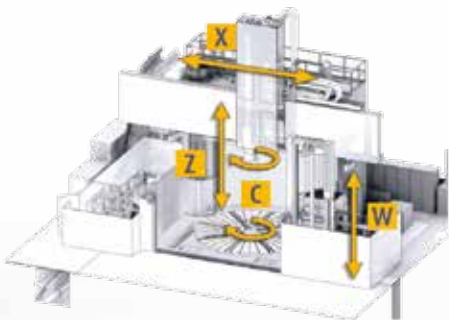
VMG

Gantry-type portal milling machine
also with faceplate



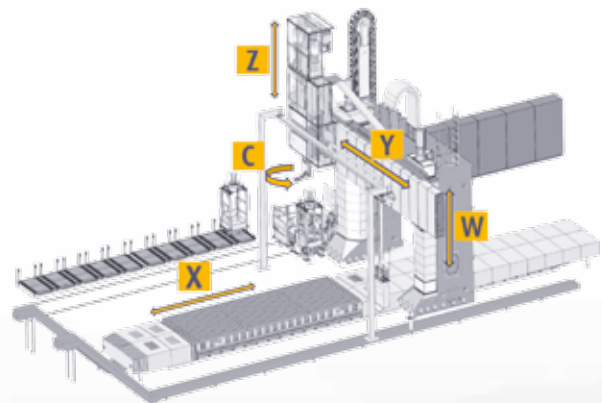
VM

Vertical turning and boring mill
with boring and milling drive



VMT

Table-type portal milling machine
in single or double table design



VERTIMASTER		VT	VM	VMG	VMT
Table width/dia. of faceplate	mm	3,000 - 12,000	3,000 - 12,000	3,000 - 12,000	2,500 - 3,000
Max. machining height, max.	mm	10,000	10,000	10,000	5,000
Travel of portal/table	mm	-	-	on request	on request
Ram stroke	mm	1,400 - 4,000	1,400 - 4,000	1,400 - 4,000	1,400 - 2,500
Drive power ram	kW	-	52 - 100	52 - 100	52 - 100
Drive power faceplate, max.	kW	500	500	500	-

This vertical turning and boring mill increases productivity and quality of output through the integration of various technologies

VERTIMASTER VME

The multifunctional single column vertical turning lathe VME is based on the know-how gained with the VERTIMASTER series. Technological processes such as turning, drilling and milling can be carried out in just one set-up, which is particularly important when it comes to complex rotation-symmetrical workpieces with especially large dimensions. The machine is individually adapted to the customer's requirements through a modular system configuration. It is even possible to make modifications and adjustments at a later date if the machine is to perform different tasks.



Your benefits:

- ⊗ Modular construction, for all machine modules
- ⊗ Open working area for maximum workpiece diameter
- ⊗ All machine axes fully hydrostatically and usable as NC axes
- ⊗ Extremely variable because of further working area with floor plate or second faceplate configurable

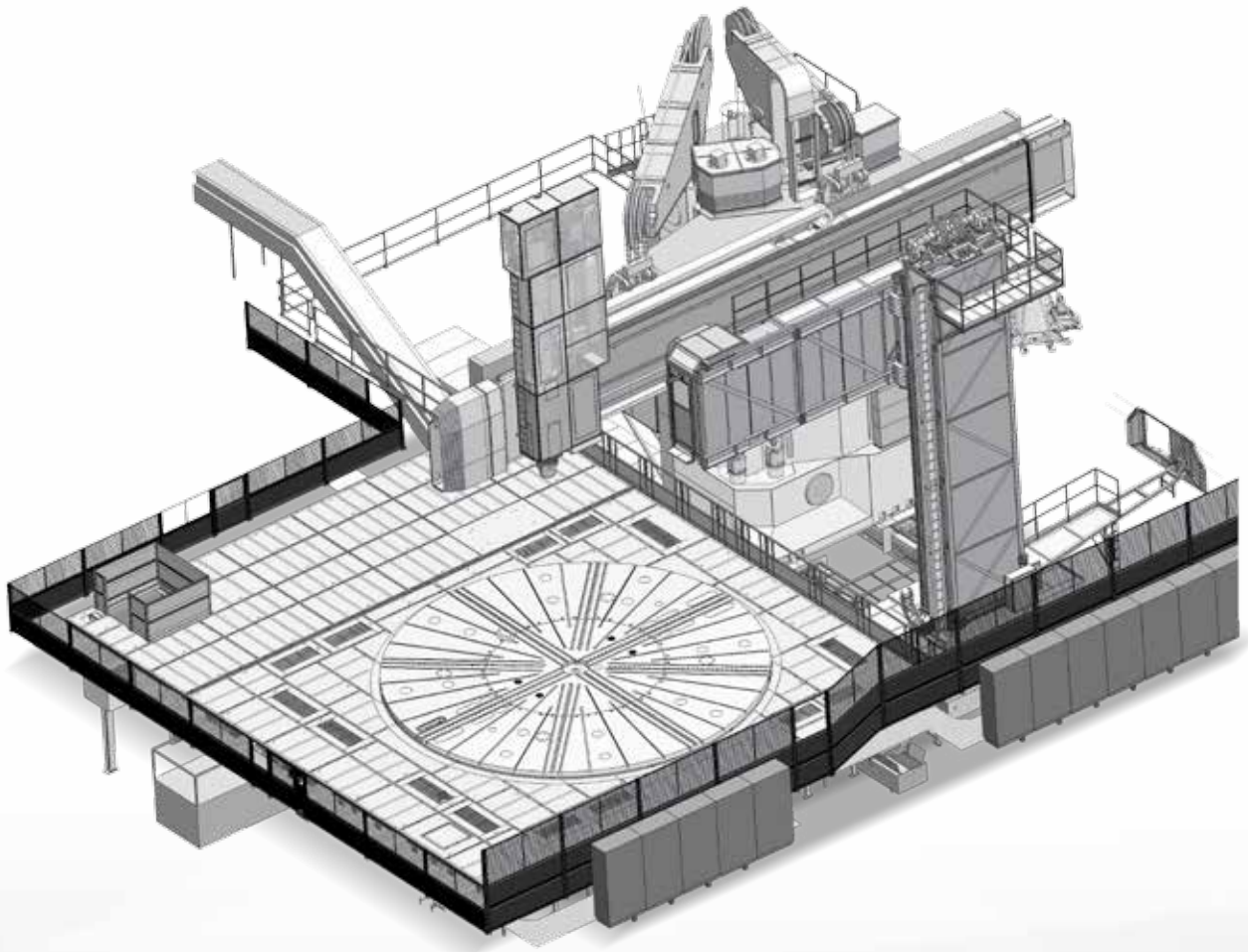
Grinding bowl



© Stempelkamp

VME

Single column vertical turning
and boring mill



VERTIMASTER		VME
Ø Faceplate	mm	8,000 - 12,000
Turning diameter, max.	mm	20,000
Load of faceplate, max.	t	500
Ram stroke, max.	mm	4,000
Drive power ram	kW	100

This horizontal travelling column machine is notable for its high dynamics, precision and efficiency

HORIMASTER

The HORIMASTER combines high dynamics with the greatest precision. A modular guiding system of identical components is used for all linear axes. The hydrostatically guided ram is equipped with integrated drives. The continuously positionable C-axis, integrated in the ram, can also be used as a feed axis. The tried and tested Masterhead-System is sufficiently flexible to allow all of the machining units to be changed for technical reasons while in fully automatic mode.



Your benefits:

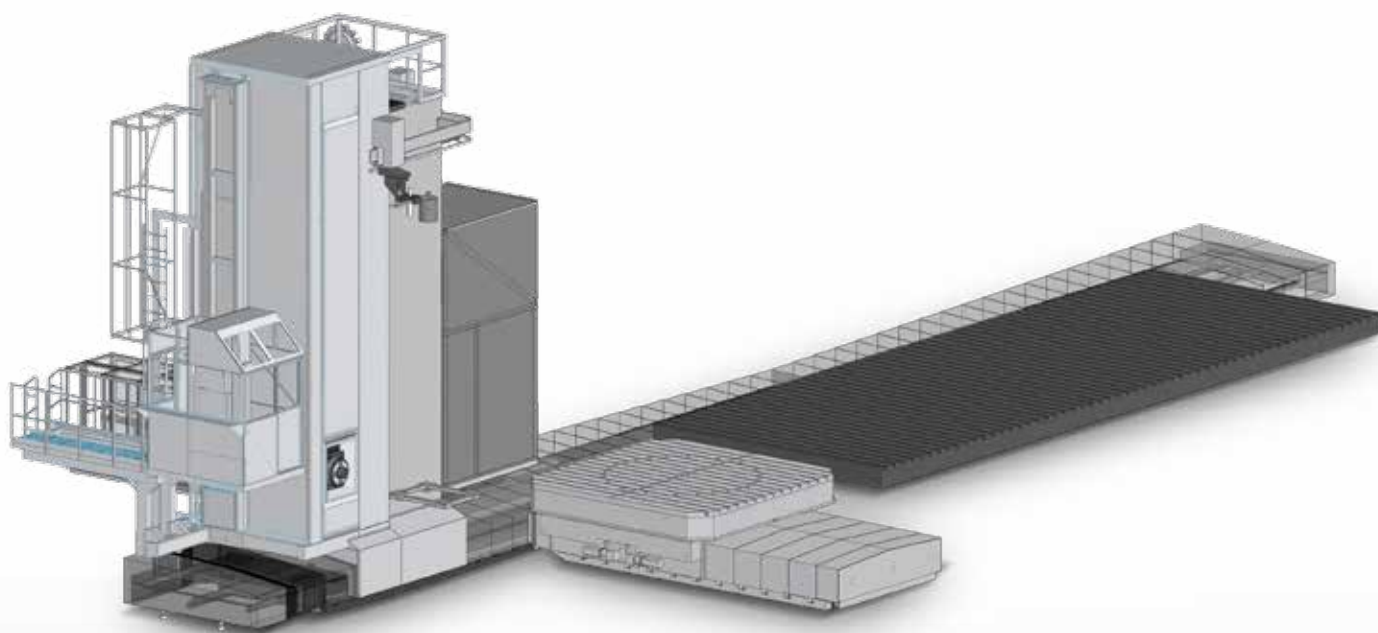
- ✔ Modular design
- ✔ Extreme rigidity of the basic machine
- ✔ Ram with Masterhead-System
- ✔ Hydrostatic guideways
- ✔ Automatic attachment and tool changer
- ✔ Pallet changing system, optional

Gear box



HM

Horizontal boring and milling machine
with travelling column



HORIMASTER		HM 3	HM 5
Ram profile	mm	420 x 340	Ø 560
Drive power boring- and milling drive	kW	52	100
Speeds	rpm	3,150	2,500
Ram stroke, max.	mm	1,800	3,000

These portal milling machines in a table design are remarkable for their precision, efficiency and ease of operation and servicing

ASCAMILL

Efficiency, precision, and ease of operation and servicing characterize this new generation of table-type portal milling machines. The machine bed, machining table, column, connection part and cross rail are high-quality cast products. The cross rail is infinitely adjustable. The new table design has been designed on the basis of bionics and has a special honeycomb structure. This makes it inherently extremely stable, while at the same time reducing its weight.

Your benefits:

- ✔ Designed as modular system
- ✔ Gearless boring- and milling drive by torque motor
- ✔ All axes are centrally lubricated linear guide systems
- ✔ Most modern, energy-efficient servo drives
- ✔ Easy programming with Sinumerik 840D sl
- ✔ Easy and quick installation without special foundation required
- ✔ Direct measuring systems in all axes
- ✔ Masterhead-System

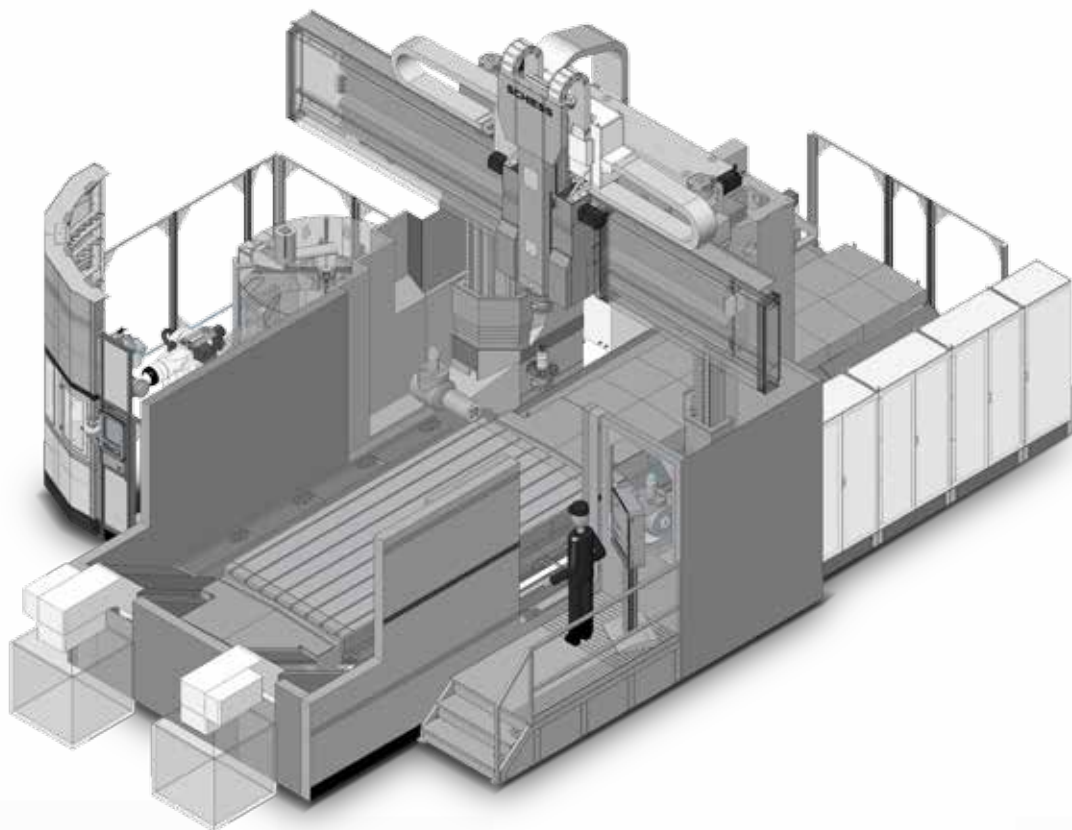


Cast iron housing



ASCAMILL

Table-type portal milling machine



ASCAMILL		T 2040 T 2060	T 2550 T 2560	T 3060 T 3080
Table size, W x L	mm	2,000 x 4,000 2,000 x 6,000	2,500 x 5,000 2,500 x 6,000	3,000 x 6,000 3,000 x 8,000
Table load, max.	t	20 / 25	25 / 30	30 / 40
Passage height	mm	2,000 / 2,500	2,000 / 2,500	2,000 / 2,500
Travel Z-axis (optional)	mm	1,100 (1,500)	1,100 (1,500)	1,100 (1,500)
Spindle speed (optional), max.	rpm	4,000 (6,000)	4,000 (6,000)	4,000 (6,000)
Torque, max.	Nm	1,000	1,000	1,000

These vertical turning/milling centers save time, as turning, drilling and milling operations are executed in a single set-up for workpieces weights up to 16 tons

ASCATURN

The high-performance ASCATURN series combines machining processes such as turning, drilling and milling in one set-up. This saves time and guarantees the precise and effective machining of workpieces with diameters of up to 2.5 m and weights of up to 16 tons. Together with an automatic head and tool changer, the ASCATURN can be adapted quickly to suit different production requirements.

Your benefits:

- ✔ No special foundation required
- ✔ Automated head- and toolchange
- ✔ Masterhead-System
- ✔ Traversable faceplate (Y-axis), optional
- ✔ Direct measuring systems
- ✔ Easy programming with Sinumerik 840D sl
- ✔ Safety Integrated for turning- and milling mode

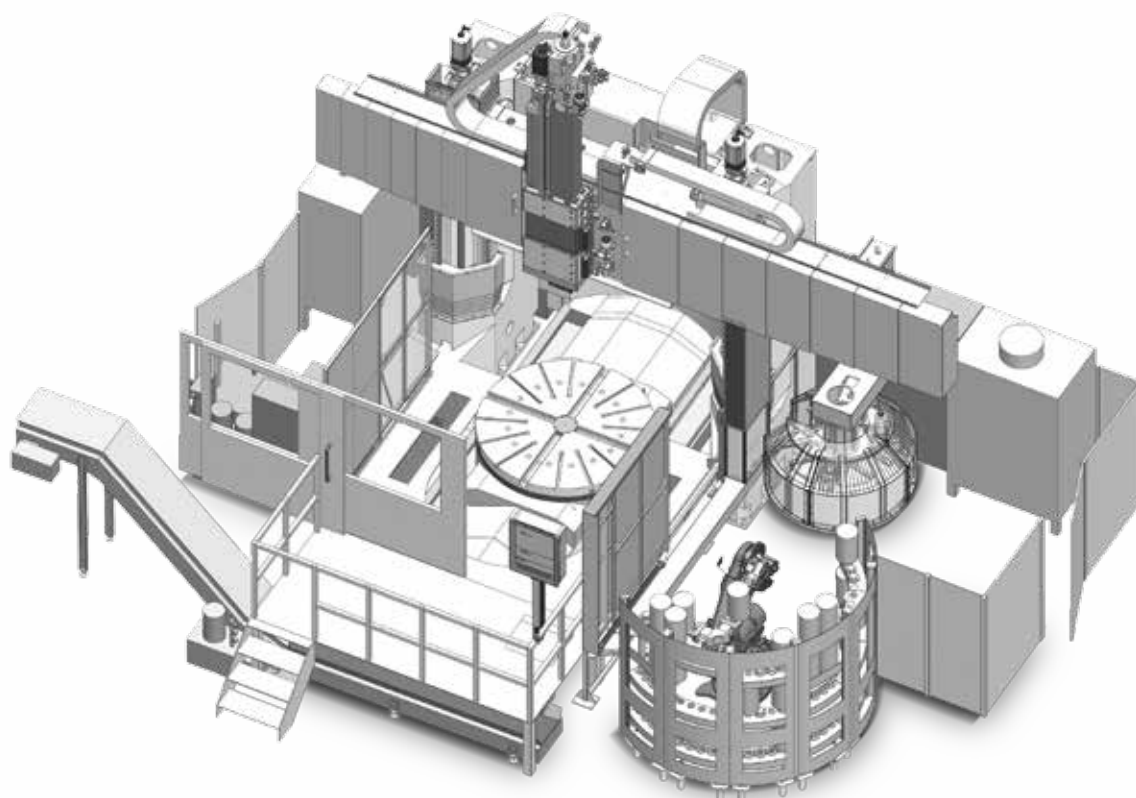


Gear ring



ASCATURN

Vertical turning/milling center



ASCATURN		V1*	V2*	V3*
		Single column design	Single column design	Double column design
Turning diameter	mm	1,600	2,000	2,500
Passage width	mm	-	-	2,700
Workpiece height, max.	mm	1,200	1,300	2,000
Workpiece weight, max.	kg	8,000	12,000	16,000
Travel Z-axis	mm	1,200	1,200	1,400
Travel W-axis	mm	-	700	1,200
Travel X-axis (-/+)	mm	2,550 / 650	2,750 / 850	3,000 / 1,550
Travel Y-axis (-/+)	mm	-	-	1,000 / 1,000

*Boring and milling drive, optional, 46 kW; 3,500 rpm; 1,200 Nm

Efficient and high-precision boring mills with a modular design and an attractive price/performance ratio

ASCARAPID

SCHIESS is taking its longstanding success as a manufacturer of efficient and high-precision boring mills to the next level with the ASCARAPID series of boring mills. The modular design of the ASCARAPID series offers every user an attractive price/performance ratio for a large number of applications. Whether using powerful rough cutting techniques or achieving an accurate finish: the ASCARAPID machine is always a good and reliable choice!

Your benefits:

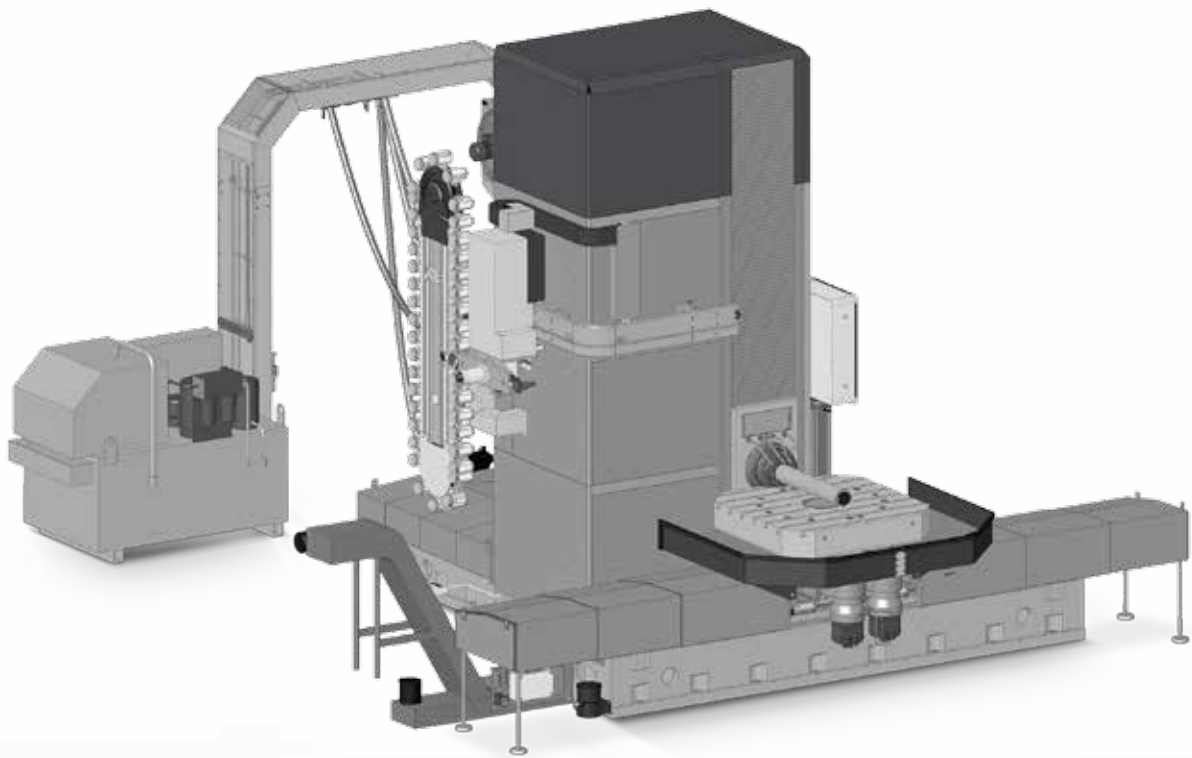
- ✔ Maximum stability and long term accuracy
- ✔ Adapts flexibly to specific manufacturing tasks
- ✔ Absolute precision and repeat accuracy by virtue of its direct measuring systems
- ✔ Energy-efficient servo drives for dynamic positioning and low operating costs





ASCARAPID

Table-type boring mill for powerful heavy cutting or highly accurate finishing



ASCARAPID		P 130	P 160
Spindle diameter	mm	130	155
Power	kW	41	51
Torque	Nm	2,500	3,200
Speed	rpm	3,500	3,000
Table size, W x L	mm	1,400 x 1,600	1,600 x 1,800
		1,600 x 1,800	1,800 x 2,000
		1,800 x 2,000	2,000 x 2,500
Table load	t	12 / 16 / 20	16 / 20 / 40

SCHIESS

EXCELLENCE IN XXL-MACHINING



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