

emco group

Designed for your profit



Various duties efficiently solved EMCOMAT E-360 E-400

Cycle-controlled lathes with high-powered
cutting performance and maximum precision

TURNING
EMCO-WORLD.COM

EMCOMAT

1 HEADSTOCK

- Dynamic, powerful main spindle
- Modern Siemens drive system
- Camlock spindle nose with a large passage
- Pneumatic brake
- Swivelling C axis
- Two-speed gearbox for high torque

2 LARGE PROTECTION DOORS]

- Protection against chips
- Easy access to the work area
- Retractable C-axis
- Two step-gearbox for high torques

3 MACHINE BED

- Solid cast-iron bed
- Strong rib
- Guides are hardened and smoothed

4 TOOL SYSTEM

- Various manual and automatic tool systems
- Stable and compact design mounted on the compound slide rest
- Both fixed and driven tools are possible



E-360, E-400

You will find the right machine for your production needs in our EMCOMAT E-series, which offers a selection of distances between centers ranging from 2000 to 6000 mm. Even the most difficult machining tasks become child's play. Thanks to solid machine construction and components of the highest quality and stability. ZF drive, Siemens drive systems and backlash-free circulating-ball spindles assure optimal quiet running and high precision, even for heavy-duty metal cutting.



- 5 TAILSTOCK**
- Stable construction
 - MK 6
 - Quill diameter 120 mm

- 6 CONTROL UNIT**
- Siemens 840D sl or Fagor 8055i Power TC
 - 11,4"-LCD monitor
 - Electr. handwheels Z/X
 - USB- and Ethernet-interface

- 7 SLIDE DRIVES**
- Large smooth circulating ball spindle
 - Simodrive 611 unit

Picture shows E-360 with optional equipment



Siemens control "Sinumerik 840Dsi - Shop Turn - Manual Machine" (including the original Siemens cycles and functions) and the Siemens "SINAMICS S120" digital drive system. The powerful Sinumerik 840D sl CNC system for demanding solutions is efficient in terms of programming, installation, commissioning, and design technology, and innovative in terms of NC functionality, communication, operation, and openness.

Highlights

- Advanced control technology
- Digital drive technology
- Electronic handwheels for the X-Z axis
- USB and Ethernet interface for easy network connection
- User-friendly interface for simple to complex programs
- Electrical documentation with E-Plan software

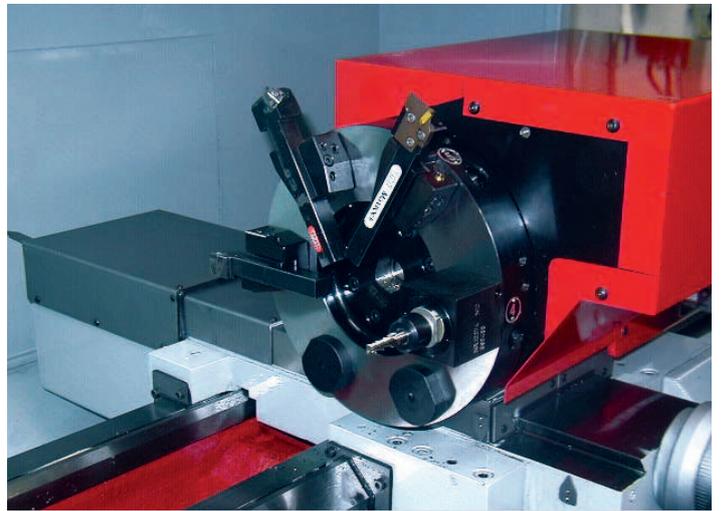
EMCOMAT E-360 E-400
Technical



The development and design of the CNC 8055 POWER targets both operators without extensive programming skills, as well as programming specialists with extensive knowledge of ISO code. The Fagor supports dialogue programming for very simple, intuitive input with the help of defined cycles. Intuitive access keys quickly provide links to variable cycles and functions. Each individual function and each cycle can be accessed via its own access key.



Tailstock quill. For fast machining the hydraulic tailstock quill can be easily inserted and removed by means of an M command.

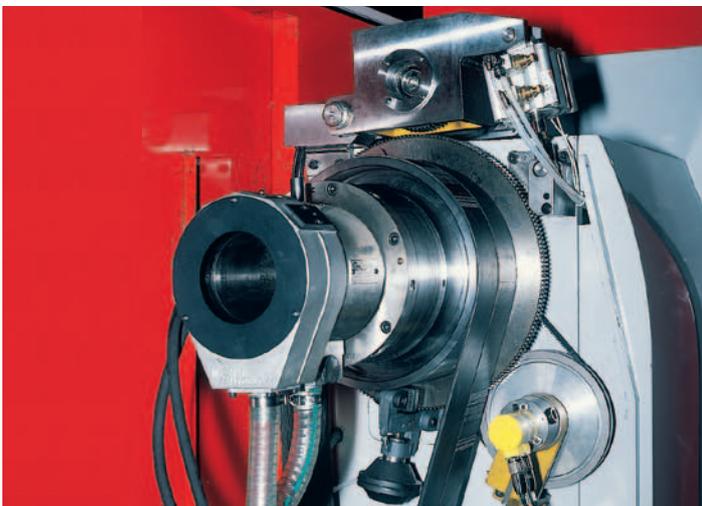


Tool turret. A multitude of types and dimensions for efficient production are available for tool turrets and driven tools.

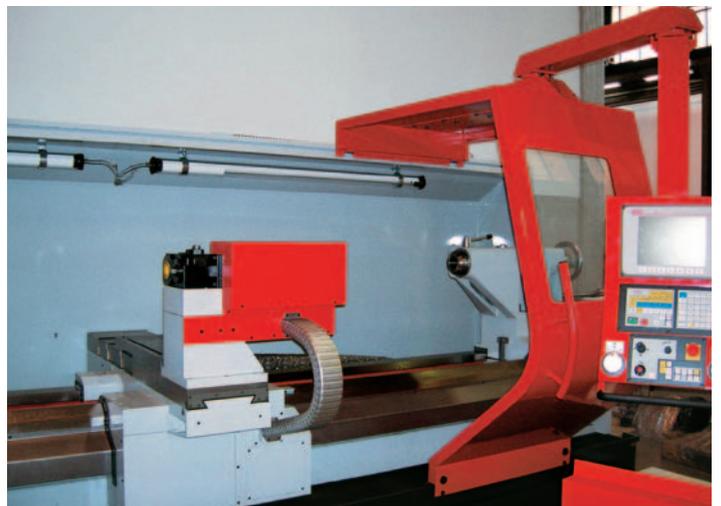
Highlights

Options

A variety of options and accessories are available for individual equipment. An extensive range of tool holders, various bed lengths, automatic quills, chip conveyors, quills, and much more.



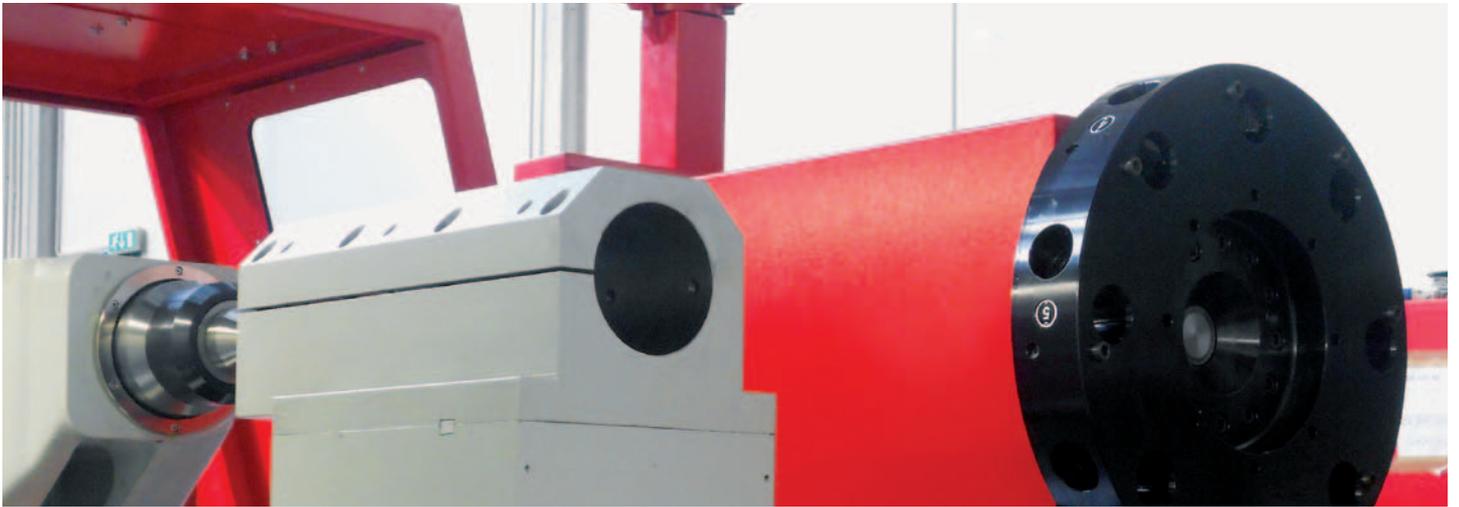
Clamping cylinder. The hydraulic clamping cylinder and the swivel C axis with braking system allow for full CNC operation.



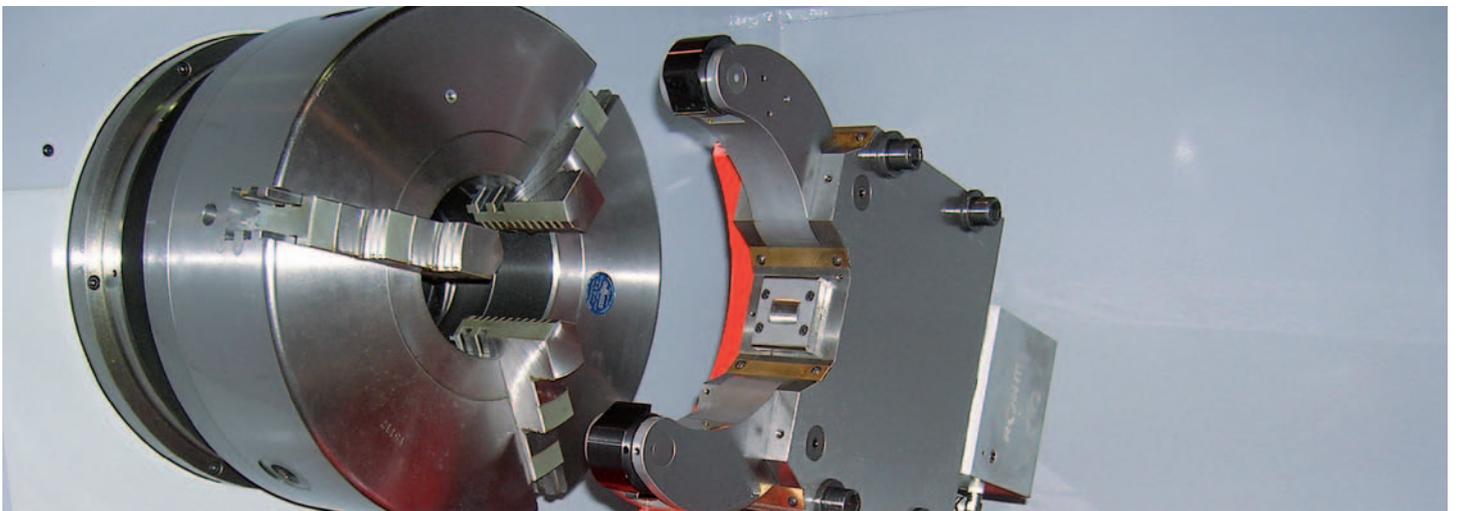
CAPTO tool holder. With its fast and precise alternating system, the CAPTO tool holder offers more stability and higher repeat accuracy during machining.

Areas of application]

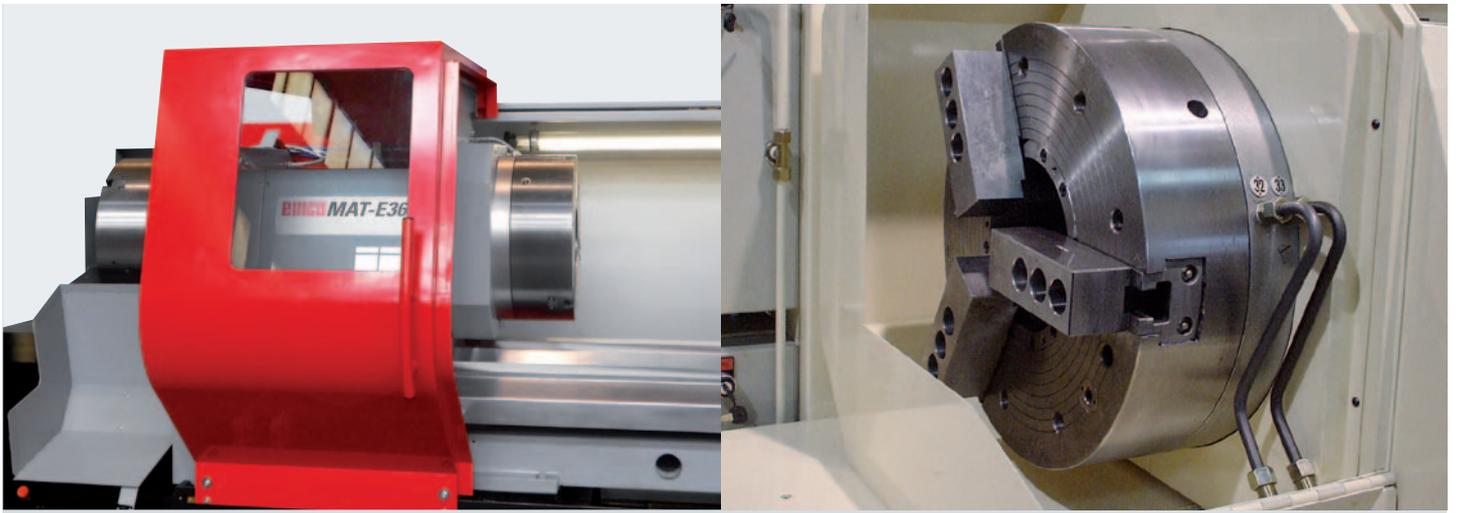
- Hydraulic/pneumatic components
- Motors and vehicle parts
- Mechanical engineering components
- Plain and roller bearing parts
- Conveying technology
- Fastening technology
- And other fields of application



Drill rod holder. The removable drill rod holder allows complex machining operations to be completed without separate chucking.



Hydraulic steady rest (E-360-400). The hydraulic steady rest and the large tip width make the EMCOMAT machines ideal for machining of rollers and cylinders.

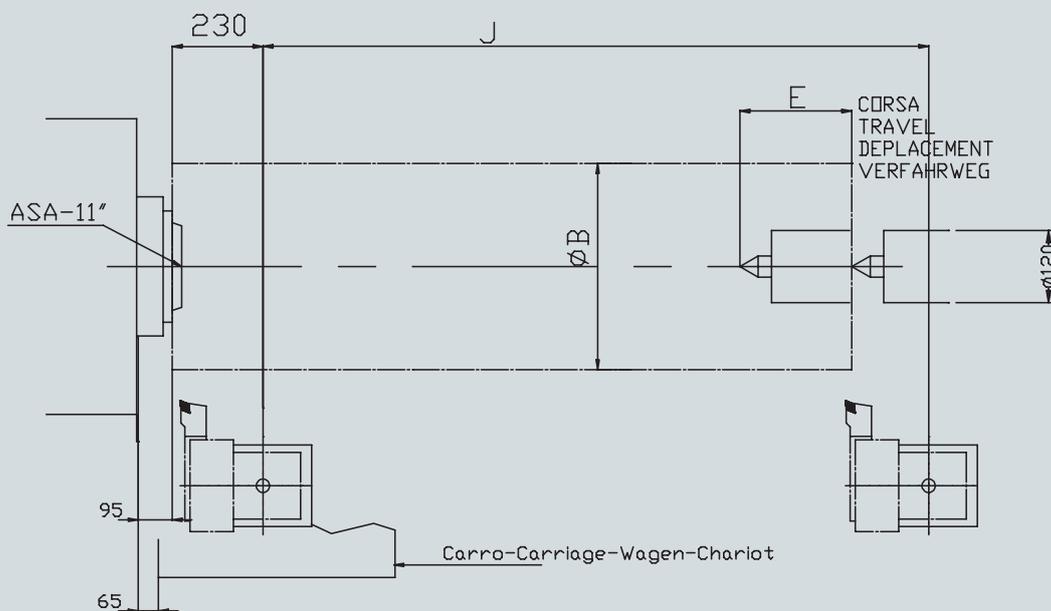
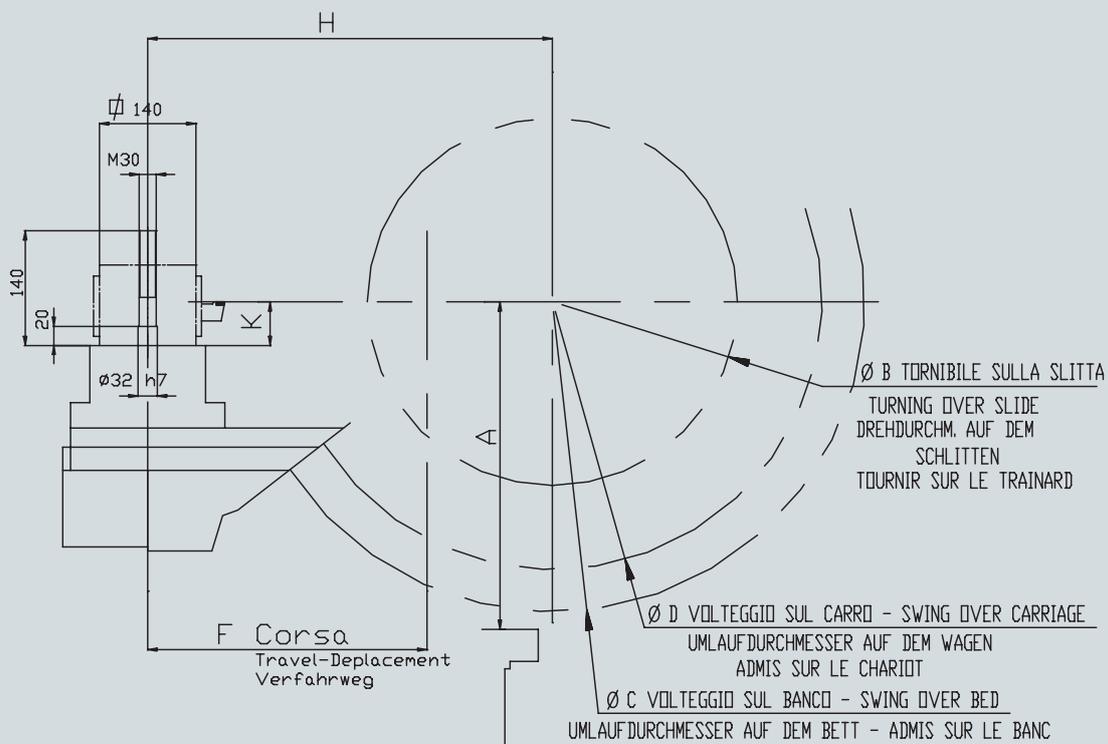


Double clamping devices. The large passage, measuring up to 205 mm (ASA-2/15"), and the use of a double-chuck that can be operated either manually or pneumatically, guarantee optimum processing of tubes, cylinders, and sleeves.



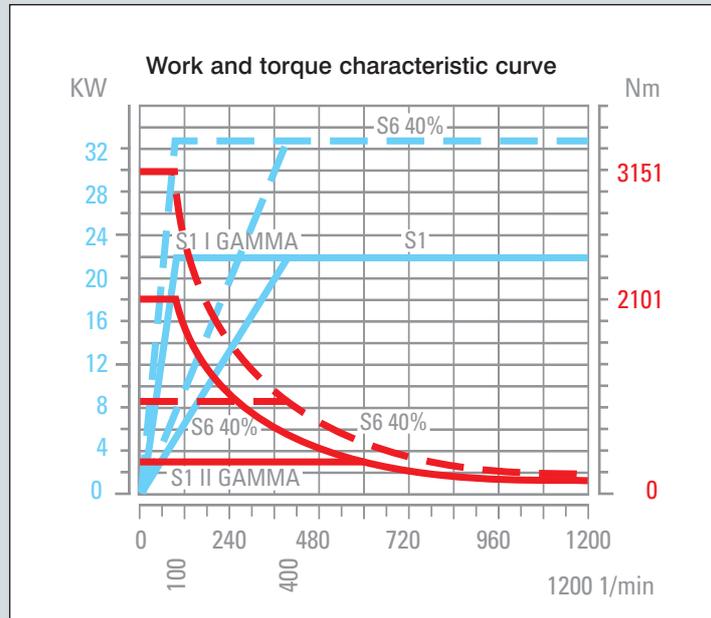
Complete concept, with Siemens 840D sl, 2-4-6-meter bed length and the chip conveyor which allows longer times in automatic mode, a higher coolant pressure and the detection of larger quantities of chips, the Emcomat machines is an all-rounder and versatil

Work area E-360, E-400

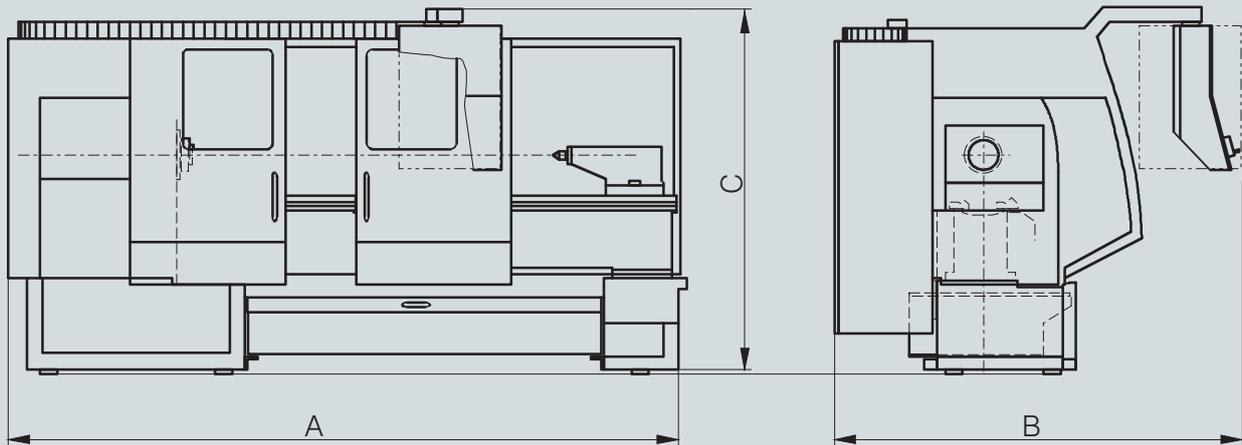


MOD.	A	B ^{±1}	C	D	E	F	J	H	K
360	380	480	810	700	220	520	1580-2080-3080	520	60
400	430	560	900	800			4080-5080-6080		

Main spindle performance diagram E-360, E-400



Floor plan EMCOMAT E-360, E-400



distance between centers		1500 mm	2000 mm	3000 mm	4000 mm	5000 mm	6000 mm
EMCOMAT - E 360	A		5 060 mm		7060 mm		9060 mm
	B	-	2 470 mm	-	2 470 mm	-	2 470 mm
	C		2 070 mm		2 070 mm		2 070 mm
EMCOMAT - E 400	A		5 060 mm		7060 mm		9060 mm
	B	-	2 470 mm	-	2 470 mm	-	2 470 mm
	C		2 070 mm		2 070 mm		2 070 mm

chip conveyor always A + 1200 mm

Detail in millimeters

EMCOMAT E-360 E-400

Technical Data

Work area	EMCOMAT E-360	EMCOMAT E-400
Distance between centers	2000 – 4000 – 6000 mm (59.1 – 236.2")	2000 – 4000 – 6000 mm (59.1 – 236.2")
Swing	380 mm (14.9")	430 mm (16.9")
Swing over bed	Ø 810 mm (31.9")	Ø 900 mm (35.4")
Swing over slide	Ø 480 mm (18.9")	Ø 580 mm (22.8")
Bed width, hardened HRC 50	500 mm (19.7")	500 mm (19.7")
Travel in Z	2000 – 4000 – 6000 mm (59.1 – 236.2")	2000 – 4000 – 6000 mm (59.1 – 236.2")
Travel in X	520 mm (20.5")	520 mm (20.5")
Feed power X max.	1900 daN	1900 daN
Feed power Z max.	1900 daN	1900 daN
Rapid motion speed in X / Z	5 (8*) m/min (197 (315*) ipm)	5 (8*) m/min (197 (315*) ipm)
Cross-slide width	286 mm (11.3")	286 mm (11.3")
Lathe tool cross-section	32 x 32 (40 x 40) (1.3 x 1.3") (1.6 x 1.6")	32 x 32 (40 x 40) (1.3 x 1.3") (1.6 x 1.6")

Moving spindle

Spindle nose DIN 55029 Camlock	11	11
Spindle bore	Ø 153 (205) mm (6.0" (8.1"))	Ø 153 (205) mm (6.0" (8.1"))
Spindle front bearing (inside diameter)	Ø 235 mm (9.3")	Ø 235 mm (9.3")
Faceplate diameter (max.)	Ø 800 mm (31.5")	Ø 800 mm (31.5")
Maximum chuck diameter	Ø 500 mm (19.7")	Ø 500 mm (19.7")
Spindle rotational speed	0 – 1200 rpm	0 – 1200 rpm
Speed control	stepless	stepless
Mechanical speed levels	2	2

Drive motor

AC motor	infinitely variable	infinitely variable
Performance at 40/100% duty cycle	33 / 22 kW (44.3 / 29.5 hp)	33 / 22 kW (44.3 / 29.5 hp)
Max. torque at the main spindle	3151 / 2101 Nm	3151 / 2101 Nm

Tailstock

Quill diameter	Ø 120 mm (4.7")	Ø 120 mm (4.7")
Inner quill taper	MK 6	MK 6
Quill travel	220 mm (8.7")	220 mm (8.7")

Power supply

Electricity supply	400 V/3~/PE	400 V/3~/PE
Frequency	50/60 Hz	50/60 Hz
Connected load	39 kVA	39 kVA

Dimensions

Machine length	Sp.W. + 3060 mm (120.5")	Sp.W. + 3060 mm (120.5")
Machine width	2470 mm (97.2")	2470 mm (97.2")
Machine height	2070 mm (81.5")	2070 mm (81.5")
Total weight	8100 – 10500 kg	8300 – 10700 kg