

emco group

Designed for your profit

[E[M]CONOMY]
means:

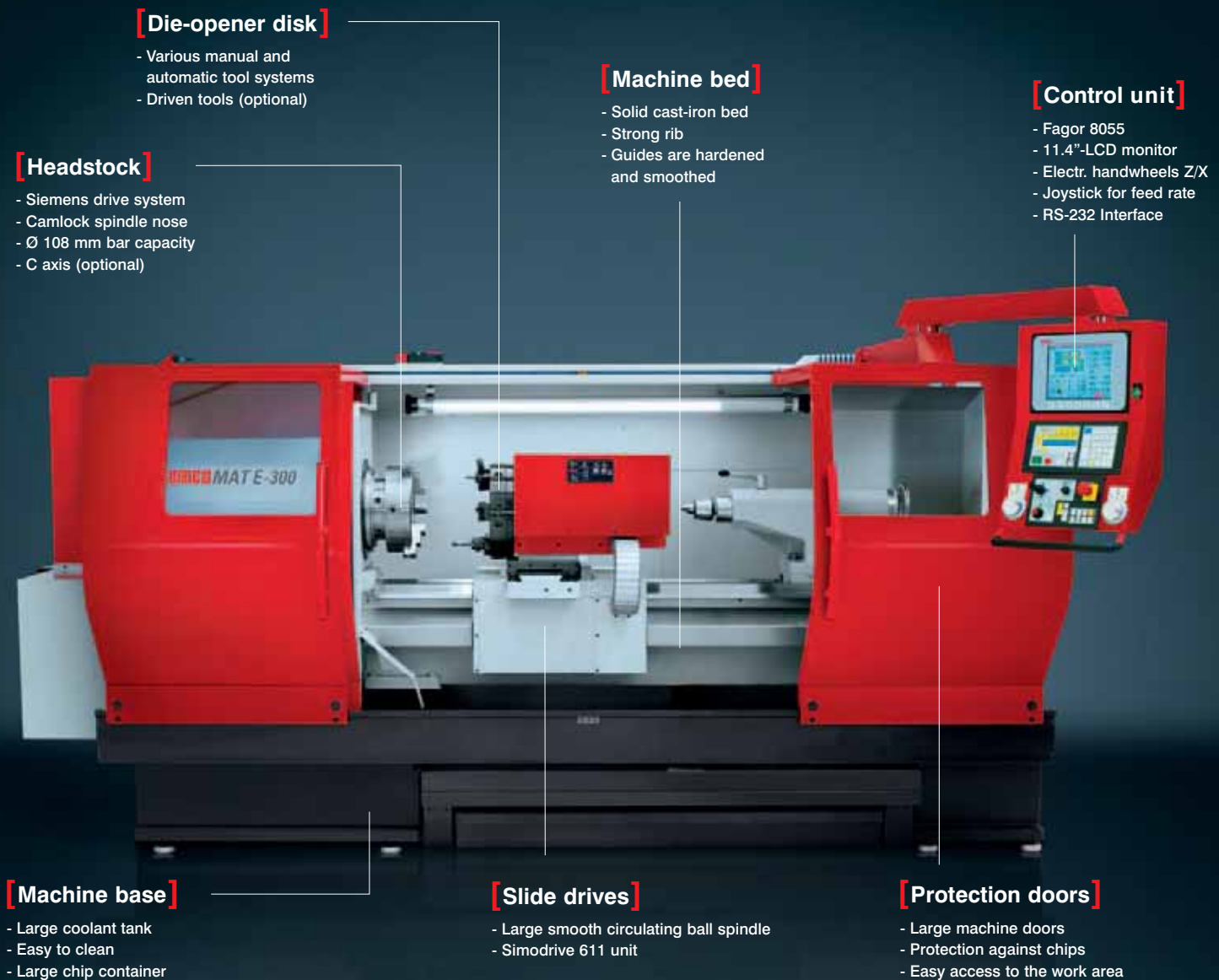


Two in one.

EMCOMAT E-300 E-360 E-400 E-480

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

EMCOMAT E-300



Picture shows machine fitted with optional equipment

Whether used for production, equipment, tool or mold construction, sample or prototype manufacturing, or repair and maintenance work the EMCOMAT E-series is centered around your needs. The machine's intelligent centerpiece is the Fagor 8055. Its perfect interaction with the AC drives provides a simple approach to the most difficult machining tasks, thereby ensuring a significant reduction in production times and an increase in manufacturing quality.

[Engineering]

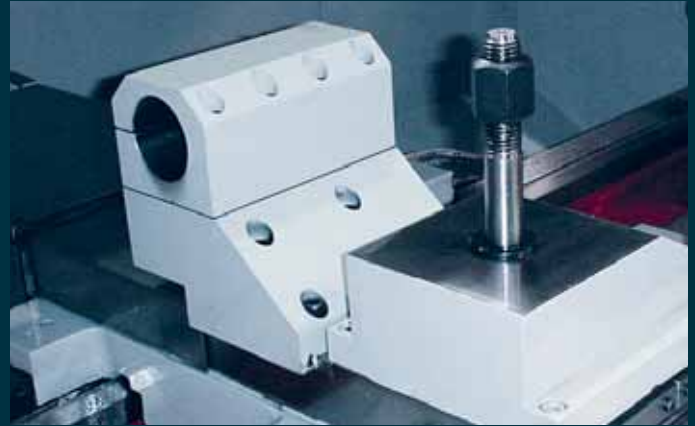
Areas of application E-300

- Hydraulic/pneumatic components
- Motors and vehicle parts
- Machine components
- Friction and roller bearing parts
- Materials handling equipment
- Fastening technology
- And even more areas of application



Workspace.

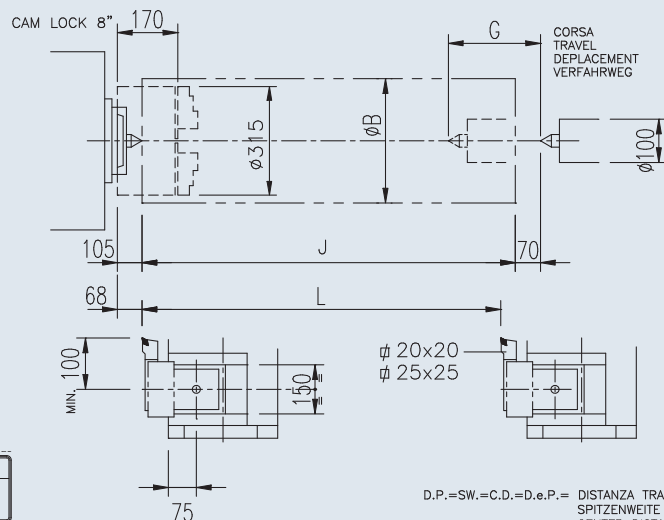
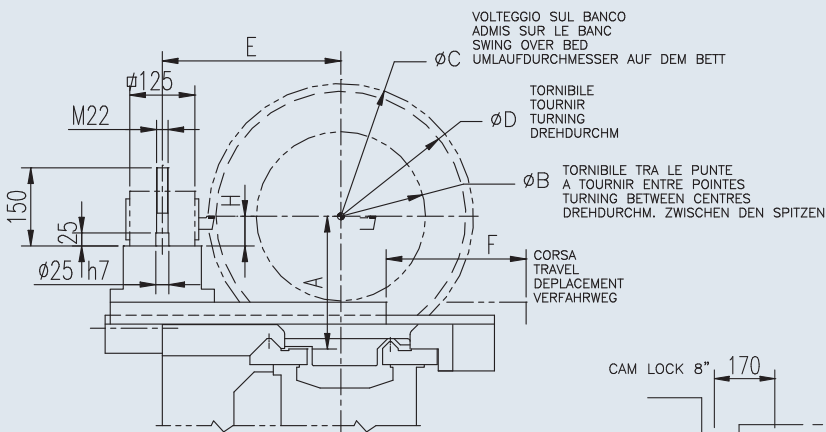
The large protection door and the swivel-mounted control panel provide the user with the perfect conditions for working efficiently without fatigue.



Tool slide with boring bar holder.

The boring bar holder is available for various bar diameters. It is suitable for internal machining and offers more stability in the process.

Work area



D.P.=SW.=C.D.=D.e.P.= DISTANZA TRA LE PUNTE
SPITZENWEITE
CENTER DISTANCE
DISTANCE ENTRE POINTES

MOD.	A	B	C	D	E	F	G	H	J	L
300	275	340	570	480	340	320	220	50	D.P.	D.P.

EMCOMAT E-360 E-400 E-480

[Protection doors]

- Large machine doors
- Protection against chips
- Easy access to the work area

[Headstock]

- Siemens drive system
- Camlock spindle nose
- C axis (option)

[Tool holder]

- Various manual and automatic tool systems
- Driven tools (option)

[Machine base]

- Large coolant tank
- Easy to clean
- Large chip container

[Slide drives]

- Large smooth circulating ball spindle
- Simodrive 611 drive unit

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 1000 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.

[Workpieces]

[Tailstock]

- Stable construction
- MK 6
- Quill diameter 120 mm
- Included in the standard equipment



[Control]

- Fagor 8055
- 11.4"-LCD monitor
- Electr. handwheels Z/X
- Joystick for feed rate
- RS-232 Interface

[Machine bed]

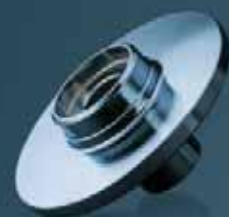
- Solid cast-iron bed
- Strong rib
- Guides are hardened and smoothed



Connecting sleeve
(Steel)



Drive shaft
(Steel)



Flange
(Steel)

[Engineering]

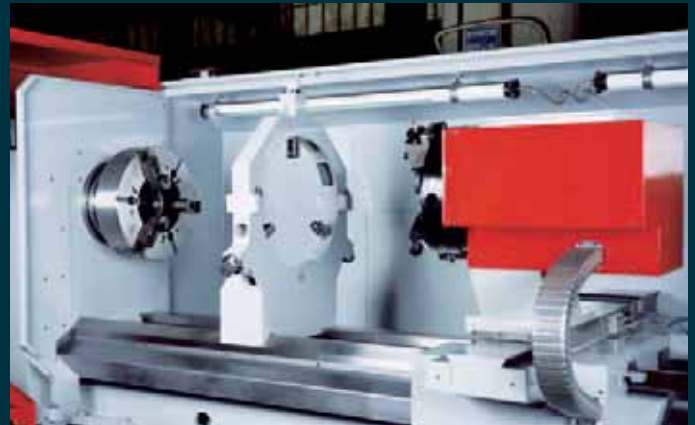
Scope of delivery

- Enclosure of the work area with slideable chip protection doors
- Coolant system
- Central lubrication of the guides and the circulating ball spindles
- Operator's toolset
- Operating instructions and spare parts list
- Electronic handwheels for X and Z axis
- Electrical documentation
- Machine lamp



Manual clamping equipment.

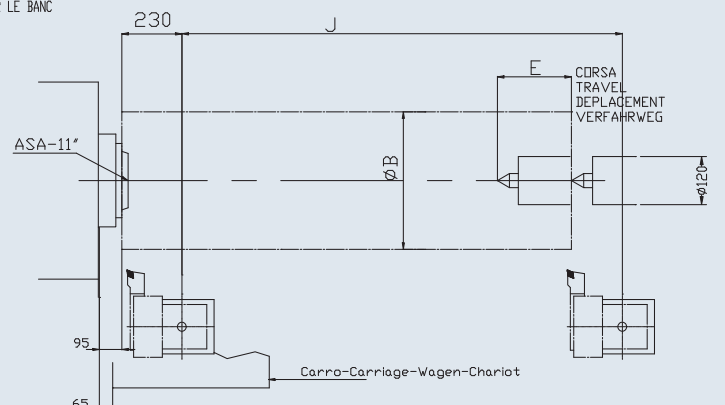
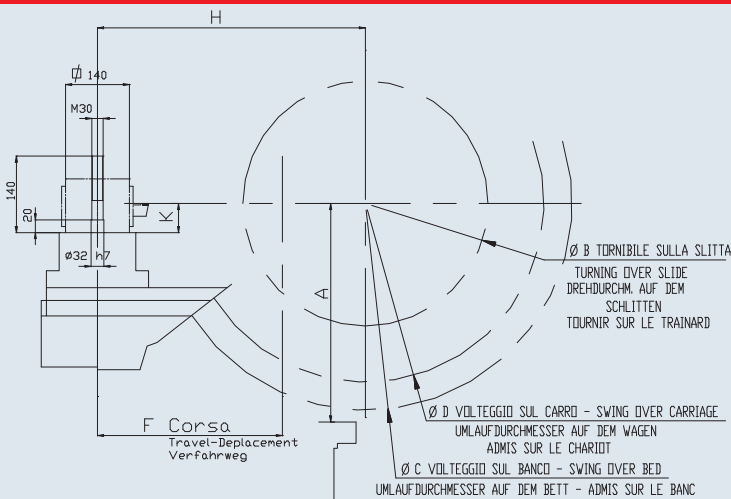
Clamping equipment can be mounted in various sizes;
DIN 5509 Camlock



Work area.

Work area with manual clamping, closed steady rest and tool turret

Work area



MOD.	A	B \varnothing	C	D	E	F	J	H	K
360	380	480	810	700					
400	430	560	900	800	220	520	1580-2080-3080 4080-5080-6080	520	60
480	515	750	1050	950					

[Options]

The EMCOMAT E-300/1500 with full enclosure, chip conveyor and suction system.

A real alternative to a CNC turning machine for small to medium series.



Clamping cylinder

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



Tailstock quills

For fast machining the hydraulic tailstock quills 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.

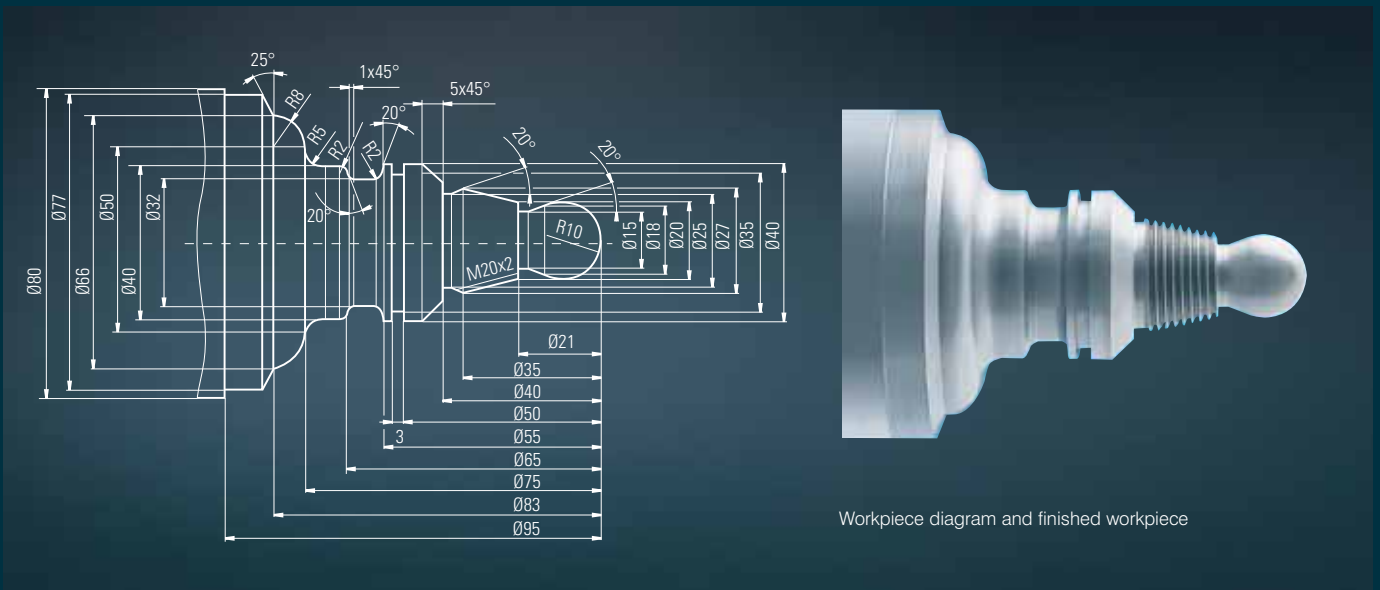


CAPTO tool holder

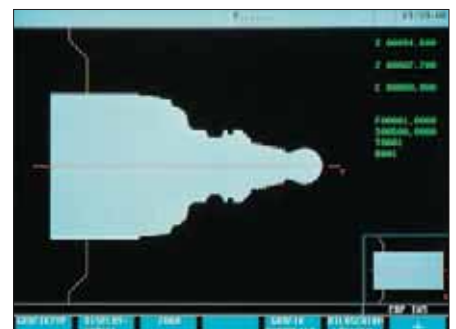
With its fast and precise alternating system, the CAPTO tool holder offers more stability and higher repeat accuracy during machining.

[Control unit]

Fagor 8055 T teach-in control system, including the control package for the X and Z axes with circulating ball spindles and the Sinumerik 611 drive system (AC motors). Options: Thread-cutting with all inclines, thread repair, ISO programming, constant cutting speed, tool storage for 99 tools, machining cycles, DNC programming, automatic programming of the contour, 640 KB + 4MB program storage, RS-232 interface, 14" TFT active matrix color screen, line and pixel graphics and much more.

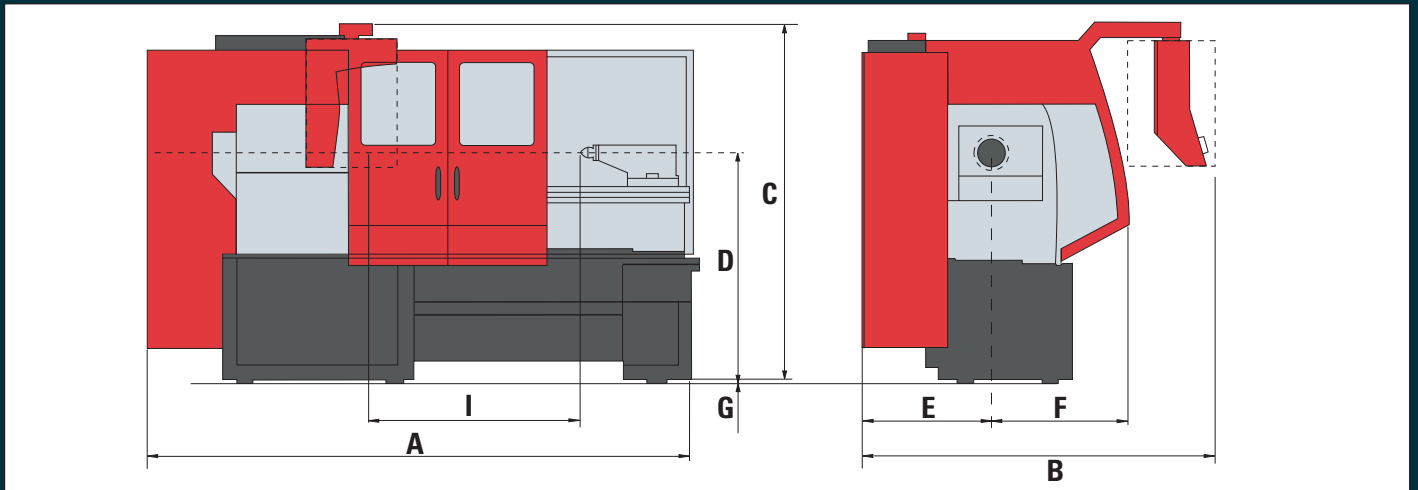


In six steps from the drawing to the workpiece



[Floor plan]

Floor plan EMCOMAT E-300 E-360 E-400 E-480

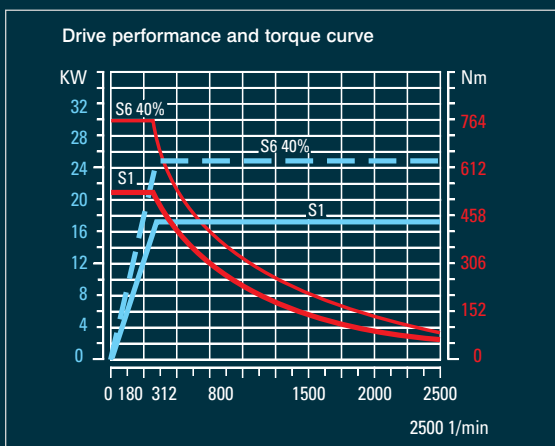


Dimensions (mm)

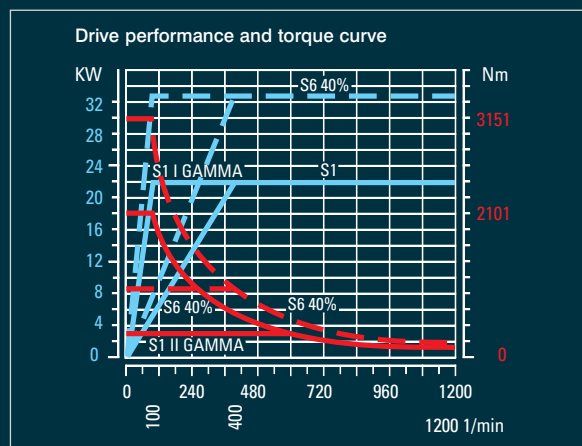
Distance between centers I		1500	2000	3000	4000	5000	6000
E300	A	3660	4160	5160	-	-	-
	B	2130	2130	2130	-	-	-
	C	1840	1840	1840	-	-	-
	D	1150	1150	1150	-	-	-
	E	755	755	755	-	-	-
	F	735	735	735	-	-	-
	G	25	25	25	-	-	-
E360-400	A	4560	5060	6060	7060	8060	9060
	B	2470	2470	2470	2470	2470	2470
	C	2070	2070	2070	2070	2070	2070
	D	1325	1325	1325	1325	1325	1325
	E	826	826	826	826	826	826
	F	974	974	974	974	974	974
	G	30	30	30	30	30	30
E480	A	4560	5060	6060	7060	8060	9060
	B	2540	2540	2540	2540	2540	2540
	C	2300	2300	2300	2300	2300	2300
	D	1325	1325	1325	1325	1325	1325
	E	826	826	826	826	826	826
	F	974	974	974	974	974	974
	G	30	30	30	30	30	30

[Main spindle performance diagram]

EMCOMAT E-300

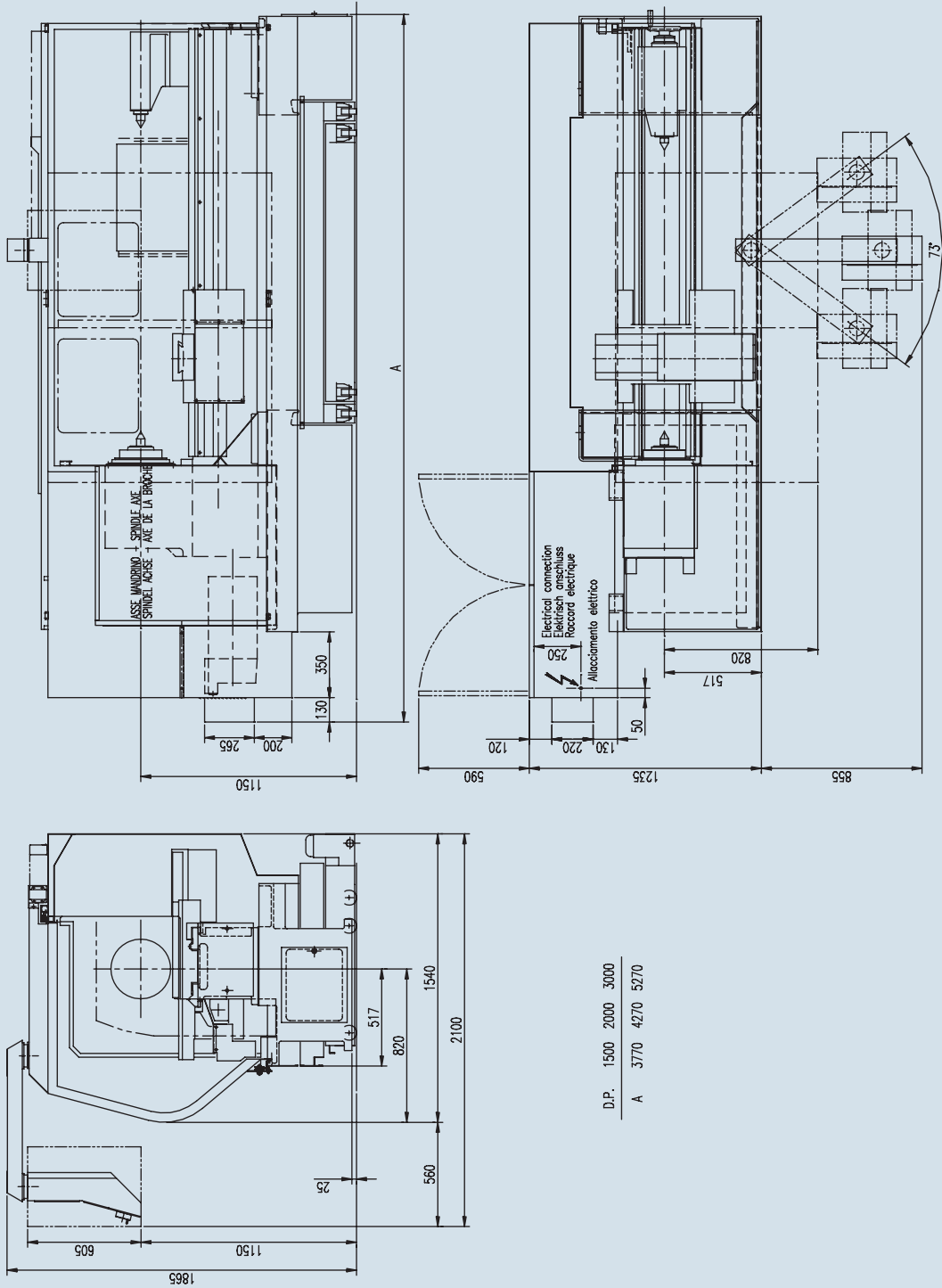


EMCOMAT E-360 E-400 E-480

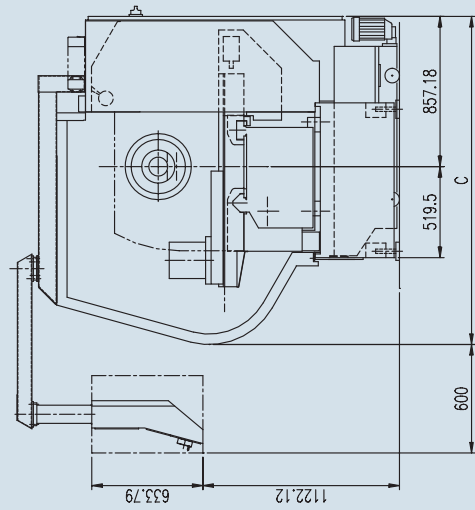
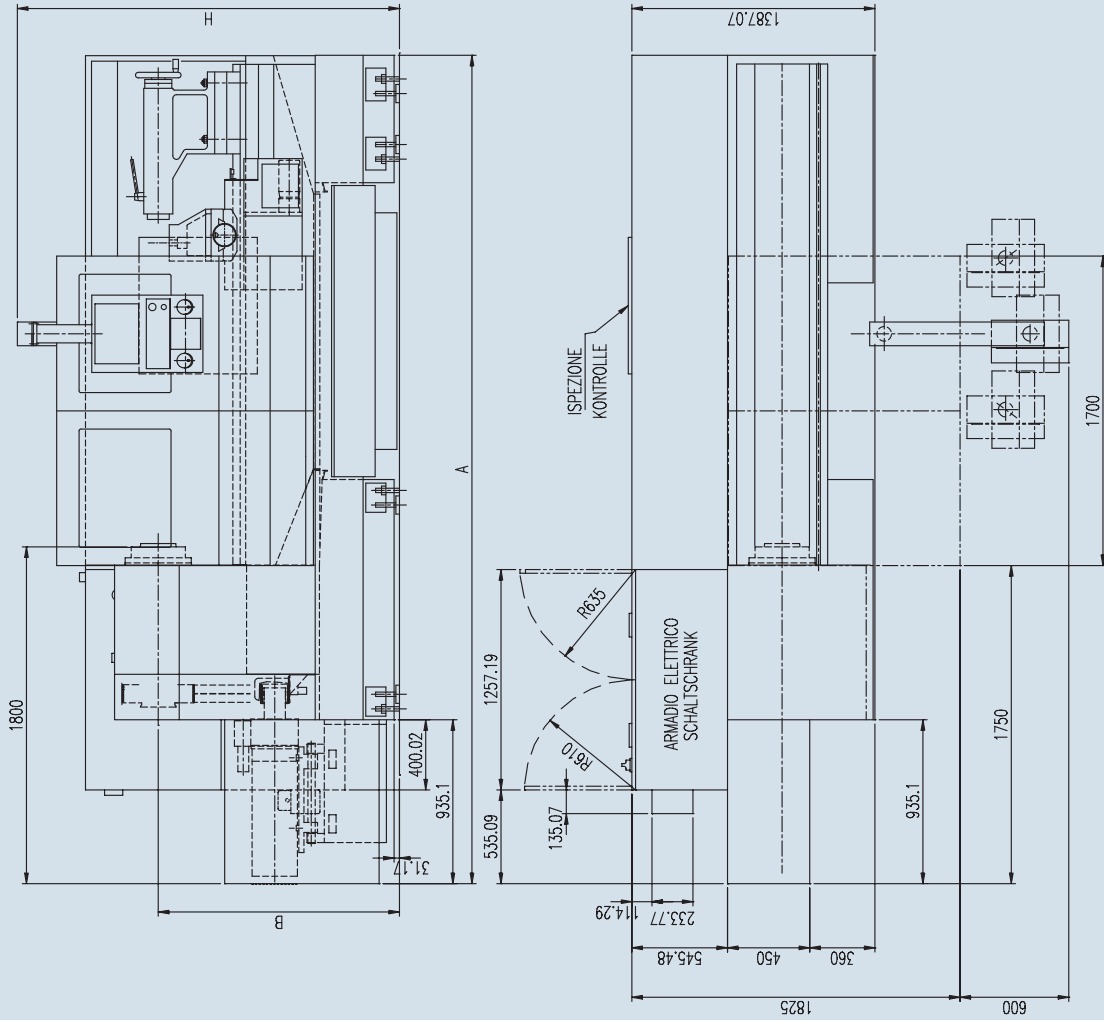


[Machine layout]

Machine layout EMCOMAT E-300



Machine layout EMCOMAT E-360 E-400 E-480



D.P.	1500	2000	3000	4000	5000	6000
A	4600	5100	6100	7100	8100	9100

EMCOMAT-E	B	C	H
360	1295	1825	2120
400	1345	1825	2120
480	1425	1925	2220

[Technical data]

EMCOMAT E-300 E-360 E-400 E-480

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Designed for your profit

	EMCOMAT E-300	EMCOMAT E-360	EMCOMAT E-400	EMCOMAT E-480
Work area				
Distance between centers	1500 – 3000 mm (59.1"–118.1")	1500 – 6000 mm (59.1"–236.2")	1500 – 6000 mm (59.1"–236.2")	1500 – 6000 mm (59.1"–236.2")
Swing	275 mm (10.8")	380 mm (14.9")	430 mm (16.9")	510 mm (20.1")
Swing over bed	Ø 570 mm (22.4")	Ø 810 mm (31.9")	Ø 900 mm (35.4")	Ø 1050 mm (41.3")
Swing over slide	Ø 340 mm (13.4")	Ø 480 mm (18.9")	Ø 580 mm (22.8")	Ø 740 mm (29.1")
Bed width, hardened HRC 50	420 mm (16.5")	500 mm (19.7")	500 mm (19.7")	500 mm (19.7")
Travel in Z	1500 – 3000 mm (59.1"–118.1")	1500 – 6000 mm (59.1"–236.2")	1500 – 6000 mm (59.1"–236.2")	1500 – 6000 mm (59.1"–236.2")
Travel in X	310 mm (12.2")	520 mm (20.5")	520 mm (20.5")	520 mm (20.5")
Feed power X max.	1000 daN	1900 daN	1900 daN	1900 daN
Feed power Z max.	1500 daN	1900 daN	1900 daN	1900 daN
Rapid motion speed in X/Z	5 (8*) m/min (197 (315*) ipm)	5 (8*) m/min (197 (315*) ipm)	5 (8*) m/min (197 (315*) ipm)	5 (8*) m/min (197 (315*) ipm)
Cross-slide width	250 mm (9.8")	286 mm (11.3")	286 mm (11.3")	286 mm (11.3")
Lathe tool cross-section	25 x 25 mm (0.98"x0.98")	32 x 32 (40 x 40) mm (1.3"x1.3") (1.6"x1.6")	32 x 32 (40 x 40) mm (1.3"x1.3") (1.6"x1.6")	32 x 32 (40 x 40) mm (1.3"x1.3") (1.6"x1.6")
Moving spindle				
Spindle nose DIN 55029 Camlock	8	11	11	11
Spindle bore	Ø 108 mm (4.3")	Ø 153 mm (6.0")	Ø 153 mm (6.0")	Ø 153 mm (6.0")
Spindle front bearing (inside diameter)	Ø 160 mm (6.3")	Ø 235 mm (9.3")	Ø 235 mm (9.3")	Ø 235 mm (9.3")
Faceplate diameter (max.)	Ø 500 mm (19.7")	Ø 700 mm (27.6")	Ø 800 mm (31.5")	Ø 900 mm (35.4")
Maximum chuck diameter	Ø 315 mm (12.4")	Ø 500 mm (19.7")	Ø 500 mm (19.7")	Ø 500 mm (19.7")
Spindle rotational speed	0 – 2500 rpm	0 – 1200 rpm	0 – 1200 rpm	0 – 1200 rpm
Speed control	stepless	stepless	stepless	stepless
Mechanical speed levels	1	2	2	2
Drive motor				
AC motor	infinitely variable	infinitely variable	infinitely variable	infinitely variable
Performance at 40/100% duty cycle	25/17 kW (33.5/22.8 hp)	33/22 kW (44.3/29.5 hp)	33/22 kW (44.3/29.5 hp)	33/22 kW (44.3/29.5 hp)
Max. torque at the main spindle	764/519 Nm	3151/2101 Nm	3151/2101 Nm	3151/2101 Nm
Tailstock				
Quill diameter	Ø 100 mm (3.9")	Ø 120 mm (4.7")	Ø 120 mm (4.7")	Ø 120 mm (4.7")
Inner quill taper	MK 5	MK 6	MK 6	MK 6
Quill travel	220 mm (8.7")	220 mm (8.7")	220 mm (8.7")	220 mm (8.7")
Power supply				
Electricity supply	400 V/3~/PE	400 V/3~/PE	400 V/3~/PE	400 V/3~/PE
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Connected load	24 kVA	39 kVA	39 kVA	39 kVA
Dimensions				
Machine length	Sp.W. +2160 mm (85.0")	Sp.W. +3060 mm (120.5")	Sp.W. +3060 mm (120.5")	Sp.W. +3060 mm (120.5")
Machine width	2130 mm (83.9")	2470 mm (97.2")	2470 mm (97.2")	2540 mm (100.0")
Machine height	1840 mm (72.4")	2070 mm (81.5")	2070 mm (81.5")	2300 mm (90.6")
Total weight	3600 – 4500 kg	7500 – 10500 kg	7700 – 10700 kg	8000 – 11000 kg

EN6501 - 07/10 - Subject to change due to technical progress. Errors and omissions excepted.

