emco group

Designed for your profit



Intelligent turn and milling solutions for everyone.

EMCO-WORLD.COM

EMCO Group

Create and use synergies!

The EMCO Group is an association of top suppliers from the machine tool industry. The companies associated work together in a network of European manufacturers on intelligent and innovative production solutions for the metal-cutting industry. There are always new possibilities for the whole group due to the various competences of the individual entrepreneurs, their resources, and the transfer of know-how amongst the companies within the group.

The EMCO Group headquarters and central production facilities are located in Salzburg. There are also further production facilities in Germany, Italy and Russia, as well as corporate sales offices in Germany, Italy, the Czech Republic and the USA. EMCO is represented internationally in all major markets with over 140 sales and services offices. At the present time, the EMCO Group employs around 730 committed and well skilled employees.

emco group
Designed for your profit

EMCO

EMCO is Austria's largest machine tool manufacturer. EMCO has earned an international reputation with innovative solutions for turning, milling, and complete machining together with a leading training program world-wide.

emco famup
Designed for your profit

Famup

Famup is one of the leading manufacturers of CNC machining centers. Product range: vertical CNC milling centers with X travel from 350 to 3200 mm for effective industrial production.

emco MECOF
Designed for your profit

Mecof

MECOF is one of the leading manufacturers of high-speed, high-precision milling and boring machining centers. With longstanding experience and expert knowledge, MECOF is well placed to meet the requirements of both small companies and the large OEM groups in the automotive and aerospace industries.

emco magdeburg
Designed for your profit

Magdeburg

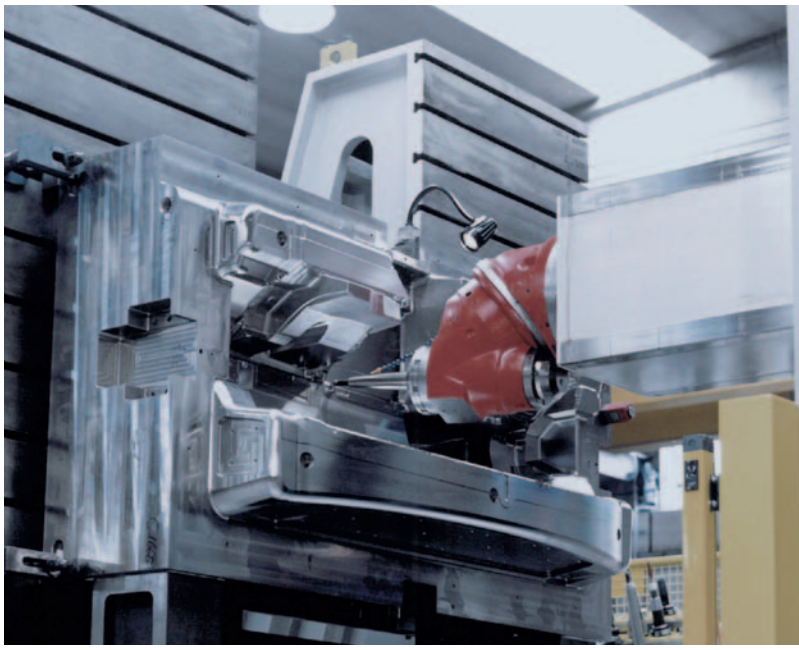
EMCO – Magdeburg is an EMCO subsidiary where the vertical lathes are produced. Also its specialist in customized technological solutions.

With regard to productivity: the divisions of the EMCO Group.

The EMCO Group has two essential divisions that pursue a common goal worldwide: more productivity for the metal-cutting industry.

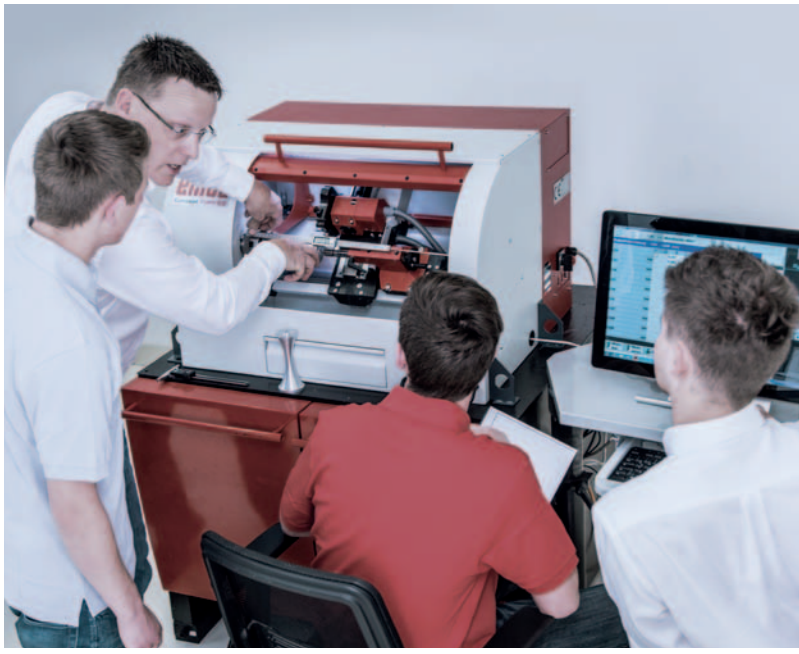
Perfect engineering for all requirements: EMCO Innovative Machine Tools

The EMCO Group develops and produces innovative high-tech machine tools for the metal-cutting industry. The product range is unique in Europe. From conventional turning and milling machines, through cycle-controlled machines, universal CNC turning machines, CNC milling and turning centers to high-speed milling and drilling machining centers for economic complete machining: The EMCO Group provides the industry with custom-made, highly efficient solutions for all requirements.

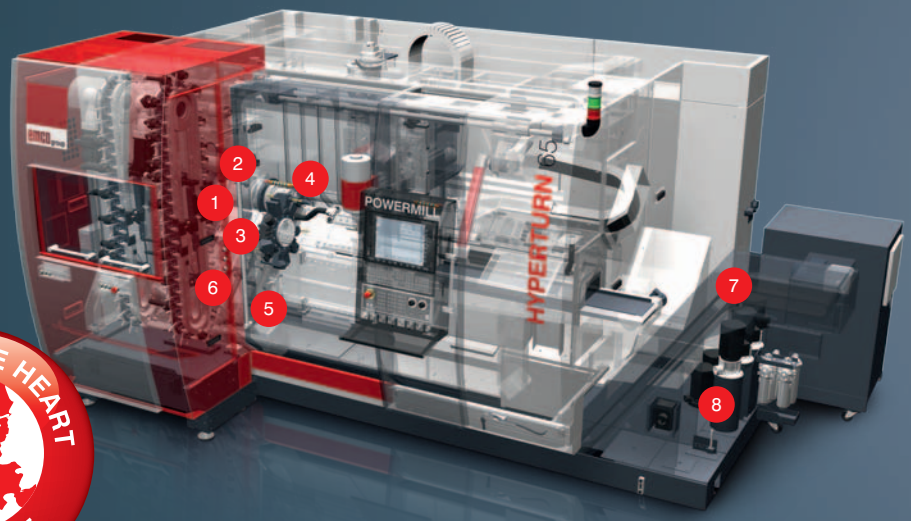


From the industry, for the industry: EMCO Industrial Training

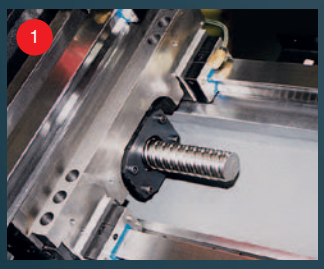
For more than 35 years, EMCO Industrial Training has trained both company employees and future specialists from around the world in the use of state-of-the-art CNC machines. As one of the leading European manufacturers of high-tech machines for the metal-cutting industry the EMCO Group has first-hand experience of the success factors for professional training. With its comprehensive training concept including Concept machines, software for the simulation of industrial requirements, and perfectly coordinated training documents - multimedia training program EMCO CAMPUS - EMCO Industrial Training represents the world market leader of CNC training.



Quality components



MADE IN THE HEART OF EUROPE



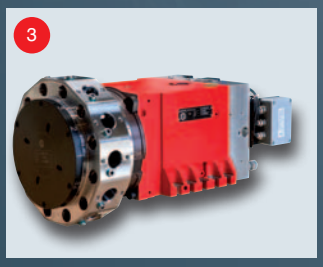
Machine bases and slides

When matching components, we place great value on high stability, good damping characteristics, and a thermoneutral design. We achieve high stability through a shorter force flow, thermal stability through symmetry, and dampening through the materials and interfaces selected.



Headstocks

The design and manufacture of headstocks are two of EMCO's core competencies. During engineering, the focus is on precision, robustness, high rigidity, precise rotational characteristics, and a long service life.



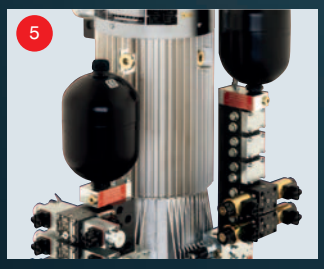
Tool turret

Rapid-indexing turrets with adjustable swivel speeds and milling drives represent the current state of the art. The backlash-free milling drive is not only ideal for milling and drilling, but also for rigid tapping, hobbing, and polygonal turning.



Tool holder

Innovative, fully developed tool holder systems form the basis for cost-effective machining. High changeover accuracy and stability result in short setup and cycle times.



Hydraulic systems

Compact dimensions, quiet operation, and high energy efficiency - just some of the advantages of the hydraulic assemblies used by EMCO. Monitored pressure switches prevent the need for time-consuming manual pressure adjustments.



Clamping cylinder / chuck

Hydraulically activated clamping cylinders and chucks guarantee the precise, safe clamping of work pieces. Programmable sensors are used for stroke monitoring. There is no need for time-consuming adjustments of contactless limit switches.



Chip conveyor

Slat band conveyors allow for flexible implementation and the safe removal of chips. A monitored overload clutch prevents damage from improper use.



Coolant pumps

Low-maintenance immersion pumps for pressures of up to 25 bar and flow rates of up to 1500 l/min provide optimum conditions for machining and enable reliable chip transportation.

Minimum use of resources for maximum profit.

E[M]COLOGY
Designed for Efficiency

At EMCO, we take a consistent, responsible approach to the use of resources in machine tools in order to safeguard long-term investments. From the development of our machines through to their construction and manufacture, we place a strong focus on the sensible and sparing use of raw materials and energy. This enables us to achieve parallel savings in two areas:

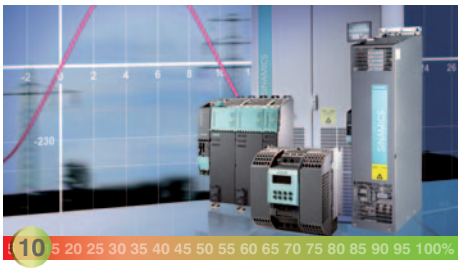
1. Reduction in the basic power consumption of machine tools, e.g. assemblies are switched on and off as required and the installed connected loads are kept to a minimum.

2. Reduction in variable consumption: This can be seen in the lighter axes, energy recovery system, increased rate of good parts, and the shorter process chain enabled by complete machining.

Through these measures, which are constantly being refined and further optimized, EMCO truly demonstrates that its slogan of „Designed for your Profit“ is not just an empty promise: EMCO products help save the environment and provide intelligent customer savings without compromising on quality and flexibility.

[Regenerative drive system]

Kinetic energy is converted into electrical energy and fed back into the grid.
Savings of up to 10%



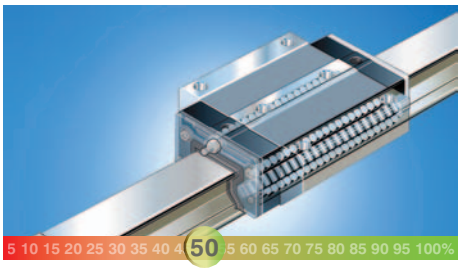
[Compact hydraulics unit with pressure accumulator]

Thanks to its accumulator charging system, the pump only runs when required. If the pressure accumulator is full, the pump switches over to closed loop circulation.
Savings of up to 90%



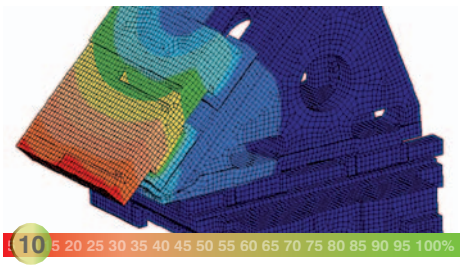
[Roller guides]

Extremely low friction losses thanks to rolling friction. Highly dynamic performance with minimal lubricant consumption.
Savings of up to 50%



[Structurally optimized mechanics]

FEM analysis is used to optimize the relevant components in terms of their rigidity while simultaneously reducing their weight.
Savings of up to 10%



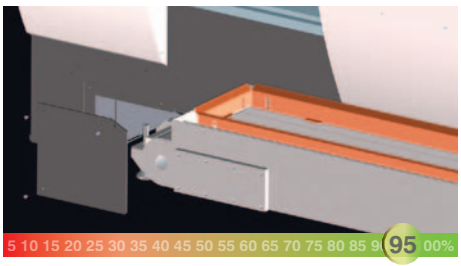
[Highly efficient motors]

The use of energy-efficient motors (IE2) in the coolant preparation area guarantee highly cost-effective operation.
Savings of up to 10%



[Synchronized chip conveyor]

Programmable interval times enable optimal use of the chip conveyor independently of of the machining process.
Savings of up to 95%



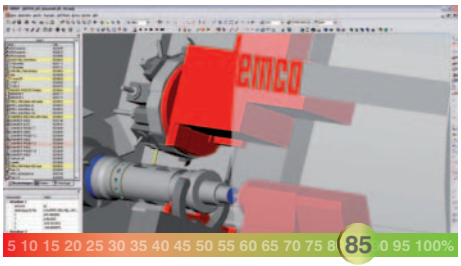
[Intelligent standby concepts]

Reduced consumption by automatically switching off ancillary units and machine space/screen illumination after a defined period of inactivity on the control panel.
Savings of up to 50%



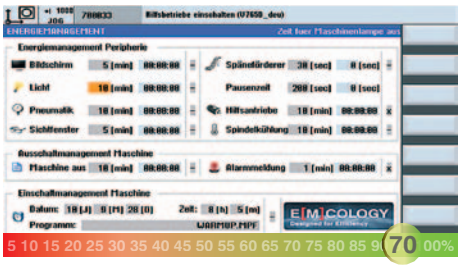
[Virtual machine]

Significant reduction in the setup and running-in times on the machine through the use of highly developed simulation and programming software.
Savings of up to 85%



[Intelligent energy management]

Intuitive data entry screens for activating the individual energy-saving functions.
Savings of up to 70%



Product Range Turning

EMCO HYPERTURN

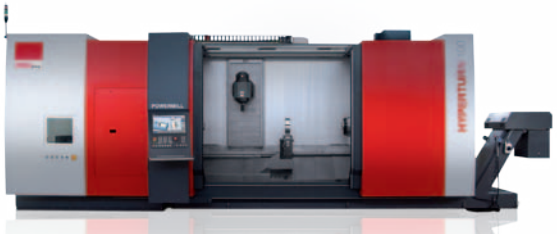
Multitasking machine with high-performance milling spindle and tool magazine
for the flexible complete machining of highly complex workpieces



HYPERTURN 65 Powermill



HYPERTURN 95 Powermill



HYPERTURN 100 Powermill

CNC Turn-Mill centers with turrets including driven tools and Y-axis
for the highly productive complete machining of complex workpieces



HYPERTURN 45 | G3



HYPERTURN 65 Duoturn



HYPERTURN 65 Tripleturn

EMCO MAXXTURN

High performance CNC turning centers with driven tools and Y-axis
For the versatile machining of chuck, shaft and rod parts Part size up to Ø 1000 mm (39.4"); bar capacity Ø 25 (1") to 110 mm (4.3")



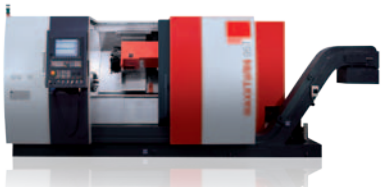
MAXXTURN 25



MAXXTURN 45



MAXXTURN 65



MAXXTURN 95

EMCO VERTICAL

Vertical pick-up turning machines
For chuck parts up to Ø 400 mm (15.75")



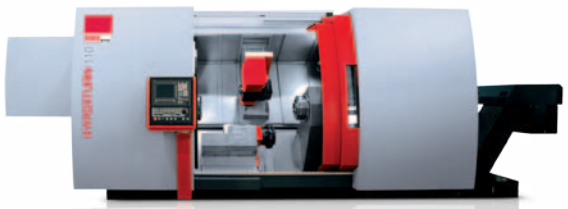
EMCO VERTICAL VT 160



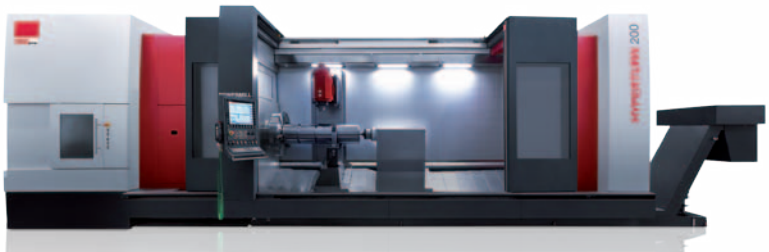
EMCO VERTICAL VT 260



EMCO VERTICAL VT 400



HYPERTURN 110 Powermill



HYPERTURN 200 Powermill



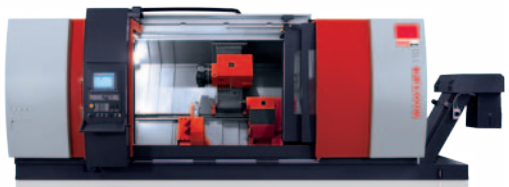
HYPERTURN 95



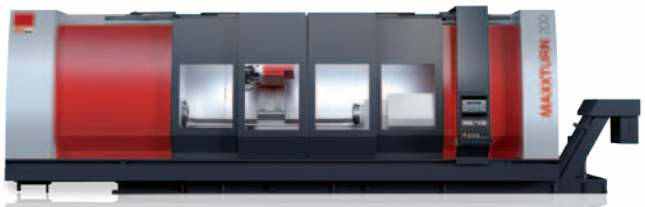
HYPERTURN 110



HYPERTURN 150



MAXXTURN 110



MAXXTURN 200

EMCOTURN

CNC turning centers with driven tools

CNC turning centers for the most economical machining of chuck, shaft and rod parts.
Part size up to Ø 500 (19.7"); bar capacity: Ø 25 (1") to 95 mm (3.7")



EMCOTURN E25



EMCOTURN E45



EMCOTURN E65

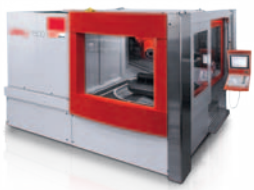
Product Range Milling

EMCO UMILL

Universal Machining Center for 5-axes machining

For 5-axes simultaneous machining

X axis: 1500 mm



UMILL 1500

X axis: 1800 mm



UMILL 1800

X axis: 500 mm



UMILL 630

X axis: 750 mm



UMILL 750

EMCO MMV

Universal Travelling Column Machining Center for 3- to 5-axes machining

For manufacturing of large workpieces also available as 5-axes version. Travel in X-axis 2000 – 3200 mm (78,7 – 126")



MMV 2000



MMV 3200

EMCO MAXXMILL

Universal Machining Center for 5-side operation

For 5-side operation of workpieces with an edge length up to 530 x 530 x 417 mm (20.9 x 20.9 x 16.4")



MAXXMILL 400



MAXXMILL 630



MAXXMILL 750

EMCOMILL

Vertical 3-axis Machining center

For the machining of small to medium lot sizes



EMCOMILL E350



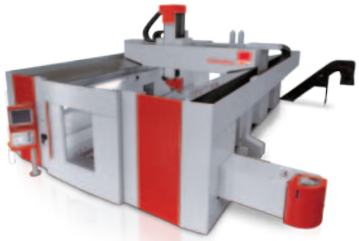
EMCOMILL 750



EMCOMILL 1200

MECOF Vertical Spindle machines

X axis: from 2500 mm (98") and over



LINEARMILL

X axis: from 2500 mm (98") and over



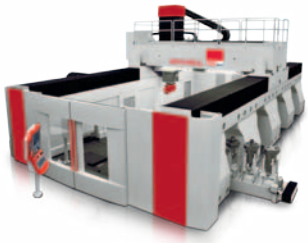
DYNAMILL G5

X axis: from 4550 mm (179")
(in steps of 2500 mm (98"))



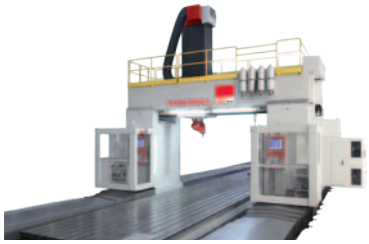
DYNAMILL

X axis: from 7500 mm (295") and over



MEGAMILL

X axis: 6000 mm (236") and over



POWERMILL

MECOF Horizontal Spindle machines

X axis: from 6000 mm (236") and over



ECOMILL

X axis: from 6000 mm (236") and over



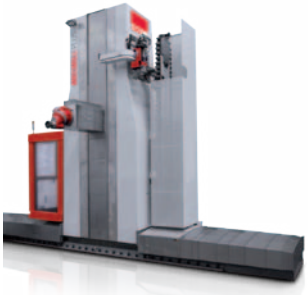
ECOMILL PLUS

X axis: from 6000 mm (236") and over



MECMILL

X axis: from 6000 mm (236") and over



MECMILL PLUS

Product Range Turning

EMCOMAT

Universal manual lathes

Center height: 140 to 200 mm (5.51 to 7.87")
Center distance: 650 to 1000 mm (25.59 to 39.37")



EMCOMAT-14 D



EMCOMAT-17 D



EMCOMAT-20 D

Precision cycle controlled lathes

Center height: 200 to 430 mm (6.30 to 16.92")
Center distance: 1000 to 6000 mm (39.37 to 236.22")



EMCOMAT E-200 MC with Siemens



EMCOMAT E-360 - 400 with Siemens or Fagor

EMCO CONCEPT TURN

CNC turning centers

With interchangeable control units Part size up to 220 mm (8.66") diameter; bar stock capacity up to 45 mm (1.77")



CONCEPT TURN 60



CONCEPT TURN 105



CONCEPT TURN 260



CONCEPT TURN 460

Product Range Milling

EMCOMAT

Universal manual and Precision cycle controlled milling machines

Travel in X from 300 (11.81") to 600 mm (23.62")



EMCOMAT FB-3 L



EMCOMAT FB-450 with position display



EMCOMAT FB-600 with position display



EMCOMAT FB-450 MC with Siemens or Heidenhain



EMCOMAT FB-600 MC with Siemens or Heidenhain

EMCO CONCEPT MILL

CNC milling centers

With interchangeable control units Travel in X from 190 (7.5") to 600 mm (23.62")



CONCEPT MILL 55



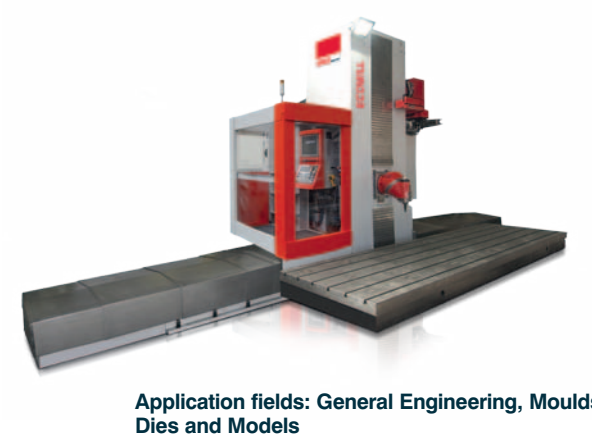
CONCEPT MILL 105



CONCEPT MILL 260

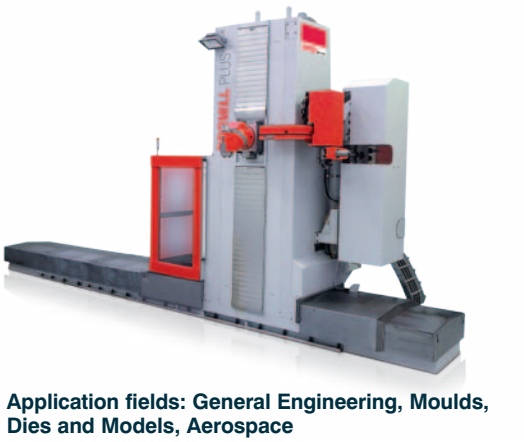
[Horizontal spindle machines]

ECOMILL



Application fields: General Engineering, Moulds, Dies and Models

ECOMILL PLUS



Application fields: General Engineering, Moulds, Dies and Models, Aerospace

Technical data	ECOMILL	ECOMILL PLUS
X axis	from 6000 mm (236") and over	from 6000 mm (236") and over
Y axis	1300 mm (51")	1600 mm (63")
Z axis	2500 mm (98.4")	3000 mm (118")
Spindle motor	60 kW / 600 Nm (81 hp / 443 lbf-ft)	base 60 kW / 600 Nm (81 hp / 443 lbf-ft) option 40 kW / 1200 Nm (54 hp / 885 lbf-ft)
Axes feed rate	30 m/min (1181 ipm)	30 m/min (1181 ipm)
Power milling heads	3+2 axes up to 38 kW / 600 Nm / 6000 rpm 51 hp / 443 lbf-ft / 6000 rpm	3+2 axes up to 38 kW / 1000 Nm / 6000 rpm 51 hp / 738 lbf-ft / 6000 rpm
High speed spindle with special support	40,5 kW / 35,4 Nm / 18000 rpm 54,7 hp / 26,1 lbf-ft / 18000 rpm	High speed full 5 axes heads up to 42 kW / 120 Nm / 24000 rpm 56 hp / 89 lbf-ft / 24000 rpm
Boring Spindle		

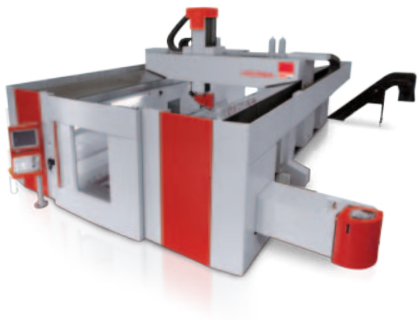
[Vertical spindle machines]

DYNAMILL



Application fields: Moulds, Dies and Models, Aerospace

LINEARMILL



Application fields: Moulds, Dies and Models, Aerospace

Technical data	DYNAMILL	LINEARMILL
X axis	from 4550 mm (180") and over (in steps of 2500 mm (98"))	from 2500 mm (98") and over
Y axis	3000 – 4000 mm (118 - 158")	2200 – 3000 mm (87 - 118")
Z axis	1500 – 2500 mm (59 - 98")	1000 – 1500 mm (39 - 59")
Spindle motor	60 kW / 600 Nm (81 hp / 443 lbf-ft)	
Axes feed rate	40 m/min (1575 ipm)	100 m/min (3937 ipm)
Power milling heads	3+2 axes and/or 5 axes up to 38 kW / 600 Nm / 6000 rpm 51 hp / 443 lbf-ft / 6000 rpm	
High speed spindle with special support	5 axes heads up to 50 kW / 120 Nm / 24000 rpm 67 hp / 89 lbf-ft / 24000 rpm	5 axes heads up to 50 kW / 67 Nm / 24000 rpm 67 hp / 50 lbf-ft / 24000 rpm

MECMILL



Application fields: Precision General Engineering, Moulds, Dies and Models, Power Generation

MECMILL
from 6000 mm (236") and over
1600 mm (63")
3500 mm (138")
40 kW / 1200 Nm (54 hp / 885 lbf-ft)
30 m/min (1181 ipm)
3+2 axes and/or 5 axes up to 38 kW / 1000 Nm / 6000 rpm 51 hp / 738 lbf-ft / 6000 rpm
5 axes heads up to 42 kW / 120 Nm / 24000 rpm 56 hp / 89 lbf-ft / 24000 rpm

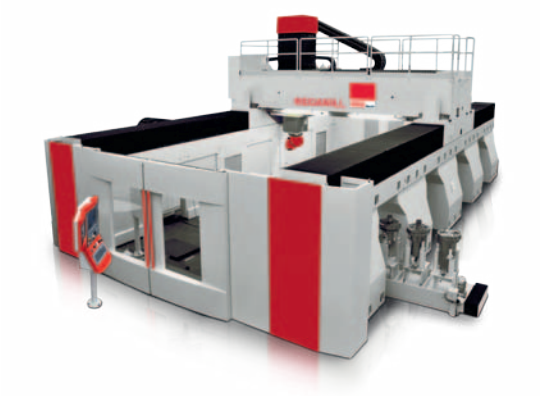
MECMILL PLUS



Application fields: Precision General Engineering, Aerospace, Power Generation

MECMILL PLUS
from 6000 mm (236") and over
1600 - 1800 mm (63 - 71")
4000 - 5000 mm (158 - 197")
40 kW / 1200 Nm (54 hp / 885 lbf-ft)
25 m/min (985 ipm)
3+2 axes and/or 5 axes up to 38 kW / 1000 Nm / 6000 rpm 51 hp / 738 lbf-ft / 6000 rpm
5 axes heads up to 42 kW / 120 Nm / 24000 rpm 56 hp / 89 lbf-ft / 24000 rpm
diameter 130 mm (5.2") - W axis travel 700 mm (28") 45 kW / 2000 Nm / 2000 rpm 60 hp / 1475 lbf-ft / 2000 rpm

MEGAMILL



Application fields: Precision General Engineering, Moulds, Dies and Models, Aerospace, Power Generation

MEGAMILL
from 7500 mm (295") and over
4000 – 5000 – 6000 – 7000 mm (158 – 197 – 236 – 276")
1500 – 2000 – 2500 mm (59 – 79 – 98")
40 kW / 1200 Nm (54 hp / 885 lbf-ft)
30 m/min (1181 ipm)
3+2 axes and/or 5 axes up to 38 kW / 1000 Nm / 6000 rpm 51 hp / 738 lbf-ft / 6000 rpm
5 axes heads up to 50 kW / 120 Nm / 24000 rpm 67 hp / 89 lbf-ft / 24000 rpm

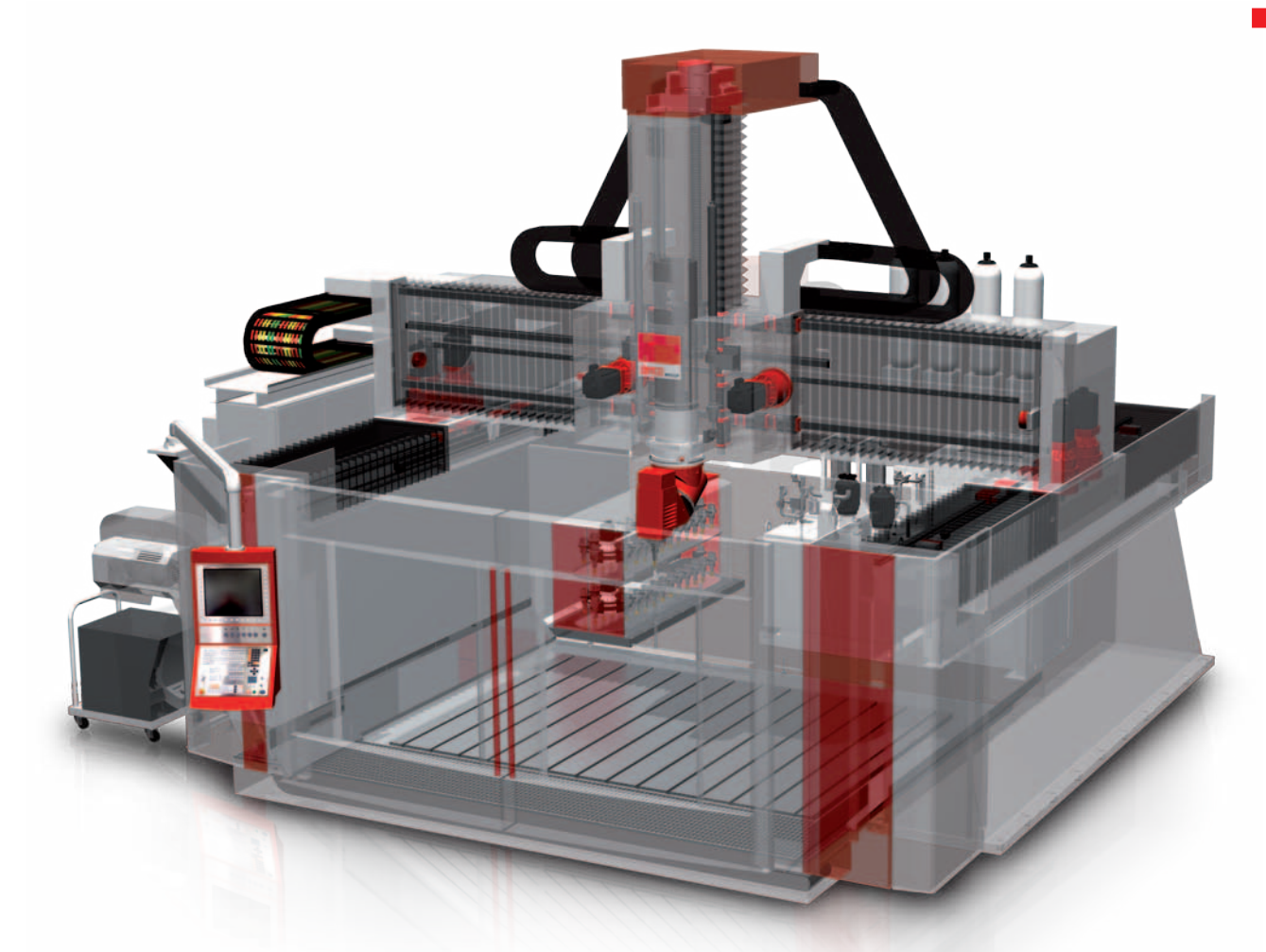
POWERMILL

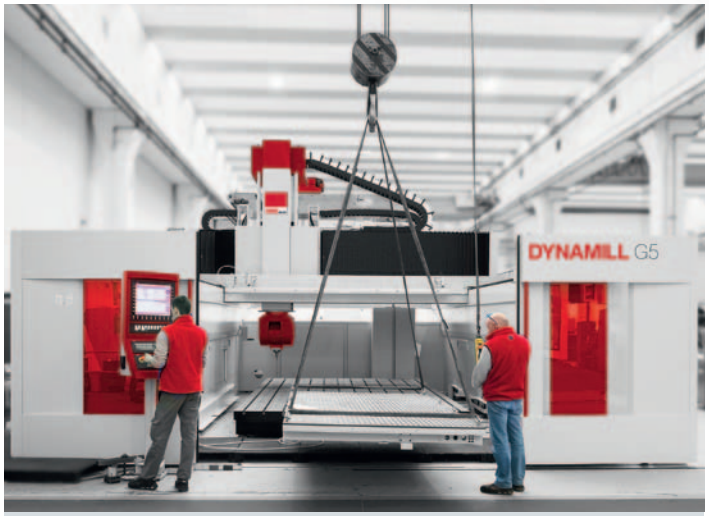


Application fields: Precision General Engineering, Moulds, Dies and Models, Aerospace, Power Generation

POWERMILL
from 6000 mm (236") and over
4000 – 5000 – 6000 – 7000 mm (158 – 197 – 236 – 276")
1500 – 2000 – 2500 mm (59 – 79 – 98")
40 kW / 1200 Nm (54 hp / 885 lbf-ft)
30 m/min (1181 ipm)
3+2 axes and/or 5 axes up to 38 kW / 1000 Nm / 6000 rpm 51 hp / 738 lbf-ft / 6000 rpm
5 axes heads up to 50 kW / 120 Nm / 24000 rpm 67 hp / 89 lbf-ft / 24000 rpm

DYNAMILL G5 for 5-Axis Machining in one set-up





Easily accessible work area. Wide sliding doors on the machine front side for easy loading and unloading of large workpieces.

Highlights

- High dynamics and accuracy by means of direct drive milling heads
- Large working area – small installation surface
- Simple foundation design
- Machine ready for Industry 4.0
- 15° undercut on universal milling head with high-speed spindle
- Direct drive technology on all milling heads with high-speed spindle
- Automatic tool changer up to 128 tools



Application fields: Mold and Dies, Aerospace, Precision General Engineering, Power Generation

[Vertical spindle machines]

Technical data	DYNAMILL G5
X axis	from 2500 mm and over (98")
Y axis	2200 – 3500 mm (86.6 x 137.8")
Z axis	1300 – 1500 mm (51.2 x 59")
Spindle motor	51 kW / 330 Nm (69 hp / 244 lbf-ft)
Axes feed rate	40 m/min (1575 ipm)
Power milling heads	38 kW / 600 Nm / 6000 min^{-1} (51 hp / 444 lbf-ft / 6000 rpm)
High speed spindle with special support	5 axes heads up to 50 kW / 300 Nm / 24.000 min-1 (69 hp / 222 lbf-ft / 24.000 rpm)

[Turning]

EMCO HYPERTURN POWERMILL

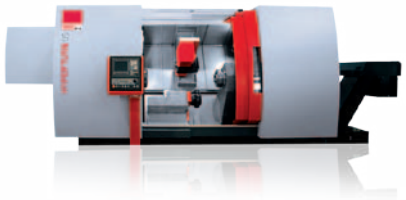
Highlights

- Powerful main and counter spindles
- Milling spindle with direct drive
- 24/40/80-slot or 50/100/200-slot tool magazine (depending on machine model)
- NC-steady-rest
- 12-station tool turrets with 12 driven tool positions
- Linear guides in all axes
- EMCO Automation

HYPERTURN 65 PM



HYPERTURN 95 PM



Technical data		HT 65 PM	HT 95 PM
Bar capacity	mm (inch)	65 (76,2 / 95) (2.5 (3.0 / 3.7"))	95 (3.7")
Swing Ø over bed	mm (inch)	500 (19.7")	720 (28.3")
Chuck size	mm (inch)	200 (250) ((7.1 (9.8"))	315 (400) ((12.4 (15.7"))
Travel in X / Y / Z	mm (inch)	405 / 220 / 1050 (15.9 / 8.7 / 41.3")	550 / 240 / 1340–1940 (21.7 / 9.4" / 52.8–76.3")
Rapid motion speed in X / Y / Z	m/min (ipm)	30 / 12 / 30 (1181 / 472.5 / 1181)	30 / 30 / 30 (1181 / 1181 / 1181)
Speed range	rpm	0 – 5000	0 – 3500
Drive power / Torque	kW (hp) / Nm	29 / 37 (39 / 50) / 250	33 / 800 (44.3 / 800)
Driven tools		20 / 40 / 80	40 / 80

EMCO HYPERTURN

Highlights

- Powerful main and counter spindles
- 2(3) x 12-station tool turrets
- 2(3) x 12 driven tool positions
- BMT-tool turret with direct drive motor (optional)
- Linear guides in all axes
- EMCO Automation

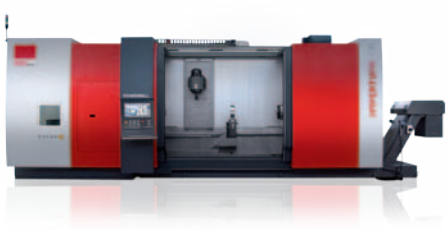
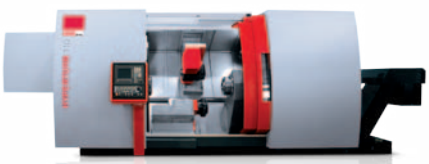
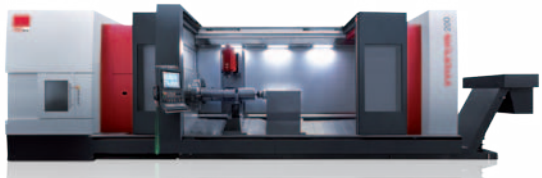
HYPERTURN 45|G3



HYPERTURN 65 DT



Technical data		HT 45|G3	HT 65 DT
Bar capacity	mm (inch)	45 (1.7") (51 (2.0"))	65 (76,2 / 95) (2.5 (3.0 / 3.7"))
Swing Ø over bed	mm (inch)	430 (16.9")	660 (26.0")
Chuck size	mm (inch)	175 (6.9")	200 (250) (7.8 (9.8"))
Travel in X / Y / Z	mm (inch)	175 / 80 / 510 (6.9 / 3.1 / 20.1")	260 / 100 / 800–1050 (10.2 / 3.9 / 31.5 – 41.3")
Rapid motion speed in X / Y / Z	m/min (ipm)	30 / 15 / 45 (1181.1 / 590.5 / 1771.6)	30 / 12 / 30 (1181 / 472.5 / 1181)
Speed range	rpm	0 – 7000	0 – (4000 / 3500)
Drive power / Torque	kW (hp) / Nm	15 (20.1) / 100	29 / 37 (39 / 50) / 250 (360)
Driven tools		2 x 12	2 x 12

HYPERTURN 100 PM	HYPERTURN 110 PM	HYPERTURN 200 PM
		
HT 100 PM (A2-8"// A2-11")	**HT 110 PM**	**HT 200 PM**
	110 (4.3")	
750 (29.5")	720 (28.3")	1050 (41.3")
315 / 400 // 400 / 630 (12.4 / 15.7 // 15.7 / 24.8")	400 (630) ((15.7 (24.8"))	500 (800) (19.7 – (28.3"))
X1 with B-axis / X2/ Z1 / Z2 780 / 420 / 1500 – 2200 – 3100 (30.7 / 16.5 / 59 - 86.6 - 122")	550 / 240 / 1340–1940 (21.7 / 9.4" / 52.8–76.3")	915 / 600 / 3100 – 6100 (36.0 / 32.6 / 122.0 240.2")
30 / 30 / 40 (1181 / 1181 / 1575)	30 / 30 / 30 (1181 / 1181 / 1181)	30 / 30 / 30 (1181 / 1181 / 1181)
10 – 3500 // 10 – 2000	10 – 2500	10 – 1800
33 / 800 – 53 / 4400 (44.2 / 800 – 71 / 4400)	52 / 2480 (69.7 / 2480)	84 (112.6) / 6400
40/100	40 / 80	50 / 100 / 200

HYPERTURN 65 TT	HYPERTURN 95	HYPERTURN 110	HYPERTURN 150
			
HT 65 TT	**HT 95**	**HT 110**	**HT 150**
65 (76,2 / 95) (2.5 (3.0 / 3.7"))	95 (3.7")	110 (4.3")	
660 (26.0")	720 (28.3")	720 (28.3")	720 (28.3")
200 (250) (7.1 (9.8"))	315 (400) (12.4" (15.7"))	400 (630) (15.7" (24.8"))	630 (24.8")
260 / 100 / 800–1050 (10.2 / 3.9 / 31.5 – 41.3")	340 and 300 / 240 / 1340 – 1940 (13.4 and 11.8 / 9.4 / 52.7 – 76.4")	340 and 300 / 240 / 1340 – 1940 (13.4 and 11.8 / 9.4 / 52.7 – 76.4")	340 and 280 / 240 / 1940 (13.4 and 11.0 / 9.4 / 76.4")
30 / 12 / 30 (1181 / 472.5 / 1181)	30 / 30 / 30 (1181 / 1181 / 1181)	30 / 30 / 30 (1181 / 1181 / 1181)	30 / 30 / 30 (1181 / 1181 / 1181)
0 – (4000 / 3500)	0 – 3500	0 – 2500	0 – 2000
29 / 37 (39 / 50) / 250 (360)	33 (44.2) / 800	52 (69.7) / 2480	52 (69.7) / 3400
3 x 12	2 x 12	2 x 12	2 x 12

[Turning]

EMCO MAXXTURN

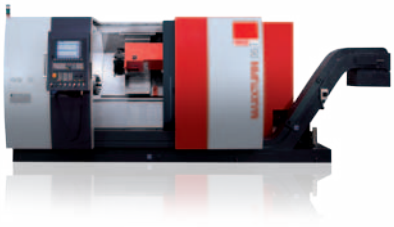
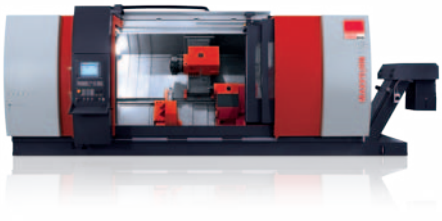
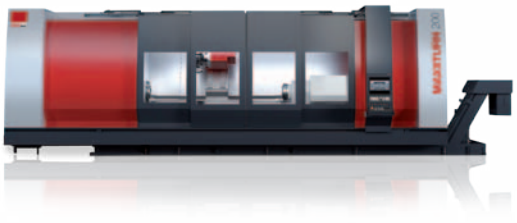
Highlights	MT 25	MT 45	MT 65
■ Powerful main spindle ■ Fully functioning counter spindle ■ Automatic tailstock ■ 12-station tool turret ■ VDI rapid-change system ■ Driven tools ■ Stable Y axis ■ NC-controlled steady ■ Linear guides in all axes ■ EMCO Automation			

Technical data		MT 25	MT 45	MT 65
Bar capacity	mm (inch)	25.4 (1.0")	45 (51) (1.7 (2.0"))	65 / 76 / 95 (2,5 / 3,0 / 3,7")
Swing Ø over bed	mm (inch)	325 (12.8")	430 (16.9")	660 (26")
Chuck Ø	mm (inch)	95 (3.7")	160 (200) (6.3 (7.9"))	200 (250) (7.9 (9.8"))
Travel in X / Y / Z	mm (inch)	100 / 35 / 320 (3.9 / 1.4 / 12.6")	160 / 70 / 510 (6.3 / 2.8 / 20.0")	260 / 100 / 800 (10.2 / 3.9 / 31.5")
Rapid motion speed in X / Y / Z	m/min (ipm)	20 / 10 / 30 (787.4 / 393.7 / 1181)	24 / 10 / 30 (944.9 / 393.7 / 1181)	30 / 12 / 30 (1180 / 590 / 1575)
Speed range	rpm	0 – 8000	0 – 6300 (5000)	0 – (4000 / 3500)
Drive power / Torque	kW (hp) / Nm	6.5 (8.7) / 30	13 (17.4) / 78 (100)	29 (37) (38.9 (49.6)) / 200 (250)
Driven tools		6	12	12

EMCO VERTICAL VT

Highlights	VT 160	VT 260	VT 400
■ Ready for heavy machining ■ Small footprint ■ Self-loading automation included ■ New Siemens control ■ Free chip fall ■ Milling tools and Y axis optionally ■ Made in the Heart of Europe			

Technical data		VT 160	VT 260	VT 400
Max. work piece length	mm (inch)	150 (5.9")	180 (7.1")	200 (7.9")
Max. work piece diameter	mm (inch)	160 (6.3")	260 (10.2")	400 (15.7")
Chuck size	mm (inch)	160 (6.3")	260 (10.2")	400 (15.7")
Travel in X / Y / Z	mm (inch)	620 / + - 65 / 310 (24.4 / + - 2.6 / 12.2")	660 / +70 -90 / 310 (26.0 / +2.8 - 3.5 / 12.2")	960 / + - 90 / 400 (37.8 / + - 3.5 / 15.7")
Rapid motion speed in X / Y / Z	m/min (ipm)	60 / 15 / 30 (2362 / 590 / 1180)	60 / 15 / 30 (2362 / 590 / 1180)	45 / 15 / 30 (1770 / 590 / 1180)
Speed range	rpm	0 – 7000	0 – 5000	0 – 4000
Drive power / Torque	kW (hp) / Nm	21 (28.2) / 150	29 (38.9) / 280	36 (48) / 600
Driven tools		12	12	12

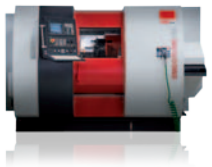
MT 95	MT 110	MT 200
		

MT 95	MT 110 (A2-8" // A2-11")	MT 200
95 (3.7")	95 // 110 (opt.) (3.7 // 4.3")	95-110 (opt.) (3.7 / 4.3")
700 (27.6")	820 (32.3")	1050 (41.3")
315 / 400 (12.4 / 15.7")	315 – 630 (12.4 – 24.8")	500 – 1000 (19.6 – 39.3")
318 / 140 / 1360 (12.5 / 5.5 / 53.5")	420 / 180 / 1560-2560-3560 (16.5 / 7.0 / 100.8-61.4-140.1")	550 / 250 / 2050 / 4050 / 6050 (21.6 / 9.8 / 80.7 / 159.4 / 238.2")
24 / 12 / 30 (944.9 / 472.5 / 1181)	24 / 12 / 30 (944.9 / 472.5 / 1181)	30 / 15 / 30 (1181.1 / 590.55 / 1181.1)
0 – 3500	10 – 3500 / 2500	10 – 1800 / 2500
33 (44.3) / 1040	33 / 800 // 53 / 2480 (3400) 44.3 / 800 // 71.1 / 2480 (3400)	84 / 6410 (53 / 4400) 112.6 / 6410 (71.1 / 4400)
12	12	12 (2 x 12opt.)

EMCOTURN E-series

Highlights

- Powerful main spindle
- 12-station tool turret
- VDI rapid-change system
- Driven tools
- Tailstock
- Linear guides in all axes
- EMCO Automation

E25	E45	E65
		

Technical data		E25	E45	E65
Bar capacity	mm (inch)	25.5 (1.0")	45 (51) (1.7 (2.0"))	65 (95) (2.5"(3.7"))
Swing Ø over bed	mm (inch)	250 (9.8")	430 (16.9")	610 (24.0")
Chuck size	mm (inch)	95 (3.7")	160 / 200 (6.3 / 7.8")	200 / 250 (7.8 / 9.8")
Travel in X / Y / Z	mm (inch)	100 / 300 (3.9 / 11.8")	160 / 510 (6.3 / 20.1")	210 / +- 40 / 610 (8.3 / +- 1.6 / 24.0")
Rapid motion speed in X / Y / Z	m/min (ipm)	15 / 24 (590.5 / 944.9)	24 / 10 / 30 (944.9 / 393.7 / 1180)	30 / 15 / 30 (1180 / 590.5 / 1180)
Speed range	rpm	60 – 6300	0 – 6300 (5000)	0 – 5000 (3500)
Drive power / Torque	kW (hp) / Nm	5.5 (7.4) / 35	13 (17.4) / 78	22 (29.5) / 305
Tools / driven		6	6 / 12	12 / 12

[Milling]

UMILL 630



Technical data	UMILL 630
Travel X / Y / Z	500 / 460 / 450 mm (19.7 / 18.1 / 17.7")
Rapid motion speed X / Y / Z	50 m/min (1969 ipm)
Tool magazine	40 spaces
Table diameter	630 x 500 mm (24.8 x 19.7")
Table load	300 kg (661 lb)
Speed range	50 – 15000 rpm
Drive power	20 kW (26.8 hp)

UMILL 750



Technical data	UMILL 750
Travel X / Y / Z	750 / 610 / 500 mm (29.5 / 24 / 19.7")
Rapid motion speed X / Y / Z	50 m/min (1969.1 ipm)
Tool magazine	40 (60) spaces
Table diameter	750 x 600 mm (29.5 x 23.6")
Table load	400 kg (881.6 lb)
Speed range	50 – 15000 rpm
Drive power	26 kW (34.8 hp)

UMILL 1500



Application fields: Precision General Engineering, Moulds & Dies Aerospace, Power Generation

Technical data	UMILL 1500
X-axis	1500 mm (59")
Y-axis	1500 mm (59")
Z-axis	1100 mm (43.3")
Rapid motion speed	60 m/min (2362.2 ipm)
Milling head with high-speed spindle	45 kW / 300 Nm / 12000 rpm (60 hp / 443 lbf ft / 12000 rpm)
Undercut	15°
Rotary table for milling and turning	ø 1400 mm (55.1"), load capacity 3,5 t, 260 rpm
Rotary table for milling	ø 1400 x 1200 mm (55.1 x 47.2"), load capacity 4,5 t, 20 rpm

UMILL 1800



Application fields: Precision General Engineering, Moulds & Dies Aerospace, Power Generation

Technical data	UMILL 1800
X-axis	1800 mm (71")
Y-axis	2150 mm (85")
Z-axis	1250 mm (50")
Rapid motion speed	60 m/min (2362.2 ipm)s
Milling head with mechanical spindle	38 kW / 600 Nm / 6000 rpm (51 hp / 221,5 lbf ft / 6000 rpm)
Milling head with high-speed spindle	45 kW / 300 Nm / 12000 rpm (60 hp / 443 lbf ft / 12000 rpm) or 50 kW / 100 Nm / 20000 rpm (66,7 hp / 148 lbf ft / 20000 rpm)
Undercut	15°
Rotary table for milling and turning	ø 1800 mm (71"), load capacity 5 tons, 250 rpm
Rotary table for milling	ø 1700 x 1400 mm (67 x 55"), load capacity 10 tons, 10 rpm

[Milling]

EMCO MMV

MMV 2000 / MMV 3200



Highlights

- Extremely solid machine design for machining large and heavy workpieces
- High rapid motion speed up to 50 m/min
- Moving column machining center with B axis and rotary table
- High cutting power
- Top surface finish quality
- Pendulum operation possible

Technical data		MMV 2000	MMV 3200
Travel X / Y / Z	mm (inch)	2000 / 800 / 750 (78.7 / 31.5 / 29.5")	3200 / 1000 / 950 (126 / 39.4 / 37.4")
Rapid motion speed X / Y / Z	m/min (ipm)	50 / 50 / 50 (1969 / 1969 / 1969)	50 / 40 / 40 (1969 / 1575 / 1575)
Clamping area	mm (inch)	2400 x 950 (94.5 x 37.4")	3500 x 1050 (137.8 x 41.3")
Table load	kg (lb)	2200 (4850)	5000 (11022)
Speed range	rpm	50 – 15000 / 18000	50 – 15000 / 18000
Drive power	kW (hp)	46 (61.7)	46 (61.7)
Tool magazine	spaces	40 / 80	40 / 60 – 120
Tool holder		ISO40 (BT40 / HSK-A63)	ISO40 (BT40 / HSK-A63)

EMCO MAXXMILL

MAXXMILL 400



Highlights

- 5-sided machining in a single set-up
- Top thermostability
- Top machining precision
- Modern moving column concept
- Massive swivel-rotary table with ø 400 mm provides high stability and precision

Technical data		MAXXMILL 400
Travel X / Y / Z	mm (inch)	350 / 250 / 300 (13.8 / 9.8 / 11.8")
Rapid motion speed X / Y / Z	m/min (ipm)	30 / 30 / 30 (1181 / 1181 / 1181")
Tool magazine	spaces	20 (30, 50)
Table diameter	mm (inch)	Ø 400 (15.7")
Table load	kg (lb)	80 (176.3)
Speed range	rpm	50 – 12000 / 24000
Drive power	kW (hp)	7 (9.4) / 16 (21.5)
Tool holders		20 (30, 50) ISO30, 30 (50) HSK-A40

EMCOMILL

EMCOMILL 350 / 750 / 1200

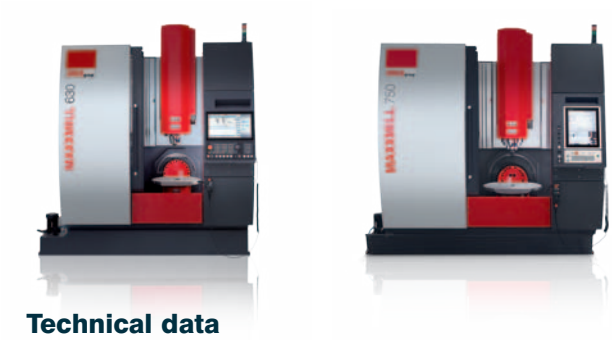


Highlights

- High-performance milling spindles
- Flexible tool system
- Large work area and wide machine doors
- Solid fixed table for workpiece weights up to 1500 kg
- State-of-the-art control technology from SIEMENS and FANUC
- Large number of options
- Best price-performance ratio

Technical data		E350	EM750	EM1200
Travel X / Y / Z	mm (inch)	350 / 250 / 300 (13.8 / 9.8 / 11.8")	750 / 610 / 500 (29.5 / 24 / 19.7")	1200 / 610 / 500 (47.2 / 24 / 21.6")
Rapid motion speed X / Y / Z	m/min (ipm)	24 / 24 / 24 (945 / 945 / 945)	30 / 30 / 30 (1,181.1 / 1,181.1 / 1,181.1)	30 / 30 / 30 (1,181.1 / 1,181.1 / 1,181.1)
Clamping area	mm (inch)	500 x 300 (19.7 x 11.8)	900 x 650 (35.4 x 25.6")	1300 x 650 (51.2 x 25.6")
Table load	kg (lb)	100 (220.5)	800 (1764)	1500 (3307)
Speed range	rpm	50 – 10000	50 – 12000 / 15000	50 – 12000 / 15000
Drive power	kW (hp)	7 (9.4)	15 / 20 (20,8 / 26,8)	15 / 20 (20,8 / 26,8)
Tool magazine	spaces	20	30 (40/60)	30 (40/60)
Tool holders		SK 30 DIN 69871	ISO40 (BT40, HSK-A63)	ISO40 (BT40, HSK-A63)

MAXXMILL 630 / 750



Highlights

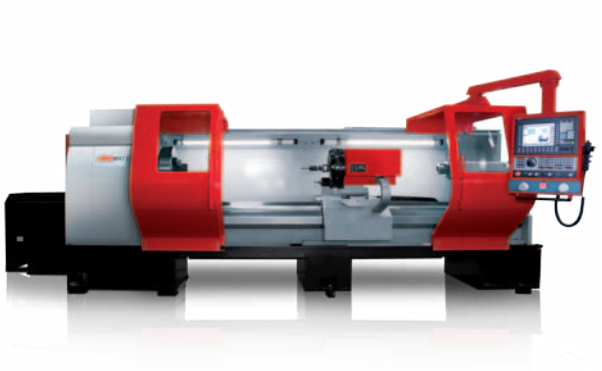
- 5-sided machining in a single set-up
- Top thermostability
- Top machining precision
- Modern movin column concept
- Compact machine design
- State-of-the-art control technology from Siemens or Heidenhain
- Extensive options such as water-cooled motor spindle with 15000 rpm
- Optimal chip removal
- Attractive price-performance ratio

Technical data		MAXXMILL 630	MAXXMILL 750
Travel X / Y / Z	mm (inch)	500 / 460 / 450 (19.6 / 18.1 / 17.7")	750 / 610 / 500 (29.5 / 24 / 19.6")
Rapid motion speed X / Y / Z	m/min (ipm)	30 (1181.1)	30 (1181.1)
Tool magazine	spaces	30	30 / 40 – 60
Table diameter	mm (inch)	630 x 500 (24.8 x 19.6")	750 x 600 (29.5 x 19.6")
Table load	kg (lb)	200 (440.9)	300 (661.3)
Speed range	rpm	50 – 12000	50 – 12000
Drive power	kW (hp)	15 (20)	15 (20)

[Turning & Milling] conventional

EMCOMAT

EMCOMAT E-360 / -400



Highlights

- Stable machine construction
- Easy to operate
- Maximum flexibility
- Easy to maintain
- Ergonomic operation
- Cycle control with teach-in functionality
- High operating safety

E-200 MC / EM-17 D





Technical data		E-360 / 400	E-200 MC	EM-20 D	EM-17 D	EM-14 D
Center height	mm (inch)	380 / 430 (15.0 / 16.9")	200 (7.9")	200 (7.9")	170 (6.7")	140 (5.5")
Distance between centers	mm (inch)	2000 / 4000 / 6000 (78,7/157.5/236.2")	1000 (39.4")	1000 (39.4")	700 (27.6")	650 (25.6")
Spindle bore	mm (inch)	153 (6.0")	53 / 50 (2.1 / 2.0")	50 (1.9")	50 (1.9")	40 (1.5")
Chuck Ø	mm (inch)	500 (19.7")	200 (7.9")	200 (7.9")	200 (7.8")	140 (5.5")
Gear steps		2	1	4	4	2
Speed range	rpm	0 – 1200	50 – 4000	40 – 3000	40 – 3000	60 – 4000
Drive power	kW (hp)	33 (44.2)	7.5 (10.0)	5.3 (7.1)	5.3 (7.1)	7.5 (10.0)
Digital Readout				EMCO	EMCO	EMCO
Control		SIEMENS 840D sl FAGOR 8055i	Sinumerik 828D			

EMCOMAT

EMCOMAT FB-600 MC





Highlights

- Retractable workspace for optimum accessibility
- Operation with the door open as manual machine
- In automatic mode, with closed Workspace guard
- Max. table load of 300 kg
- With Sinumerik 828D or Heidenhain TNC620
- Made in the Heart of Europe

FB-450 MC / FB-3 L





Technical data		FB-450 / FB-600 with position display	FB-450 MC / FB-600 MC	FB-3 L
Travel X	mm (inch)	450 / 600 (17.7 / 23.6")	450 / 600 (17.7 / 23.6")	300 (11.8")
Travel Y	mm (inch)	350 / 400 (13.7 / 15.7")	350 / 400 (13.7 / 15.7")	200 (7.9")
Travel Z	mm (inch)	400 (15.7")	400 (15.7")	350 (13.7")
Clamping area	mm (inch)	800 x 400 (31.5 x 15.7")	800 x 400 (31.5 x 15.7")	600 x 200 (23.6 x 7.9")
Gear steps/control		1	1	8 / mechanical
Speed range	rpm	10 – 5000	10 – 5000	80 – 2200
Drive power	kW (hp)	10 / 13 (13.4 / 17.4)	10 / 13 (13.4 / 17.4)	1.4 (1.8)
Position display				Heidenhain
Control		Heidenhain, Sinumerik 828D	Heidenhain, Sinumerik 828D	

EMCO CONCEPT TURN

CONCEPT TURN 460 / 260



Highlights CT 460 / CT 260

- CNC training at industrial level
- Interchangeable WinNC control
- High machining accuracy
- 12-station tool turret
- Driven tools
- C-axis
- Profile rail guides
- Digital drive technology
- Industrial-level performance
- Extremely high thermostability
- Wide range of automation options
- Speed range max. 6300 rpm

Highlights CT 105 / CT 60

- Compact CNC machine
- Essential functions of an industrial machine
- 8-station tool changing system
- Slant-bed design
- Fully enclosed work area
- Wide range of automation options

CT 105 / CT 60



Technical data		CT 460	CT 260	CT 105	CT 60
Swing Ø over bed	mm (inch)	430 (16.9")	250 (9.8")	180 (7.1")	130 (5.1")
Max. turning diameter	mm (inch)	220 (8.7")	85 (3.3")	75 (2.9")	60 (2.4")
Distance between centers	mm (inch)	670 (26.3")	405 (15.9")	236 (9.3")	335 (13.2")
Travel X / Z or X / Y / Z	mm (inch)	160 / 510 (6.3 / 20.1")	100 / 300 (3.9 / 11.8")	55 / 172 (2.2 / 6.7")	60 / 280 (2.4 / 11.0")
Rapid motion speed in X / Z	m/min (ipm)	24 / 30 (944.9 / 1181.1)	15 / 24 (590.5 / 944.9)	5 (196.85)	3 (118.1)
Main drive	kW (hp)	13 (17.4)	5.5 (7.4)	1.9 (2.55)	1.1 (1.5)
Speed range	rpm	0 – 6300	60 – 6300	150 – 4000	300 – 4200
Tools/driven		12 / 6	12 / 6	8 / 0	8 / 0

EMCO CONCEPT MILL

CONCEPT MILL 260



Highlights CM 450 / CM 260

- CNC training at industrial level
- Interchangeable WinNC control
- 20-station tool changing system
- Wide range of automation options
- Optimal view despite fully enclosed work area
- Dividing attachment as fourth axis
- optional: nc tilting rotary table as 4th and 5th axis
- Profile rail guides
- Digital drive technology

Highlights CM 105 / CM 55

- Compact CNC machine
- Essential functions of an industrial machine
- Optimal view despite fully enclosed working area
- CM 55 with 8-station tool changing system (optional)
- CM 105 with 10-station tool turret
- Engraving spindle attachment (optional)
- Dividing attachment as 4th axis

CM 105 / CM 55

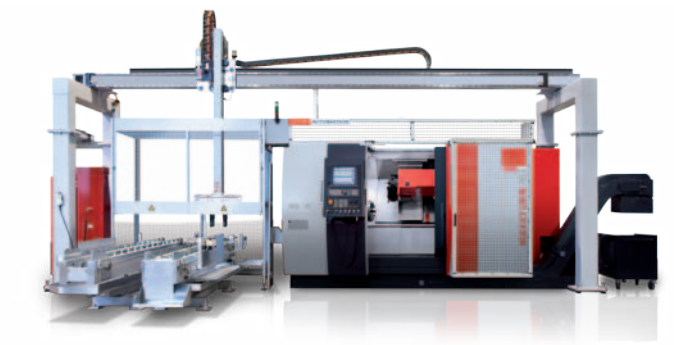


Technical data		CM 260	CM 105	CM 55
Travel X / Y / Z	mm (inch)	350 / 250 / 300 (13.8 / 9.8 / 11.8")	200 / 150 / 250 (7.9 / 5.9 / 9.8")	190 / 140 / 260 (7.5 / 5.5 / 10.2")
Rapid motion speed X / Y / Z	m/min (ipm)	24 (944.9)	5 (196.8)	2 (78.7)
Main drive	kW (hp)	6.8 (9.11))	1.1 (1.47)	0.75 (1.0)
Speed range (option)*	rpm	150 - 10000	150 – 5000 (20000)*	150 – 3500 (14000)*
Number of tools		20	10	8

[Automation]

GANTRY LOADER

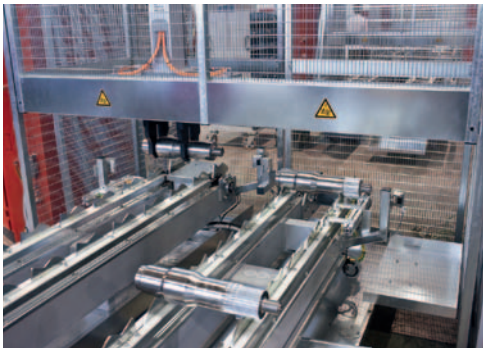
GANTRY LOADER MT 95 / 110 / Hyperturn 110



Profile

The EMCO loading gantry solution provides maximum flexibility in terms of weight and machine size. It allows the integration of various automated systems such as a shaft conveyor, circulating magazine, robot, or measurement station. This enables various combinations of minimally staffed complete solutions to be implemented in line with customer requirements.

Finished parts conveyor



Technical data:

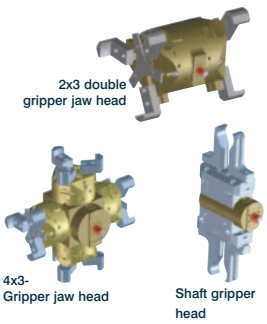
Traverse speed			
Horizontal	80 m/min / (3150 ipm)	Vertical	40 m/min / (1575 ipm)
Application example: Maxxturn 95			
Workpiece dimensions for flanged parts		Workpiece dimensions for shaft parts	
Max. diameter	250 mm (9.8")	Max. diameter	180 mm (7.1")
Max. length	100 mm (3.9")	Max. length	800 mm (31.5")
Max. weight	25 kg (55.1 lb)	Max. weight	150 kg (330.7 lb)

GANTRY LOADER

EMCO GANTRY LOADER



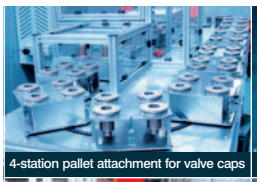
Gripper heads



Profile

Manufacturing processes can be significantly shortened with the EMCO gantry loader - a decisive contribution to increasing economic viability. They are well coordinated to the respective machines, thereby producing a harmonious, highly productive system.

Pallet attachments


4-station pallet attachment for valve caps


6-station pallet attachment for joint yokes


20-station pallet magazine with customer-specific removable pallets


20-station pallet magazine with customer-specific removable pallets

Technical data

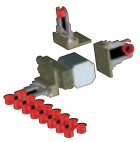
Traverse speed		Workpiece dimensions 4 x 3 gripper jaws	
Horizontal	120 m/min (4724 ipm)	Diameter max.	120 mm (4.7")
Vertical	60 m/min (2362 ipm)	Length max.	100 mm (3.9")
		Weight max.	5 kg (11.0 lb)
Workpiece dimensions 2 x 3 Gripper jaws		Workpiece dimensions 2 x 2 Gripper jaws	
Diameter max.	220 mm (8.7")	Diameter max.	100 mm (3.9")
Length max.	100 mm (3.9")	Length max.	300 mm (11.8")
Weight max.	10 kg (22.0 lb)	Weight max.	10 kg (22.0 lb)

SWING LOADER

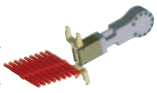
EMCO SWING LOADER



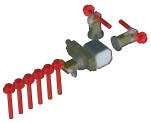
Grippers



Parallel grippers with rotary module for loading flange parts (1st and 2nd chucking)



2-finger toggle lever grippers for loading shaft parts



2-finger grippers with rotary module for loading vertically fed blanks

Profile

The swing loader is a universal loading device for all types of pre-formed parts. A large variety of gripper and handling systems enables highly individual coordination of the system to the respective operating requirements.

Blank feed systems



Chain feeding system for loading blanks with the correct orientation



Multiple infeed chutes for loading rotationally-symmetrical blanks



Chain feeding system with V-supports for preformed shaft parts of various shapes

Technical data

Motion speed		2-finger toggle lever grippers	
Horizontal	60 m/min (2362 ipm)	Diameter max.	ca. 30 mm (1.1")
Swing movement	180°/sec	Length max.	ca. 200 mm (7.8")
		Weight max.	2 kg (4.4 lb)
Parallel grippers with rotary module		2-finger grippers with rotary module	
Diameter max.	ca. 60 mm (2.3")	Diameter max.	ca. 60 mm (2.3")
Length max.	ca. 100 mm (3.9")	Length max.	ca. 100 mm (3.9")
Weight max.	2 kg (4.4 lb)	Weight max.	2 kg (4.4 lb)

BAR LOADER

EMCO TOP LOAD 10-65/3300



EMCO SL1200



Profile

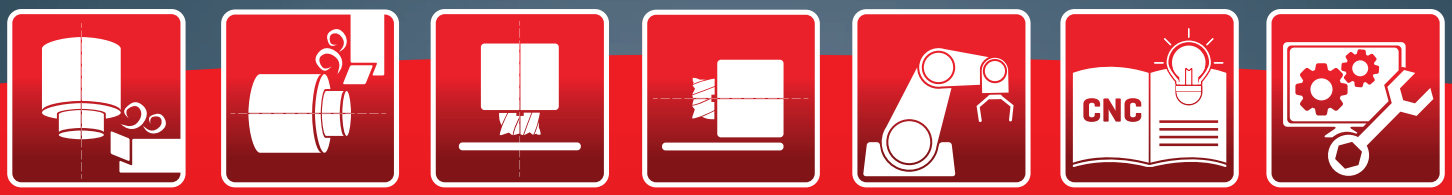
Depending on the space available on site, EMCO can offer either the TOP LOAD for 3 meter bar material or the LM for short bar material. Connection to the respective machine is free-of-charge. A „Plug & Play" solution ex works.

Technical data

		TOP LOAD 4-25	TOP LOAD 8-42	TOP LOAD 10-65	LM800	SL1200
Bar diameter Ø	mm (inch)	4 – 25 (0.1 – 0.9")	8 – 42 (50) (0.3 – 1.65 (1.9"))	10 – 65 (75) (0.3 – 2.5 (2.9"))	6 – 45 (52) (0.2 – 1.8"(2.1))	8 – 95 (0.31 – 3.7")
Max. bar length	mm (inch)	3300 (129.9")	3200 (126")	3200 (126)	800 (31.5")	1200 (47.2")
Min. bar length	mm (inch)	1500 (59.0")	1500 (59.0")	1500 (59.0")	100 (3.9")	150 (5.9")
Material support	mm (inch)	350 (13.7")	350 (13.7")	350 (13.7")	550 (21.6")	550 (21.6")
Feed speed	m/min (ipm)	0 – 100 (0 – 3937)	0 – 30 (0 – 1181)	0 – 30 (0 – 1181)	0 – 60 (0 – 2362)	0 – 60 (0 – 2362)
Bar changing time	sec.	30	70	75	10	15
Dimensions (L x B)	mm (inch)	4390 x 867 (172.8 x 34.1")	4310 x 790 (169.6 x 31.1")	4410 x 1090 (173.6 x 42.9")	1200 x 1100 (47.2 x 43.3")	1700 x 1250 (66.9 x 49.2")
Weight	kg (lb)	1100 (2425)	1200 (2645)	2200 (4850)	330 (727.5)	500 (1102)

emco group

Designed for your profit



EN2801 12/18 Subject to change due technical progress. Errors and omissions excepted.

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