

Big

in every sense.

[EMCO big CNC machines]

Perfection in every dimension



[Power engineering]

Solutions for generations

The importance of renewable forms of energy is continuing to increase against a background of climate debate and the challenging economic situation. Lower environmental impact, contingency for disasters, and increased independence from foreign raw material suppliers are just a few of the many compelling advantages of this industrial sector. EMCO has acquired specific knowledge and processing expertise in this segment through numerous developments relating to large-scale CNC machines.




[Mechanical engineering]

Intelligent production benefits an ever-increasing number of people

The growing world population and associated rise in demand for agricultural products are resulting in increasingly varied requirements being placed on agricultural, forestry, and construction machinery. These machines are characterized by complex workflows, a high level of resilience, long service life, low rates of failure, and the need for only a small number of operators.

Whether heavy roughing, interrupted cutting, or unbalanced clamping – the large-scale guides, bearings, and tool systems in EMCO machines ensure the required level of stability.





[Materials handling equipment]

Raw materials that everyone needs

What links the cosmetics industry, plastics manufacture and the production of road surfaces? They all require raw materials such as oil, gas - both of which are still primary energy sources - or coal, which are extracted using a wide range of materials handling equipment. Whether oil, gas or coal: the raw materials need to be handled efficiently, safely, and systematically to ensure that they can be extracted and used in an optimum manner. A dedicated team of EMCO specialists focuses on the specific requirements of this sector in terms of clamping devices, special tools and parts handling.



[Transport]

Because every yard counts

Airplanes, ships, trucks, and trains ensure maximum mobility and the rapid availability of goods. The use of elevators to carry people and materials also falls within the field of transport, an activity that is gaining in importance because of the need to make optimal use of available space. Whether ship propellers, structural components or pulley wheels for elevators - the significance of mobility and the associated increase in production quantities require clever manufacturing processes. Complete machining with just one or two clamping cycles, a reduction in throughput and wait times, and prevention of the need for follow-on processes are the key factors to success.



[Power engineering]

Big parts need big machines – a simple equation for which EMCO offers a range of high-performance machines.

[EMCOTURN 900]



Main shaft for wind turbine

Main shaft for a wind turbine, installed between the gear assembly and rotor hub

[Highlights]

- Maximum stability
- Robust boxed guide ways
- C axis with 3200 Nm holding torque
- Driven tools

[Key data]

Swing over bed	1050 mm
Turning lengths	2 / 3 / 4 / 5 m
Spindle speed (KK15)	800 rpm
Drive power (KK15)	80 kW

[EMCO HYPERTURN 95/110]



Generator shaft

Generator shaft for power generation in a hydropower plant

[Highlights]

- High-performance turning/milling machine
- 2 dynamic and powerful spindles
- High-performance milling spindle
- Up to 80 tool positions

[Key data]

Swing over bed	720 mm
Turning length	1300 / 1900 mm
Spindle speed (KK8/11)	3500 / 2500 rpm
Drive power (KK8/11)	33 / 52 kW

[EMCO MAXXTURN 110]



Turbine shaft

Turbine shaft for the charging of gas engines

[Highlights]

- Universal turning/milling machine
- 2 base lengths 1500 / 2500 / 3500 mm
- 12-station tool turret VDI50
- NC-controlled tailstock/steady rest

[Key data]

Swing over bed	820 mm
Turning lengths	1560 / 2560 / 3560 mm
Spindle speed (KK11)	2500 rpm
Drive power (KK11)	52 kW

[Materials handling equipment]



[EMCOTURN 900]



Drill bit

Cutter head for oil well drilling

[Highlights]

- Maximum stability
- Robust boxed guide ways
- Special chuck
- NC-controlled tailstock

[Key data]

Swing over bed	1050 mm
Turning lengths	2 / 3 / 4 / 5 m
Spindle speed (KK15)	800 rpm
Drive power (KK15)	80 kW

[EMCOTURN 900]



Valve

Valve housing for natural gas facilities

[Highlights]

- Maximum stability
- Robust flat guides
- Tool turret with CAPTO C8
- NC-controlled tailstock

[Key data]

Swing over bed	1050 mm
Turning lengths	2 / 3 / 4 / 5 m
Spindle speed (KK15)	800 rpm
Drive power (KK15)	80 kW

[EMCO MAXXTURN 110]



Cylinder tubes

Manufacture of hydraulic cylinders for general construction machinery and mining

[Highlights]

- Universal turning/milling machine
- 12-station tool turret VDI50
- Driven tools and C axis
- Water-cooled spindle motor

[Key data]

Swing over bed	820 mm
Turning lengths	1560 / 2560 / 3560 mm
Spindle speed (A2-8)	3200 rpm
Drive power (A2-8)	33 kW



[EMCOTURN 900]



Combine harvester shaft Rotor shaft for combine harvesters

[Highlights]

- Maximum stability
- Robust boxed guide ways
- NC-controlled steady rest
- Tag-along tailstock

[Key data]

Swing over bed	1050 mm
Turning lengths	2 / 3 / 4 / 5 m
Spindle speed (A2-11)	2500 rpm
Drive power (A2-11)	52 kW

[EMCO MAXXTURN 110]



Wheel mount Wheel mount flange for tractors

[Highlights]

- Universal turning/milling machine
- 12-station tool turret VDI50
- Driven tools and C axis
- Y axis with a travel range of 180 mm

[Key data]

Swing over bed	820 mm
Turning lengths	1560 / 2560 / 3560 mm
Spindle speed (KK11)	2500 rpm
Drive power (KK11)	52 kW

[EMCO MAXXMILL 500]



Pump housing Pump housing for hydraulic systems

[Highlights]

- 5-Side-CNC-Milling center for simultaneous 5-axis operation
- Main spindle 11 kW and 34,5 kW
- Tilting-rotary table

[Key data]

Travel in X / Y / Z	650 / 550 / 500 mm
Max. table load	250 kg
X/Y/Z rapid motion speed	30 m/min
Spindle speed	10000 / 15000 rpm



[EMCO Linearmill 600]



Ship propeller
Ship propeller for a luxury liner

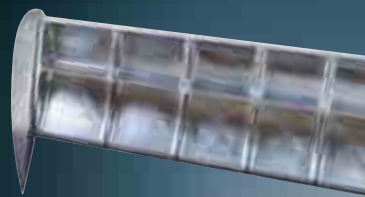
[Highlights]

- Highly dynamic milling center
- 5-axis simultaneous machining
- Linear motors in the linear axes
- Torque motors in the rotation axes

[Key data]

Travel in X / Y / Z	600 / 500 / 500 mm
Max. table load	800 kg
X/Y/Z rapid motion speed	60 m/min
Spindle speed	15000 rpm

[EMCO MMV 2000]



Structural component
Structural component for sports airplanes

[Highlights]

- Vertical moving column milling machine
- 3-, 4- or 5-axes version
- Motor milling spindle 34 kW
- 30-station tool magazine

[Key data]

Travel in X / Y / Z	2000 / 800 / 750 mm
Max. table load	2200 kg
X / Y / Z rapid motion speed	50 m/min
Spindle speed	10000 rpm

[EMCO HYPERTURN 110]



Pulley wheel
Pulley wheel for high-speed elevators

[Highlights]

- High-performance turning/milling machine
- 2 dynamic and powerful spindles
- High-performance milling spindle
- Up to 80 tool positions

[Key data]

Swing over bed	720 mm
Turning length	1300 / 1900 mm
Spindle speed (A2-11)	2500 rpm
Drive power (A2-11)	52 kW

