

[E[M]CONOMY]
means:

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**Made in the Heart of Europe –
at a great price.**

**Vertical turning machine VT 250
with integrated automation**

EMCO VERTICAL VT 250

Designed for heavy-duty machining the VT 250 is equipped with an integrated self-loading system and even though, it gets along with a small foot print. High productivity, high repeat accuracy and good operability are the convincing product features that characterize this machine.

The turning machine has an integrated pick-up system and self loads chuck parts with a diameter of up to 200 mm, thus saving the user the additional costs and programming time involved with the use of an automated unit. It is no longer necessary to align the automated unit with the machine causing downtime.

[Work area]

- Optimal access to the work area ergonomically ideal for operators

[Main spindle]

- Powerful main spindle with high torque for short cycle times

[Control]

- Simple programming and operation thanks to the state-of-the-art control technology
- Sinumerik 828D with Shopturn dialog programming and Sinamics drives

[Automation]

- Quick loading through direct pick-up of raw materials by the conveyer belt using the spindle (pick-up concept)
- Variable automation possible: The conveyer belt is not integrated into the machine

[Tool turret]

- Two independent tool systems: 12-position turret VDI40 with and without milling drive and a multi-functional plate for special tools

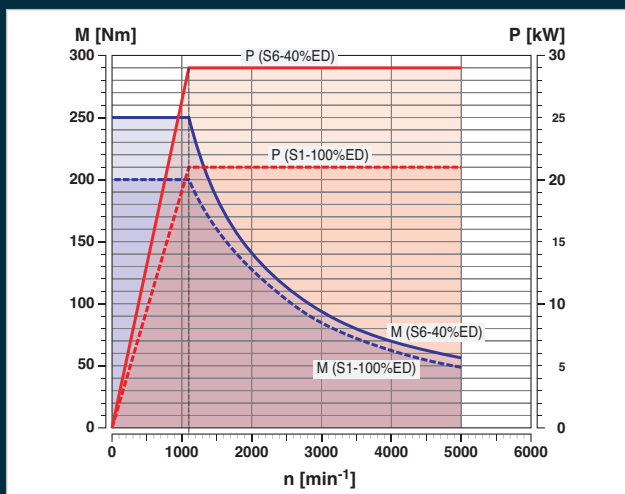
[Chip conveyer]

- Guarantees optimal chip removal
- Chip conveyer (hinge type belt) with integrated coolant device as standard

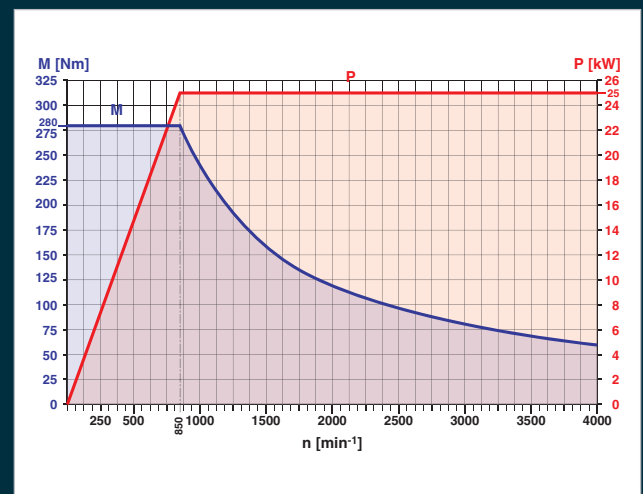


- Machine status lamp
- Coolant pistol
- Oil mist separator
- Electric cabinet air conditioning system
- Linear scales

Power



Hollow spindle motor characteristics



Main spindle characteristics

Versions EMCO Vertical VT 250

EMCO VERTICAL VT 250 – Basic machine without driven tools with belt drive on the main spindle

EMCO VERTICAL VT 250 M – Basic machine with driven tools and belt drive on the main spindle

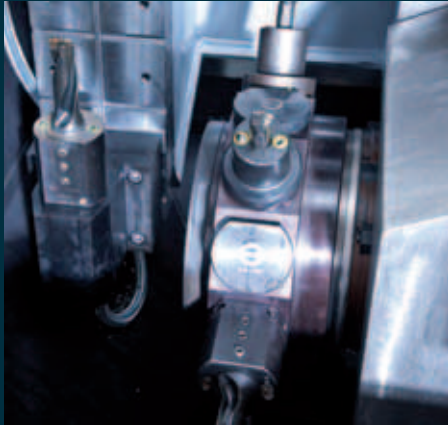
EMCO VERTICAL VT 250 M (ISM) – Basic machine with driven tools and hollow spindle drive

EMCO VERTICAL VT 250 MY (ISM) – Basic machine with driven tools, Y axis and hollow spindle drive

[Engineering]

Highlights

- Designed for heavy-duty machining
- Small footprint
- Integrated self-loading system
- Latest Siemens control unit
- Straight chip fall
- Optional driven tools and Y axis
- Made in the Heart of Europe



The multi-functional plate can be used to mount fixtures for changing the chuck or the spindle or to use long tools like boring bars.



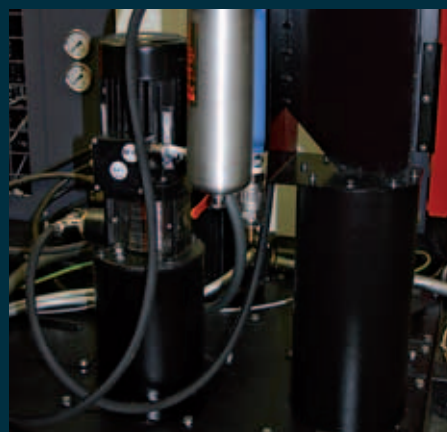
Because of the completely closed work area it is possible to integrate an exhaust system. The oil and water particles are separated from the air. Only clean filtered air can get out of the machine.



The VT250 comes standard with a circulating belt with carrier prisms. According to the customer's request different systems can be adopted (see picture). High flexibility is guaranteed: linking of various machines is possible. Because of the "Pick-up"-System no additional loading system is necessary.



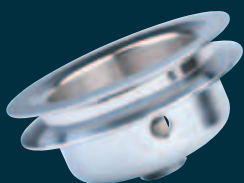
A hinge type chip conveyor comes standard with the machine, ensuring an optimal chip removal during production. The machine doesn't need to be stopped to remove the chips. The coolant device is integrated in the chip conveyor.



The standard coolant system contains a 14 bar pump which gets the coolant via the tool turret to the tool tip. Optional a chip flushing system for cleaning the inside of the machine from chips, a coolant pistol and coolant through the spindle can be added.



The state of the art 828D-control contains the newest functions of the Siemens control surface "Operate". Based on the "solution line technology" the 828D is an ideal solution for 1-channel machines like the VT250. The communication with the control is possible via a USB- or ethernet-interface or SD-card in the face of the control.



V-belt pulley
(Steel)



Wheel hub
(Steel)



Belt pulley
(Steel)

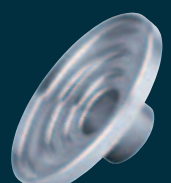
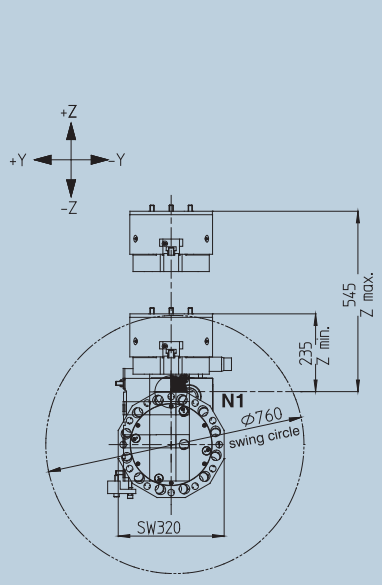
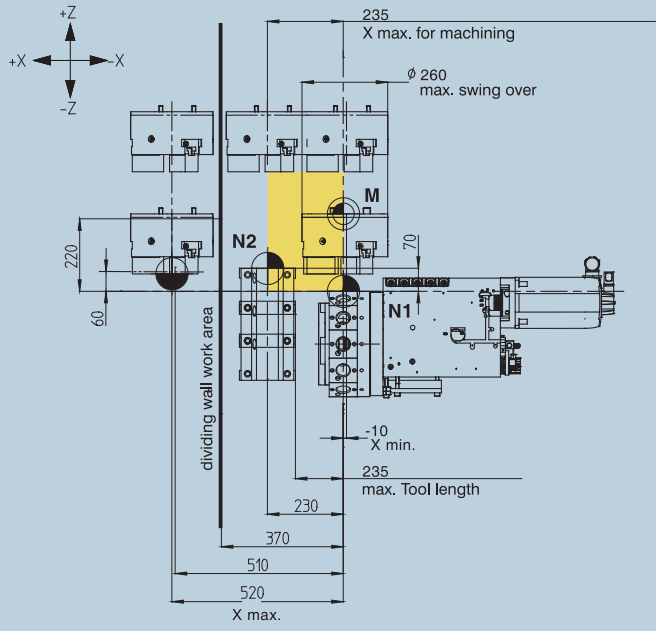


Plate flange
(Steel)

Machine area

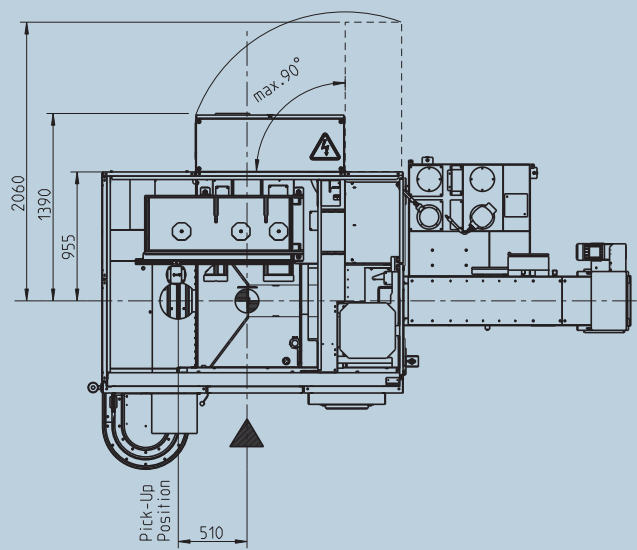
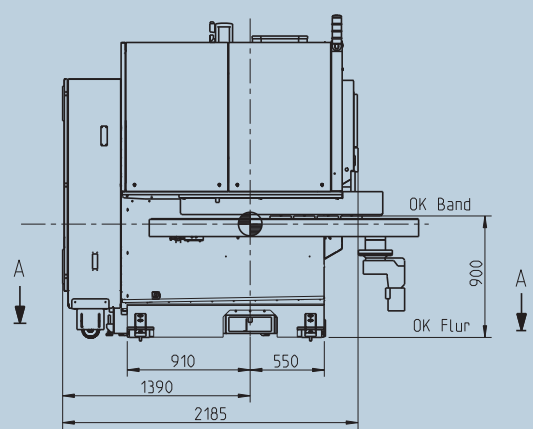
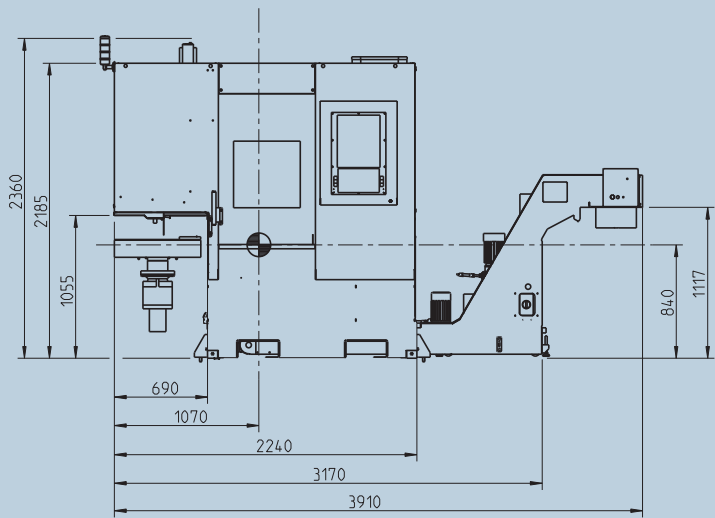


- machine zero point
- tool zero point N1
- tool zero point N2 - multi functional plate (option). Mountable in three positions Z=70; Z=-30; Z=-130
- work piece support on the belt

swing circle on the tool turret

Details in millimeters

Machine layout



Details in millimeter

[Technical data]

emco group

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EMCO VERTICAL VT 250

Work area	
Maximum chuck diameter	250 mm (9.8")
Maximum turning diameter	200 mm (7.9")
Maximum part length	150 mm (5.9")
Travel	
Travel X/Z axis	530 / 310 mm (20.9" / 12.2")
Travel Y axis	+/- 90 mm (+/- 3.5")
Rapid motion speed X / Y / Z	60 / 15 / 30m/min (2362 / 590.5 / 1181"/min)
Main spindle	
Speed range	0-4000 rpm

Main spindle	
Drive power	25 kW (33.5 hp)
Torque	280 Nm (207.2 ft/lbs)
Tool turret	
Number of tool holders	12
Tool shaft according VDI (DIN 69880)	VDI40
Driven tools	12
Speed range	0-4000 rpm
Drive power	8.5 kW (11.4 hp)
Torque	40 Nm (29.6 ft/lbs)



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