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The VSC 250

More speed

The patented construction of the VSC 250 guarantees shortest travels between pick-up station and machining area, leading to optimal reductions in idle times. The machine base in MINERALIT[®] and the twinwall construction are highly effective in dampening any vibrations and guarantee outstanding thermal stability. A large selection of technology modules ensures that the VSC 250 can be configured to suit customerspecific production requirements. The availability of a variety of automation components guarantees easy integration of the machine into production lines.





EMAG





Maximum speed. Highest precision. efinitive production!

The advantages of the VSC 250

- · Extremely short travels, resulting in short workhandling times
- Customer choice of Z-axis with hydrostatic or linear motion guideway
- Optimal accessibility
- Operating the machine from the front helps to reduce the footprint
- All accuracy defining machine modules are fluid-cooled
- · Safe, wear resistant, maintenance-free machine guard



VLC 250

EMAG

Greater flexibility. Improved performance.

The VLC 250 has been specially designed for the application of different manufacturing technologies. A high degree of flexibility and powerful technology modules ensure that the greatest variety of workpieces can be manufactured efficiently. Turning, drilling, milling, grinding, + automation + measuring. Giving access to the optimally suitable machining technology – every time!

The machine		VLC 250
Chuck diameter	mm	250 / 315
Swing diameter	mm	350
Workpiece diameter, max.	mm	250
Travel in X, max.	mm	1,600
Travel in Z	mm	300
Travel in Y (optional)	mm	± 100

VLC 250





The advantages of the VLC 250

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- Multi-functional manufacturing system: turning, drilling, milling, grinding, gear cutting, laser applications and other processes
- Laterally arranged machining area, for optimal ease of operation and accessibility
- Complete-machining in a single setup eliminates clamping errors
- High degree of process integrity through integrated measuring
- Standardised automation modules guarantee a high degree of flexibility and a small footprint
- Ideal chip flow conditions, with chips falling to the bottom
- The compact design makes for a small footprint



VTC 315 Cost Killer

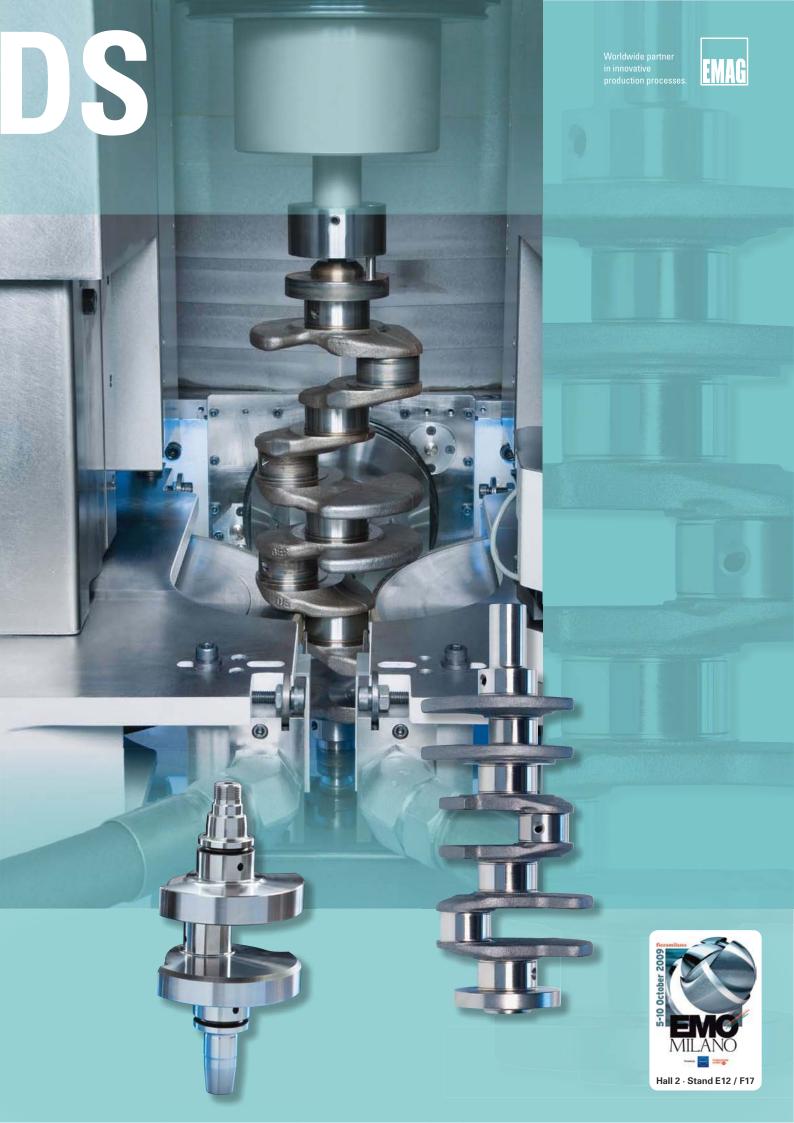
Synchronous support grinding is the first process to combine flexibility and high output rates in the grinding of crankshafts. Here, two opposing CBN grinding wheels simultaneously machine the same sector of a workpiece. This eliminates both axial and tangential forces and allows for extremely high feedrates. The result is a noticeable grinding time reduction of up to 50% over conventional grinding methods, which – in turn – leads to a significant lowering of the machining costs. A true cost killer, nothing less!

EMAG VTC 315 DS

The advantages:

- Two grinding wheels machine the same crankshaft bearing simultaneously
 - → force-free machining at very high feedrates
- No deflexion of the workpiece
 - \rightarrow no interminable finishing times and spark-out periods
- Post-process instead of in-process measuring of the diameter
- No time consuming whetting of the steady rest seat
- Centric grinding of the pin bearings, with the shaft clamped eccentrically
 - → a simple cylindrical grinding operation
- · Simultaneous grinding of the thrust bearing shoulders

Capacity		VTC 315 DS
Swing diameter of crankshaft, max.	mm	200
Workpiece length, max.	mm	650
Grinding wheel dia.	mm	540
Workpiece weight, max.	kg	30





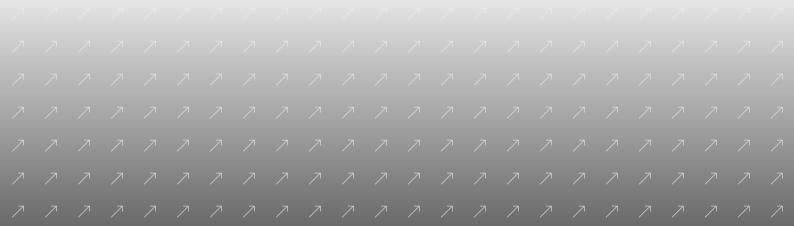


to the EMO in Milan from 5th to 10th October 2009

Hall 2 · Stand E12 / F17

At the EMO in Milan the EMAG Group will present their latest developments in the machining of precision metal components. Whether you are interested in turning, drilling, milling, grinding or gear cutting, see live how you can raise your efficiency levels.

We are looking forward to your visit!







UNIVERSAL, FAST,



With its fully automated K 300 Universal Gear Hobbing Machine KOEPFER succeeded in soft finish-hobbing a pump pinion of module 4.0, quality class 6 to DIN 3960/-62. This dispenses with the need to shave the gear profile. The result: the new investment is halved. The high degree of precision achieved on the K 300 Gear Hobbing Machine with its nine activated CNC axes is – last but by no means least – the result of the machine base in wet-mix aggregate, featuring motion guideways in all linear axes. The closed-loop frame construction ensures highest possible rigidity of tailstock and work spindle, even under the greatest possible clamping and machining forces. Furthermore, the diagonal positioning of the milling head offers ideal chip flow conditions for both dry and wet machining.

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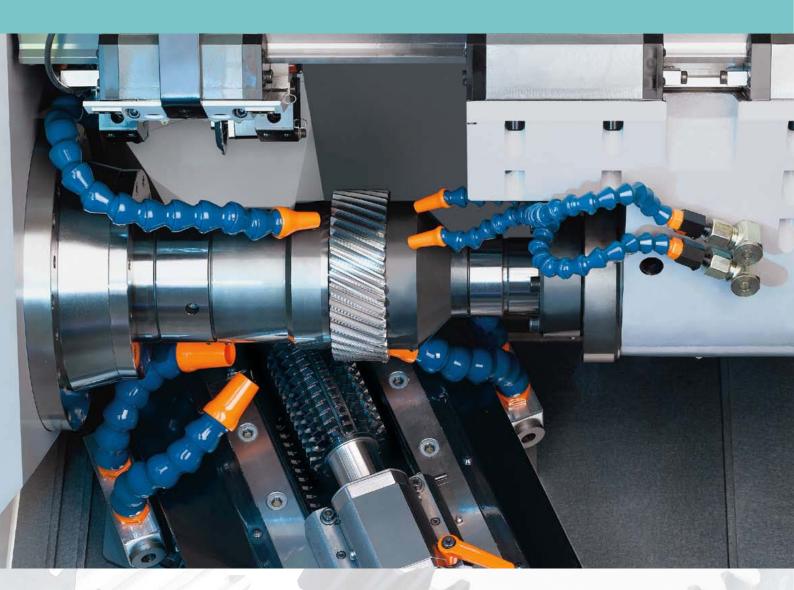
Capacity		KOEPFER 300
Module, max.	mm	4
Workpiece dia., max.	mm	140 / 195
Hobbing length, max.	mm	300
Workpiece length, max.	mm	300 / 500
Hob width, max.	mm	200
Shift travel	mm	160
Main spindle speed	1/min	800
Hobbing speed	1/min	2,000 / 4,000



PRECISE

Worldwide partner in innovative production processes.









MAKING AN IMPRESSION.

The RD 430, for the machining of impression cylinders of up to 3,000 mm length and 1,000 mm diameter. This twinhead grinder features two independent grinding units. Linear motors and hydrostatic guideways in all axes make for high output rates and outstanding quality. What is better still is that the RD 430 complete-machines impression cylinders in a single set-up: lateral surface and transition edge. Once wear is detected on the grinding wheel, it is automatically dressed using diamond dressing rolls. An in-process absolute measuring device will also detect non-continuous surfaces. And thus we have quality assurance built in!

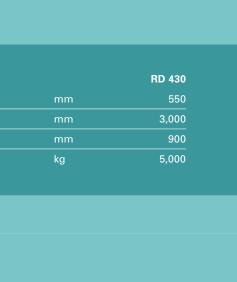




The advantages of the RD 430

- Cutting speed with corundum grinding wheels: max. 60 m/s
- Cutting speed with CBN grinding wheels: max. 125 m/s
- Contour accuracy is in the μm range
- Complete-machining in a single set-up
- In-process measuring, with automatic logging of the machining results

Capacity		RD 430
Centre height, max.	mm	550
Workpiece length, max.	mm	3,000
Wheel dia.	mm	900
Workpiece weight, max.	kg	5,000







The new Medium Class at SW. EMO Premiere.

Similar to a medium class car, the new BA 322 convinces by its productivity levels and its energy efficiency and resource conservation. This is supported by, among other features, the box-in-box design that ensures a lowering of the moving mass. The vertical axis, which dominates the design, features a pneumatic weight compensation system with generously dimensioned reservoir and a maximum degree of compensation. This guarantees an almost 100% energy recovery. New feed drives work at speeds much

> lower than before. This not only reduces energy consumption and noise emission during acceleration, but also – owing to a lower temperature growth across the whole system – noticeably increases the life expectancy of the ball screws. With the option to expand the BA 322 to allow for the 5-axes machining of smaller and medium size workpieces in steel, cast iron and light alloys, the machine – with its two horizontal spindles – covers an even wider

range of workpiece dimensions and geometries.

The machine		BA 322
X-axis	mm	300
Y-axis (alternative)	mm	450 (725)
Z-axis/axes	mm	375
Distance between spindles	mm	300
Work spindles		
Speed range	rpm	1 – 17,500
Power rating	kW	2 x 32
Torque	Nm	2 x 72
Feed drive		
Rapid traverse speed X / Y / Z	m/min	65 / 75 / 75
Axis acceleration X / Y / Z	m/s²	10 / 10 / 15
Feed force, max. X / Y / Z	N	8,000











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