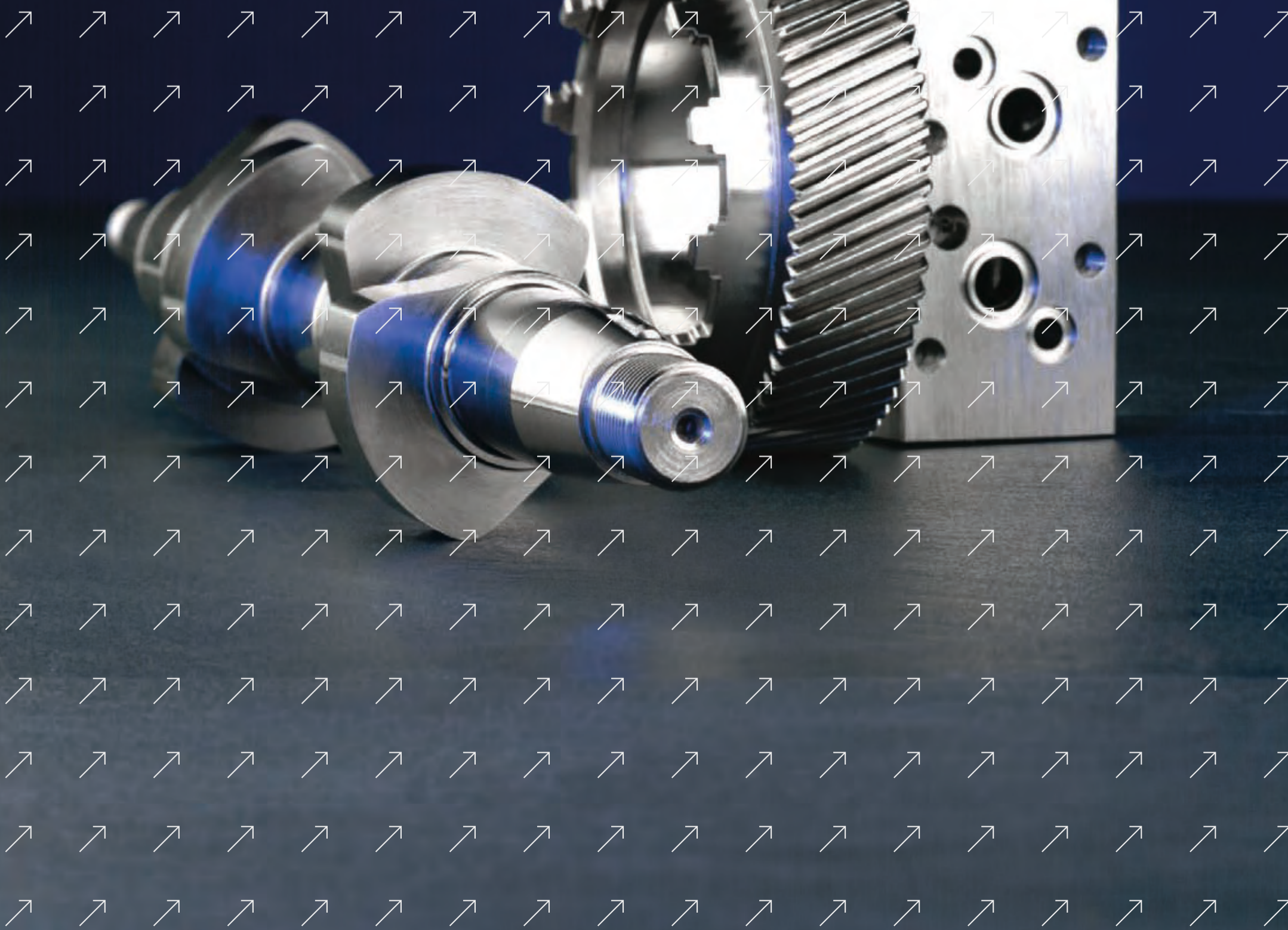
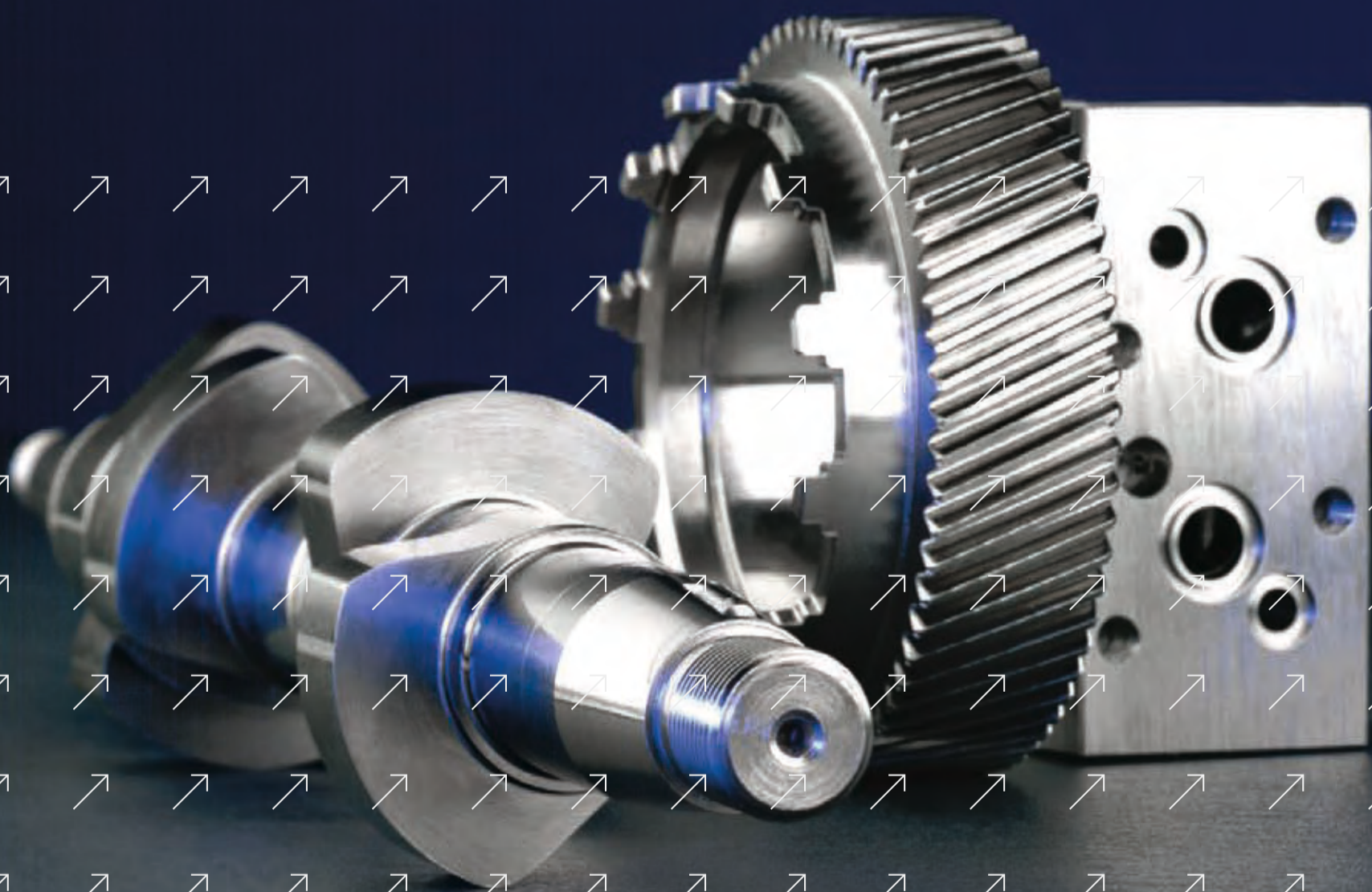


**EMAG**

GB

# news

**REINECKER  
KARSTENS  
KOPP  
NAXOS-UNION  
SW  
KOEPPER  
LASER TEC**





# VTC 250

The principle of scroll-free turning, developed by EMAG, opens up new avenues in hard finishing. Scroll-free turning is a very fast process – about 5 to 6 times faster than other hard turning processes and about 5 to 8 times faster than conventional grinding. It also makes for a superb surface finish, with no signs of scrolling. Surfaces that had to be ground before can now be scroll-free turned. The challenge for the machine builder is to provide a machine that is dynamically as well as statically rigid. The vertical pick-up machines from EMAG offer optimal preconditions to meet this challenge.

## TURNING IS FAST – SCROLL



The advantages of the EMAG scroll-free turning technology:

- a turning process that avoids leaving scroll marks
- surfaces that had to be ground before can now be turned
- 5 to 8 times faster than conventional grinding
- 5 to 6 times faster than other hard turning processes
- short machining times result in high output rates
- dry machining
- low capital investment



Worldwide partner  
in innovative  
production processes.



**-FREE TURNING IS FASTER**





# VSC 7

**The VSC 7.** Vertical turning machine for large chucked components: turning + automation integrated in a single machine. The VSC series is known for its outstanding productivity rates, its extremely high, constantly maintained accuracy, a high degree of operational safety and for its ease of operation.

Other outstanding characteristics of the machines include a successful combination of sophisticated technology and highest quality on the one hand and low capital investment, minimal footprint and optimal economic viability in production on the other.

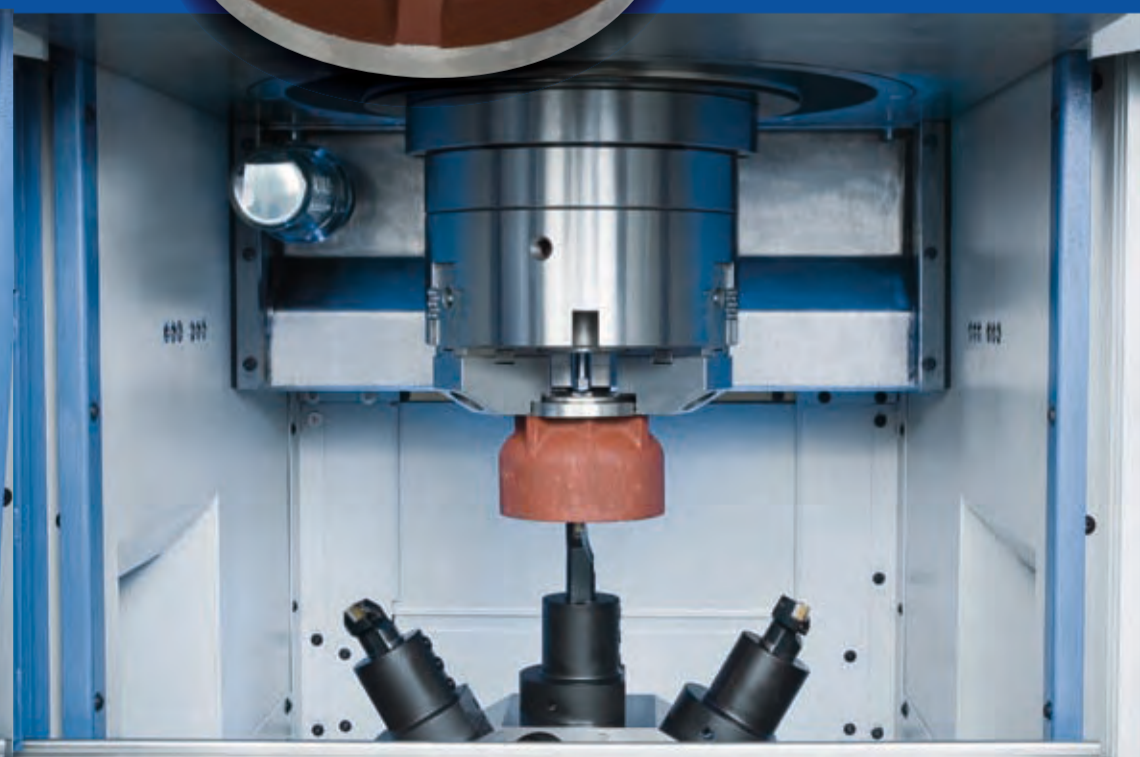
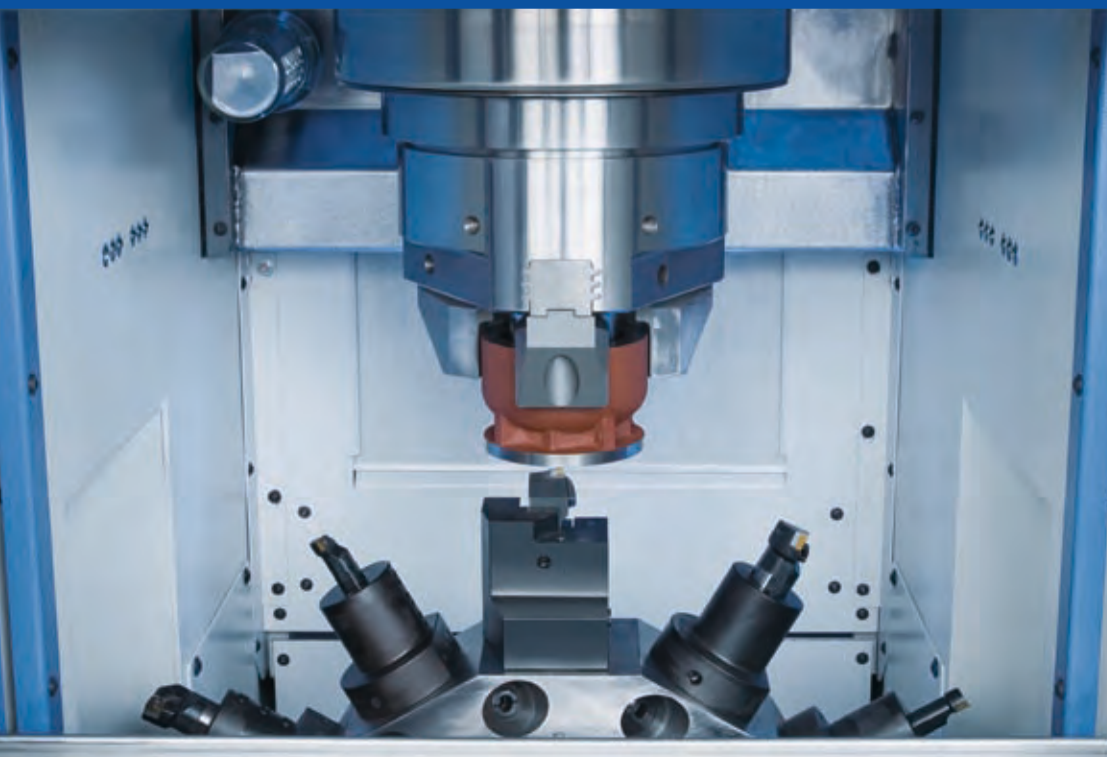
The VSC 7 is equipped with a recirculating workpiece storage conveyor that ensures the machine can load and unload itself with the aid of its pick-up spindle. No matter whether the operator is taking a break, or whether the shift is changing – the VSC 7 continues to produce.



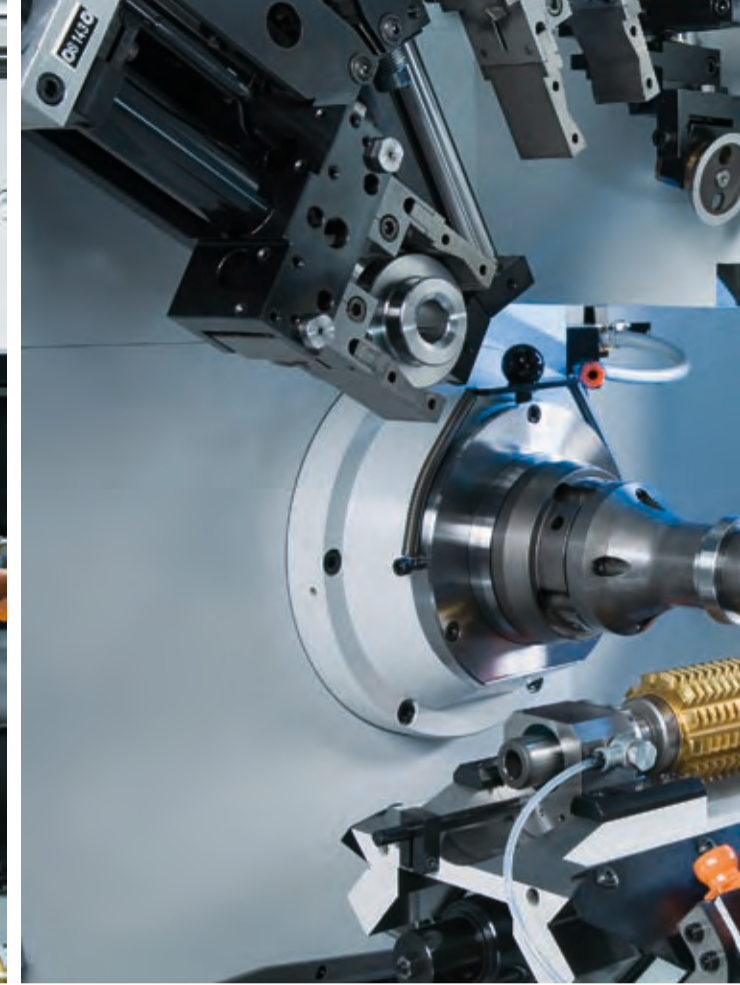
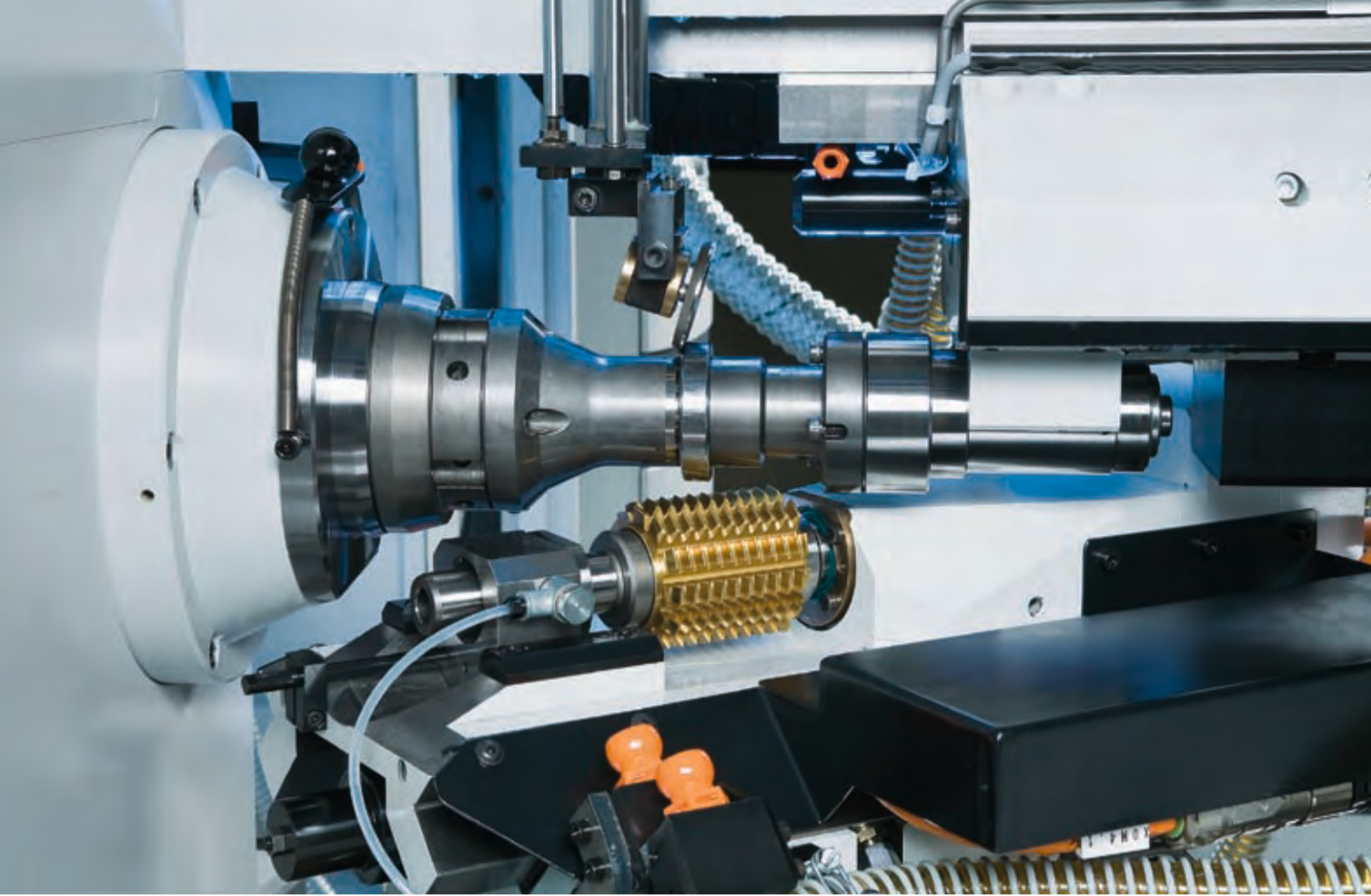
<b>The machines</b>		<b>VSC 7</b>
Chuck dia.	mm	400
Swing dia.	mm	420
Workpiece dia.	mm	340
X-/Z-axis travels	mm	850 / 315
<b>The workpiece</b>		
Material		GG25 / GG30
Variants		18
Tools	to ISO standard, with VDI 50 interface	



Worldwide partner  
in innovative  
production processes.







# SOFT AND HARD

Capacity		KOEPFER 200
Module, max.		3
Workpiece dia., max.	mm	120 / 180
Milling length, max.	mm	200
Workpiece length, max.	mm	300
Width of milling hob, max.	mm	130 / 100 / 63
Shift	mm	100 / 70 / 40
Main spindle speed	rpm	270 / 450 / 1,000
Speed of milling hob	rpm	2,000 / 3,000 / 5,000

## The sample application:

With the K 200 you can, on the same machine, soft pre-mill spur gears and worms and, following case hardening, hard-finish them using the skiving process; or even hob the profile into the hardened material (up to max. 54 HRC). The advantage: highest quality at shortest cycle times!







Worldwide partner  
in innovative  
production processes.



# K 200

## ON THE SAME MACHINE

**The K 200** – for the manufacture of gear modules 0.3 to 3. The newly developed milling head and corresponding software allow for the milling of every gear geometry that can possibly be generated with a milling hob: soft milling – axial and radial milling of spur gears and pinions, or radial and tangential milling of worm gears – and hard machining on a single production tool.

The K 200 is equipped with a new universal, shifting milling head – a milling head that is extremely efficient, pretty small and designed especially for the hobbing of spur gears and the milling of single- and multi-start worms. Its compact design allows for the head to be swung below the tailstock, thus making it possible to mill the worms.







# 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 twin-head 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!





Worldwide partner  
in innovative  
production processes.



## 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  $\mu\text{m}$  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



# RD 430

# RD 430

# RD 430

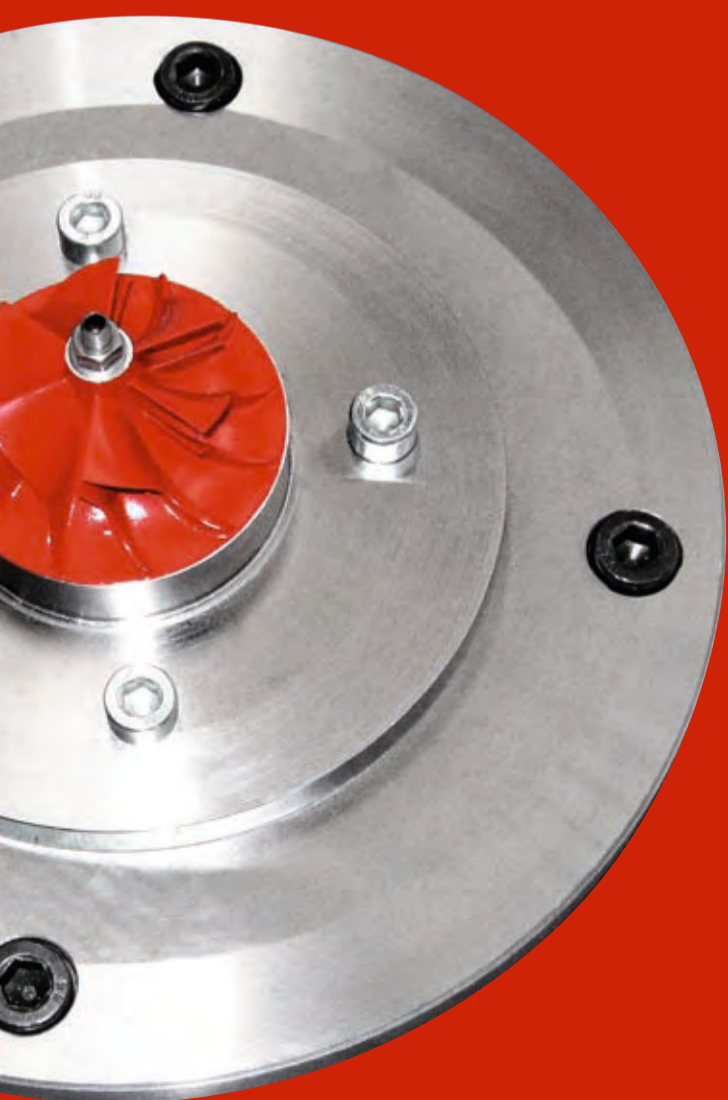




# Small Parts –

**The BA S03** – a very impressive, highly dynamic package. With spindle speeds of up to 42,000 rpm and linear axis speeds of max. 75 m/min this machining center is predestined for the two-spindle, 5-axis machining of small light metal components. Highest quality over many years is guaranteed by the optimal force distribution between 3-axis unit and workpiece and the extreme rigidity provided by the monobloc closed on three sides.

The fourth and fifth axes with absolute measuring systems and the fast, low-wear torque motors ensure the machine's longevity. The sprung-loaded, collision-monitored tool magazine houses up to 64 tools, to cover the most extensive applications. The BA S03 – highest output on a minimal footprint.



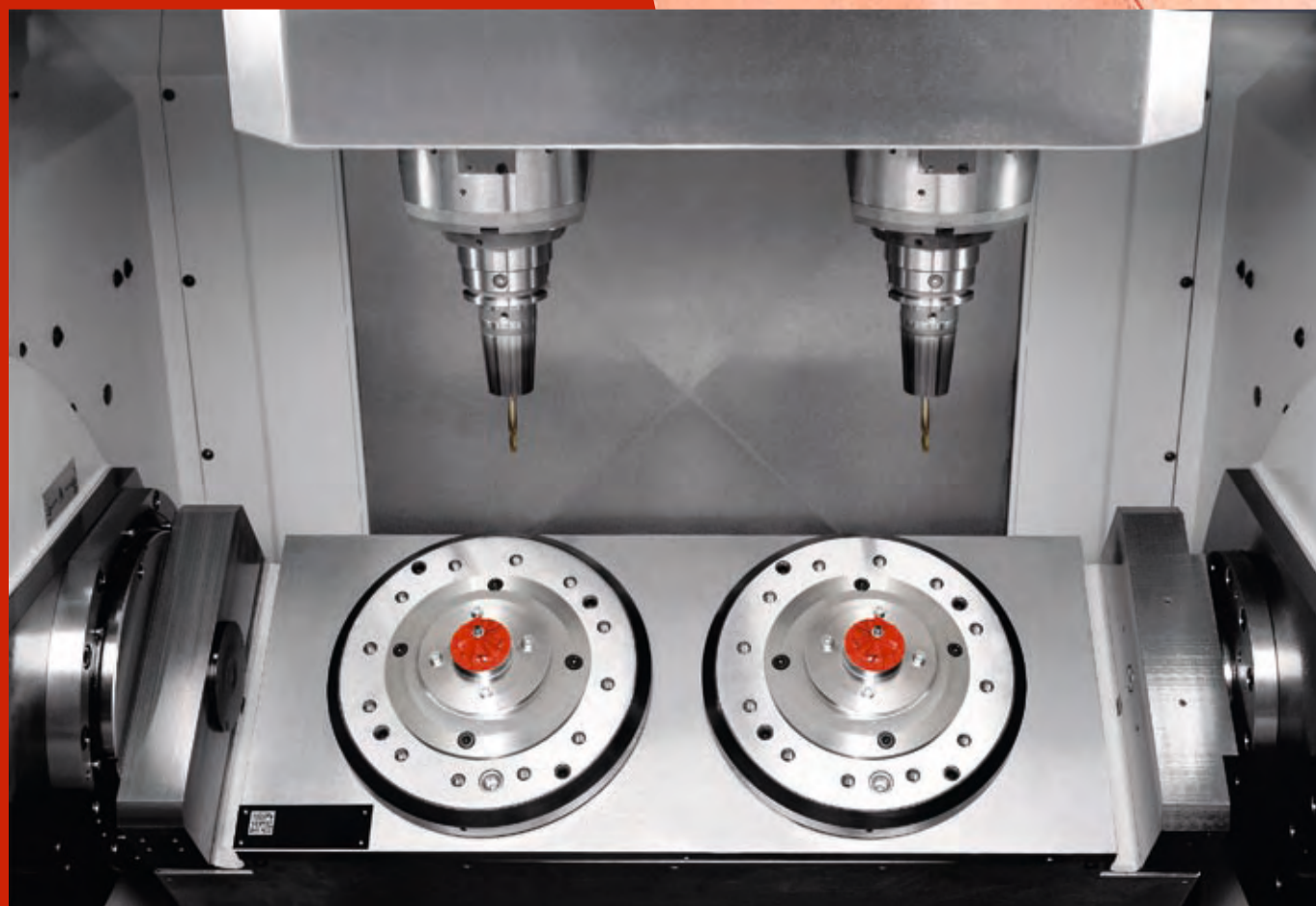


Worldwide partner  
in innovative  
production processes.



# High Speed

The machine		BA S03-22
X-axis	mm	300
Y-axis (alternative)	mm	400 (650)
Z-axis/axes	mm	400
Distance between spindles	mm	300
<b>Work spindles</b>		
Speed range	rpm	1–42,000
Power (at 40% duty cycle)	kW / rpm	2 x 12 / 15,000
Torque (at 40% duty cycle)	Nm	2 x 7.6
<b>Feed drive</b>		
Rapid traverse speed X / Y / Z	m/min	75
Axis acceleration X / Y / Z	m/s <sup>2</sup>	10
Feed force, max. X / Y / Z	N	4,500







THE EMAG GROUP – WORLD-WIDE PARTNER  
IN FORWARD LOOKING PRODUCTION TECHNIQUES

**EMAG**  
Gruppen-Vertriebs- und Service GmbH

**Salach**  
Austrasse 24  
73084 Salach  
Germany  
Phone: +49 (0)7162 17 0  
Fax: +49 (0)7162 17 820  
E-mail: info@salach.emag.com

**Frankfurt**  
Orber Strasse 8  
60386 Frankfurt/Main  
Germany  
Phone: +49 (0)69 40802 0  
Fax: +49 (0)69 40802 412  
E-mail: info@frankfurt.emag.com

**Köln**  
Robert-Perthel-Strasse 79  
50739 Köln  
Germany  
Phone: +49 (0)221 126152 0  
Fax: +49 (0)221 126152 19  
E-mail: info@koeln.emag.com

**Leipzig**  
Pittlerstrasse 26  
04159 Leipzig  
Germany  
Phone: +49 (0)341 4666 0  
Fax: +49 (0)341 4666 114  
E-mail: info@leipzig.emag.com

**München**  
Zamdorferstrasse 100  
81677 München  
Germany  
Phone: +49 (0)89 99886 250  
Fax: +49 (0)89 99886 160  
E-mail: info@muenchen.emag.com

**Dänemark**  
Horsvangen 31  
7120 Vejle Ø  
Denmark  
Phone: +45 75 854 854  
Fax: +45 75 816 276  
E-mail: info@daenemark.emag.com

**Schweden**  
Glasgatan 19 B  
73130 Köping, Sverige  
Sweden  
Phone: +46 (0)221 40305  
E-mail: info@sweden.emag.com

**Österreich**  
Glaneckerweg 1  
5400 Hallein  
Austria  
Phone: +43 (0)6241 640  
Fax: +43 (0)6241 26204  
E-mail: info@austria.emag.com

**Polen**  
Spółka Z Ograniczoną Odpowiedzialnością  
Oddział w Polsce  
Miodowa 14  
00-246 Warszawa  
Phone: +48 (0)22 53 10 500  
Fax: +48 (0)71 31 37 359

**Belarus**  
ul. Timirjazewa, 65 B, Pom. 78 (K.1101)  
220035 G. Minsk  
Belarus  
Phone: +375 296 205 100  
Fax: +375 17 254 77 30  
E-mail: info@emag.by

**NODIER EMAG INDUSTRIE S.A.**  
Service commercial Unital:  
38, rue André Lebourblanc - B.P. 26  
78592 Noisy le Roi Cedex  
France  
Phone: +33 1 30 80 47 70  
Fax: +33 1 30 80 47 69  
E-mail: info@nodier.emag.com

**EMAG MAQUINAS HERRAMIENTA S.L.**  
Pasaje Arrahona, No.18  
Centro Industrial Santiga  
08210 Barberá del Vallés (Barcelona)  
Spain  
Phone: +34 93 719 5080  
Fax: +34 93 729 7107  
E-mail: info@emh.emag.com

**ZETA EMAG SpA**  
Viale Longarone 41/A  
20080 Zibido S.Giacomo (MI)  
Italy  
Phone: +39 02 905942 1  
Fax: +39 02 905942 21  
E-mail: info@zeta.emag.com

**EMAG (UK) Ltd.**  
Chestnut House,  
Kingswood Business Park  
Holyhead Road  
Albrighton  
Wolverhampton WV7 3AU  
Great Britain  
Phone: +44 1902 376090  
Fax: +44 1902 376091  
E-mail: info@uk.emag.com

**KP-EMAG**  
ul. Butlerova 17  
117342 Moscow  
Russia  
Phone: +07 495 3302574  
Fax: +07 495 3302574  
E-mail: info@kp.emag.com

**EMAG L.L.C. USA**  
38800 Grand River Avenue  
Farmington Hills, MI 48335,  
USA  
Phone: +1 248 477 7440  
Fax: +1 248 477 7784  
E-mail: info@usa.emag.com

**EMAG MEXICO**  
Colina de la Umbria 10  
53140 Boulevares  
Naucalpan Edo. de México  
Mexico  
Phone: +52 55 5 3742665  
Fax: +52 55 5 3742664  
E-mail: info@mexico.emag.com

**EMAG DO BRASIL Ltda.**  
Rua Schilling, 413  
Vila Leopoldina  
05302-001 São Paulo  
SP, Brazil  
Phone: +55 (0)11 3837 0145  
Fax: +55 (0)11 3837 0145  
E-mail: info@brasil.emag.com

**EMAG SOUTH AFRICA**  
P.O. Box 2900  
Kempton Park 1620  
Rep. South Africa  
Phone: +27 11 3935070  
Fax: +27 11 3935064  
E-mail: info@southafrica.emag.com

**EMAG Machine Tools (Taicang) Co., Ltd.**  
Room 2315 B, Far East International Plaza  
No. 317 Xianxia Road  
200051 Shanghai,  
P.R. China  
Phone: +86 21 62 35 15 20  
Fax: +86 21 62 35 01 18  
E-mail: info@china.emag.com

**EMAG INDIA Private Limited**  
#12, 12<sup>th</sup> Main Street, 17<sup>th</sup> Cross  
Malleswaram  
Bangalore - 560 055,  
India  
Phone: +91 80 2344 7498  
Fax: +91 80 2344 7498  
E-mail: info@india.emag.com

**EMAG KOREA Ltd.**  
Lotte IT Castle 1st B/D, Rm 806  
550-1, Kasan-dong  
Kamchun-gu  
South Korea  
Phone: +82 2 2026 7660  
Fax: +82 2 2026 7670  
E-mail: info@korea.emag.com

**TAKAMAZ EMAG Ltd.**  
1-8 Asahigaoka Hakusan-City  
Ishikawa Japan, 924-0004  
Japan  
Phone: +81 76 274 1409  
Fax: +81 76 274 8530  
E-mail: info@takamaz.emag.com

