

PRECISION MANUFACTURING & FINISHING SOLUTIONS

PRODUCT PORTFOLIO



## ALL ABOUT GRINDING

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#### **DELIVERING ULTIMATE PRECISION**



# SURFACE GRINDING ROTARY TABLE GRINDING CYLINDRICAL OD/ID GRINDING



Ziersch grinding machines provide forward-looking manufacturing solutions for both individual and mass production requirements. Made in Germany, Ziersch offers a selection of 22 different machine models. Operated via color touch screen with fully automatic grinding and dressing cycles, achieving a high degree of automation.





SURFACE GRINDING Table sizes from 16 x 10" up to 197 x 87"

**ROTARY TABLE GRINDING** Rotary table dia. 20" / 24" / 31.5" / 40"

CYLINDRICAL OD/ID GRINDING Max. Part dia. 11.8" | 24 / 40" center distance



## THE NEW ART OF GRINDING



# CYLINDRICAL OD/IDGRINDINGPRODUCTIONGRINDINGVERTICALGRINDINGCENTERLESSGRINDINGCARBIDE/PCDGRINDING



A DANOBAT

Three leading brands in precision. DANOBAT & DANOBAT-OVERBECK and Hembrug. Your partner that combines your industry knowledge with our in-house manufacturing expertise to deliver standard and customized precision manufacturing and finishing solutions.



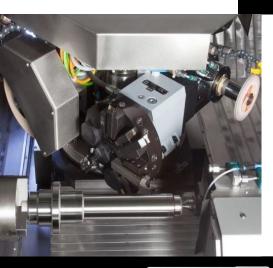
CYLINDRICAL OD/ID GRINDING Diameters up to 63" | Length up to 32' | Weights up to 33'000lbs CENTERLESS GRINDING Diameters up to 13" | Infeed & Through feed Spindle motor up to 110 kW VERTICAL GRINDING Diameters 23" - 177" | Max. Depth 28" | Max. Weight 13'200lbs

## **GOT A CHALLANGE?**





## FINISH HARD TURNING FINISH HARD TURN/ GRIND



The name Mikroturn<sup>®</sup> is synonymous for world's most accurate finish hard turning machines built by Hembrug, a Danobat Company.

Capable of hard turning complex contours in the highest accuracy class, Hembrug's fully hydro-static machines process materials such hardened steel (up to 70 HRc) and even carbide!.





Max. part dia. 14" I x-Axis travel 35" I Spindle run out 0.15μm Hydrostatic X– and Z-slide with +/-0.1μm repeatability HARD TURN/GRIND—MULTITASKING Max. Part dia. Up to 15" I Part length up to 40" HARD TURNING VERTICAL Max. dia. 60" I Max. weight 4'400lbs I Axis repeatability 0.1μm

HARD TURNING—Horizontal



## **GRINDING OR FINISH HARD TURNING OR BOTH?**

# **O**SMS

# PROFILE & RELIEFGRINDINGTHREADGRINDINGCHAMFERGRINDINGFLUTEGRINDINGGUN POINTGRINDING



The product range of SMS ranges from highly flexible universal thread grinding machines to fully automated singlepurpose thread grinding machines for mass production. In addition to the core business, the thread grinding machines, the product range also includes relief & profile grinding and relief turning solutions.





UNIVERSAL CNC PROFILE GRINDING MACHINE Part Dia. Up to 16" I Length up to 133" I Weight up to 880lbs UNIVERSAL CNC THREAD GRINDING MACHINE Part Dia. Up to 10" I Length up to 23" I Weight up to 9.8" PRODUCTION CNC TAP GRINDING MACHINE M3 (M1) - M25 I Relieve frequency 70 Hz I 50sec/tap

#### **EXPERTS IN THREAD, PROFILE & FLUTE GRINDING**

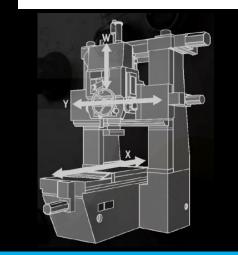


# HAUSER JIG GRINDING RETROFIT MOORE JIG GRINDING RETROFIT RE-CONTROL SOFTWARE



Esoma is specialized in retrofit of HAUSER jig grinding machines with in-house developed jig grinding software and HMI user interface for FANUC controls.

Packages for Moore jig grinding machines available upon request.





<u>Capabilities</u> Repair & Diagnostics Maintenance & Spare Parts State of the Art Jig Grinding Software for Fanuc CNC Controls Retrofit—Machine Modernization New electrical cabinet and new wiring Integration of balancing system & acoustic emission control Industry 4.0 compatible



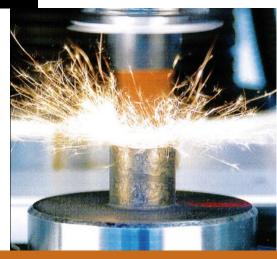
## **ADDING A SECOND LIFE**

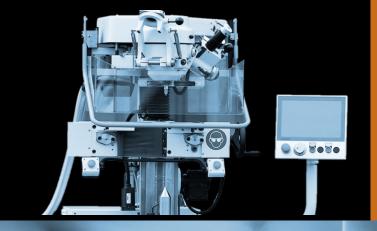


## **CENTER HOLE GRINDING**



With its special simultaneous 3D abrasive cone movements, the ZSM vertical center hole grinding machine, built by ws technica technology gmbh in Switzerland, produces extremely accurate geometric 60 degree center bores with a roundness of less than 1µm!





CNC controlled for a high degree of automation or manually operated. Small to large badge production. Easy to automate.

Surface finishes of Ra 0.2 to 0.8 with cross-hatch finish. Part diameters from 0.1" to 8.6" Part length from 2" to 78" Part weights up to 370lbs

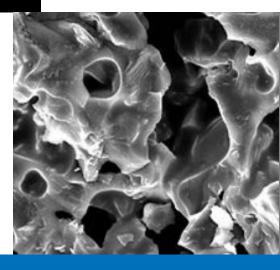
#### THE FOUNDATION TO GRINDING ROUND PARTS



# VITRIFIED DIAMOND ABRASIVES VITRIFIED CBN ABRASIVES ROTARY & STATIONARY DRESSING TOOLS



Meister Abrasives is an international manufacturer of cutting-edge industrial abrasive products for highprecision grinding applications.



#### **GRINDING:**

HPL—Technology—High Performance Lubrication HPB-Technology—High Performance Bonding HPC—Technology—High Performance Cutting Vit-Technology conventional Vit-Technology CBN & Diamond DRESSING:

cDD—Technology—High porosity with extreme edge stability vDD—Technology—Vitrified Diamond Dressing Tools hDD—Technology—Hybrid Diamond Dressing Tools





## **IT'S A PRODUCTIVITY DECISION**

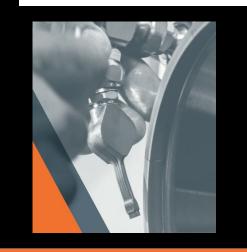


## STAINLESS STEEL COOLANT LINES 3D PRINTED TITANIUM NOZZLES



3D printed titanium coolant nozzles from InnoGrind ideally pair with stainless steel coolant lines from HirtLine.

A powerful recipe to minimize or eliminate grinding burn all together.



**3D-printed coolant nozzles** 

Properties: High life span, direct coolant stream directly to grinding/maching zone, lockable in place to assure consistency, for high pressure applications of up to 1'450 psi / 100 bar. Highly versatile and wear resistant, customizable, resistant against heat and chemical substances.

#### **GRINDING BURN NO MORE**



# PRECISIONWORK HOLDINGPOWERCHUCKSCOMPENSATINGCHUCKSDIAPHRAGMCHUCKSTOOL GRINDCHUCKS



SwissChuck develops and produces highly precise clamping solutions as the major supplier to some of the world's largest grinding and precision machine tool builders.





Precision Power Chucks Compensating & moving Compensating Chucks Diaphragm Chucks Tool Grind Chucks Swivel Finger-, Eccentric-, Index-, Double Pitch such Chucks Custom Specific Chucks



## HOLDING IT ALL TOGETHER



# EDGE PREPARATION DEBURRING HONING POLISHING



Gerber systems enable the machining of workpieces made of hard materials such as CBN, PCD, Sapphire, Ruby, Ceramic, Carbide, and also Aluminum, Brass and Plastics. Specially developed machines in modular design enable the machining of flat, turned and rotary tools.





Cutting edge preparation with brushes to increase tool life up to 300%!

Tight control over radius size, contour and shape.



#### **KEEPING YOUR EDGE**



# WHEEL TRUING & DRESSING CUT-OFF & CHAMFER CUT PRE-POINT CHAMFER PCD TOOL GRINDING OIL FILTRATION



We build and service an extensive line of production and support machines for industries that use diamond and CBN wheels and work with carbide and other hard materials.





Our machines are for: Truing and dressing Diamond & CBN wheels Cutting off carbide & HSS rods and tools Cutting, Pre-pointing, and chamfering carbide & HSS rods Chamfering carbide & HSS rods Balancing wheels and tools Grinding PCD tools Filtering grinding oil Sharpening drills and tools.



#### **GRIND BETTER**

## MANUFACTURING PARTNERS

&

GRINDING







**O**SMS













#### ALL ABOUT GRINDING



DIAMETAL Group 🚹



**SUPER ABRASIVES** 

PRECISION WORKHOLDING

**SUPER FINISHING** 

COOLANT LINES & NOZZLES

HARD TURN/GRIND

**TOOL MANUFACTURING** 

## **REY** TECHNOLOGIES

#### PRECISION MANUFACTURING & FINISHING SOLUTIONS

#### **ABOUT US**

Rey Technologies is a family owned machine tool distributor, offering a comprehensive line of precision manufacturing and finishing solutions.

Rey Technologies was founded in 2018 and distributes most of its products through its sales network nationwide. Direct sales activities focus in the Midwest & Northeast.

We provide solutions to the aerospace, automotive, cutting tool, defense, die/mold, energy, medical industries, and metal working machine shops.

We also provide precision/custom built work holding solutions, grinding wheels, dressing tools and coolant lines and nozzles to enhance and optimize grinding and finishing processes.

Carbide processing equipment and wheel balancing systems complement our offerings for the cutting tool industry.

> 2600 Oak St. P.O. Box 1050 St. Charles, IL 60175 847-313-9688

www.reytechnologies.com

#### DISCOVERING ULTIMATE PRECISION

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# REY TECHNOLOGIES