

HAUSER H55

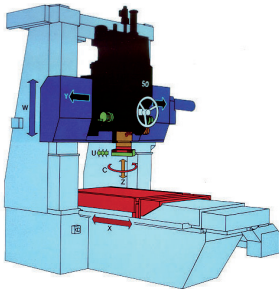
JIG GRINDING MACHINE



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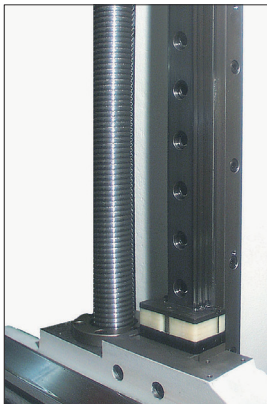
JIG GRINDING MACHINE

OPTIONS & ACCESSORIES



MACHINE

- Robust, distortion-resistant module
- Consequent lay-out with regard to thermal stability



GUIDEWAYS / MEASURING SYSTEMS / AXES DRIVES

- Sliding guideways wherever required
- Linear guideways wherever possible
- Absolutely smooth stroke reversal
- Measuring systems optimally positioned with regard to the measuring technique
- Axes drives in the centre of friction



GUIDEWAYS

- Scraped sliding guideways in X and Y axis
- Oil pressurized guideway- lubricating system, to avoid stick-slip effect ATC automatic tool changer with 12 magazine positions, permitting automatic machining with grinding wheels from $\varnothing 3$ mm to $\varnothing 50$ mm (alternatively with grinding wheels from $\varnothing 0,3$ mm to $\varnothing 5$ mm).

CONTROL SYSTEM

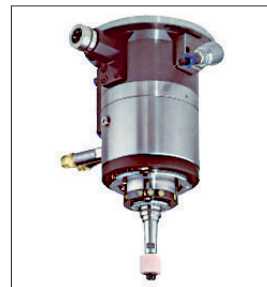
If you appreciate user friendly menu-programming and insist on the advantages of ISO/DIN programming, then the HAUSER product will be the right choice.

As standard, the X,Y, C, U, Z and W axes are CNC controlled. Based on the Fanuc 30i with integrated PC, we have created HAUSER SOFTWARE CYCLES, ensuring that the control will perfectly cover all the special requirements of jig grinding.



ATC AUTOMATIC TOOL CHANGER

ATC automatic tool changer with 12 magazine positions, permitting automatic machining with grinding wheels from $\varnothing 3$ mm to $\varnothing 50$ mm (alternatively with grinding wheels from $\varnothing 0,3$ mm to $\varnothing 5$ mm).



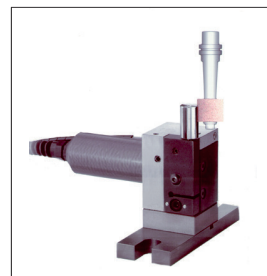
GRINDING MOTOR

Grinding motor 70S ATC with its extremely wide range of application, from $9'000 \text{ min}^{-1}$ to $65'000 \text{ min}^{-1}$. This grinding motor, and its state-of-the-art design is an absolute must for getting optimal use out of the grinding tool changer.



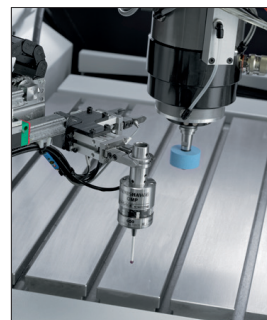
CBN DRESSING UNIT

CBN dressing unit with HF drive, for conditioning (dressing) vitrified and resinoid bond CBN grinding wheels.



MSS

MSS – multi-sensor-system for automatic suppression of “air grinding” and for automatic grinding wheel calibration.



MEASURING PROBE

Measuring probe for the automatic best fit of work-pieces.



ROTARY AND ROTARY TILTING AXES

A- and A-B axes in customized version are available as additional units.



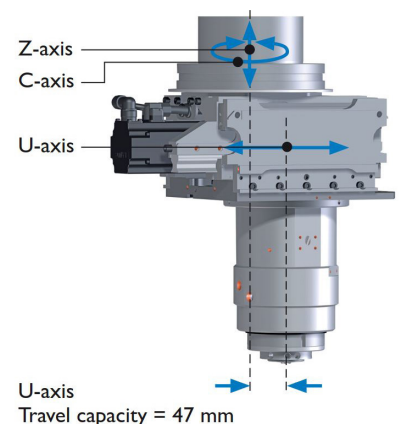
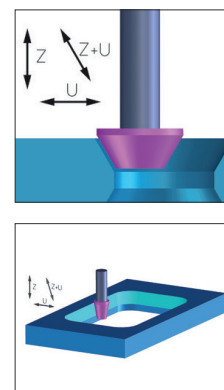
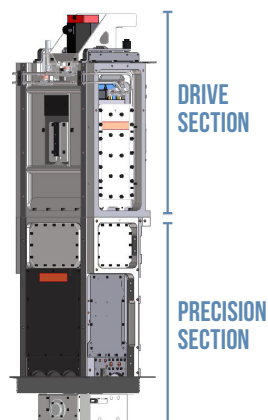
TECHNICAL SPECIFICATIONS

Machine type	H55	Unit
Work range		
Range of adjustment X, Y	1,300×800	mm
Vertical adjustment of grinding head (W)	635	mm
Clearance between table surface and U-axis carrier plate for grinding motor	max. 905	mm
Clearance between upright columns	970	mm
Diameter ground in planetary mode, with grinding wheel Ø 50 mm/70HS:		
• grinding motor 70HS in U-axis center position, automatic grinding mode	max. 144	mm
• grinding motor 70HS with extension plates, semi-automatic mode	max. 360	mm
Diameter ground in planetary mode, with grinding wheel Ø 100 mm/40HS:		
• grinding motor 40HS in U-axis center position, automatic grinding mode	max. 194	mm
• grinding motor 40HS with extension plates, semi-automatic mode	max. 360	mm
Taper grinding, included angle (divergent and convergent)	max. 120	degree
Table		
Working surface	1,440 × 860	mm
7 T-slots, width	14	mm
Permissible table load	max. 800 (1'500)	kg
Feeds		
Table and saddle X, Y, W		
• Machining speed	0 – 2,000	mm/min
• Traversing speed	4,000	mm/min
Grinding spindle Z, C, U		
Diameter of the spindle sleeve	125	mm
Basic machine is prepared for use of the following grinding spindle speeds:		
• for electric grinding motor 40HS, infinitely adjustable & programmable	4,000 – 40,000	min ⁻¹
• for electric grinding motor 70HS, infinitely adjustable & programmable	9,000 – 65,000	min ⁻¹
• System to allow use of grinding turbine T15	up to 150,000	min ⁻¹
C-axis planetary mode:		
• Planetary mode, infinitely adjustable and programmable	5 – 350	min ⁻¹
• C-axis follow-up mode, AC servo drive	up to 10	min ⁻¹
Z-axis in alternating stroke mode:		
• Z-alternating stroke movement, infinitely adjustable	Vmin. 0.500	mm/min
• Z-alternating stroke movement, infinitely adjustable	Vmax. 22,000	mm/min
• Z-stroke frequency	max. 8	Hz
• Z-stroke length, infinitely adjustable	0.1 up to 170	mm
U-axis radial travel capacity (in CNC-mode)	from –3 up to +47	mm
Accuracy		
Positional uncertainty of the axes X, Y and W, corresponding to VDI/DGQ 3441	0.0025	mm

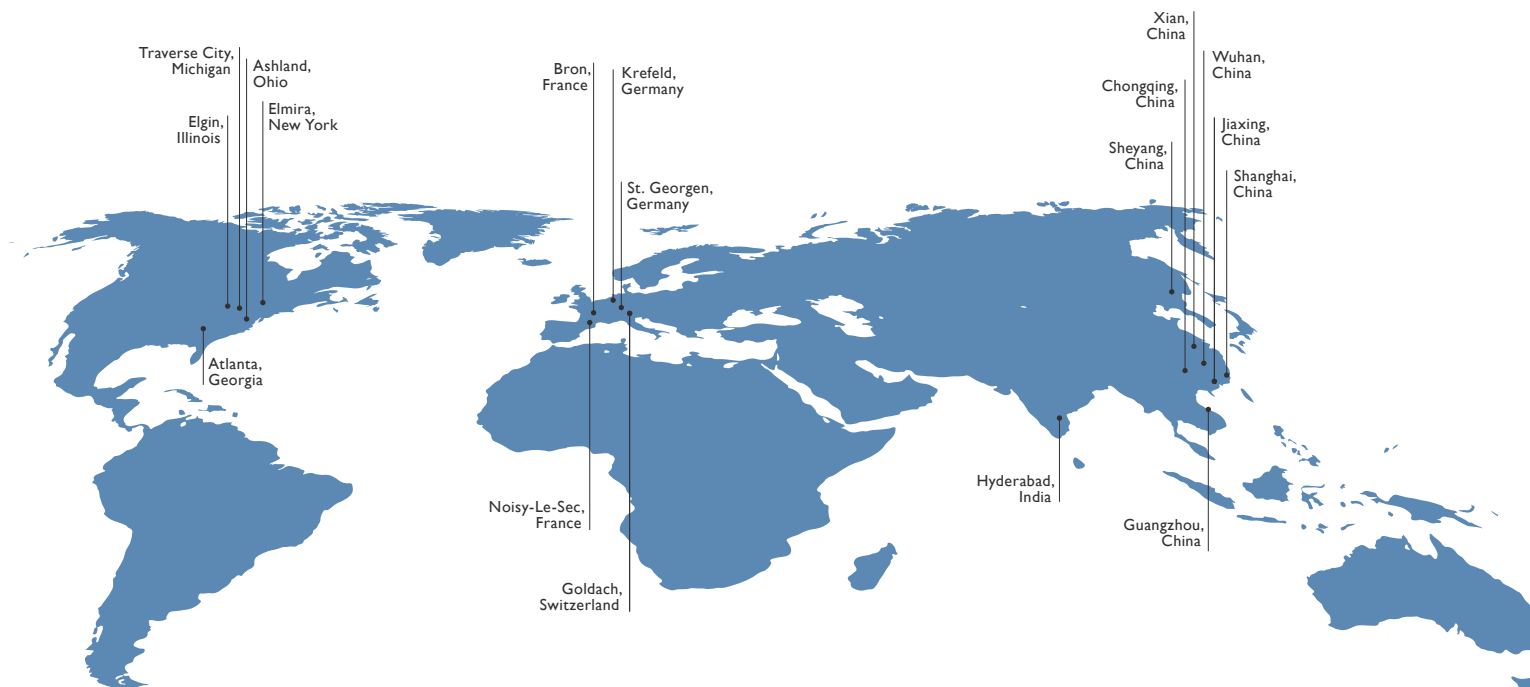
All specifications and designs are subject to alterations without notice

NEW HAUSER JIG GRINDING HEAD

- High-grade rigidity and stiffness leads in duplicating the stock removal capability and cuts spark out time in half.
- Significant boost in stroke speed and stroke frequency leads into reduced grinding cycle time.
- Hydrostatic guided spindle bearing system allows circular accuracies within < 0.5µm in planetary grinding.
- Unparalleled U-axis capacity up to +47 mm increases the grinding autonomy. Automated taper grinding with help of Z-U-axis interpolation.



HARDINGE WORLDWIDE



Hardinge is a leading international provider of advanced metal-cutting solutions. We provide a full spectrum of highly reliable CNC turning, grinding, and honing machines as well as technologically advanced workholding accessories.

The diverse products we offer enable us to support a variety of market applications in industries including aerospace, agricultural, automotive, construction, consumer products, defense, energy, medical, technology, transportation and more.

We've developed a strong global presence with manufacturing operations in North America, Europe, and Asia. Hardinge applies its engineering and applications expertise to provide your company with the right machine tool solution and support every time.

AMERICAS

GEORGIA
Hardinge Corporate
79 W Paces Ferry Rd, 2F
Atlanta, GA 30305
P. 800.843.8801

ILLINOIS
Hardinge
1755 Britannia Dr
Unit 1A
Elgin, IL 60124

MICHIGAN
Forkardt
2155 Traversefield Dr
Traverse City, MI 49686
P. 800.544.3823
E. tcsales@forkardt.com

NEW YORK
Hardinge
1 Hardinge Drive
Elmira, NY 14903
P. 800.843.8801
E. info@hardinge.com

OHIO
Ohio Tool Works
1374 Enterprise Parkway (TR 743)
Ashland, OH 44805
P. 419.281.3700
E. sales@ohiotoolworks.com

EUROPE

SWITZERLAND
Hardinge Kellenberger AG
Thannäckerstrasse 22
CH-9403 Goldach
P. 41 71 2429111
E. info@kellenberger.net

GERMANY
Hardinge GmbH
Fichtenhain A 13c
47807 Krefeld
P. 49 2151 49649 10
E. info@hardinge-gmbh.de

J.G. Weisser Söhne GmbH
Johann-Georg-Weisser-Straße 1
78112 St. Georgen
P. +49 7724 881-0
E. info@weisser-web.com

FRANCE
Jones & Shipman SARL
8 Allee des Ginkgos
BP 112-69672
Bron Cedex, France

ASIA

CHINA
Hardinge Machine
(Shanghai) Co. Ltd.
1388 East Kangqiao Road
Pudong, Shanghai 201319
P. 0086 21 3810 8686