

H3 Step Down Grinder

Intelligent grinding

Multi step height aspect ratio cylindrical component grinding tool

- Diameter range of grinding workpiece: $\varnothing 0.05 - 20.0\text{mm}$
- Maximum length of grinding workpiece: 200 mm

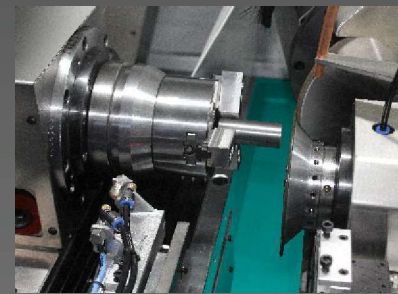
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Grinding efficiency:
It'll be done in 40
minutes
Yield:
 ≥ 97

Intelligent grinding solution

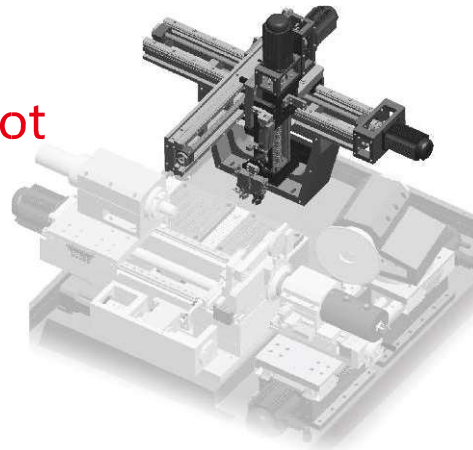
- Four-axis segment difference grinding machine is equipped with three-axis manipulator loading and unloading mechanism to realize batch processing of components.
- Online measuring system, to ensure the accuracy of long unattended.
- The first centering type workpiece clamping device in China, in the grinding process to obtain superior concentricity.
- Rough machining and finishing shaft effectively match through the diameter difference to get the best accuracy and surface finish.
- The control system and software independently developed by Hotman can realize the quick editing and creation of the workpiece.



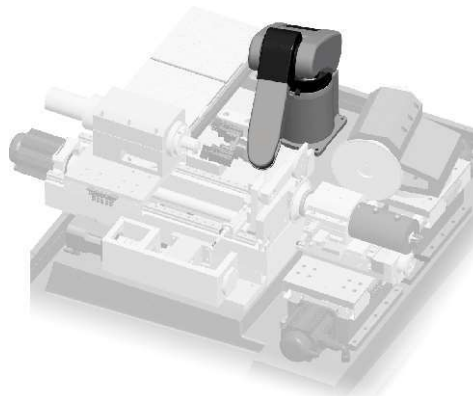
Three-jaw holding device (special accessories)

Automation

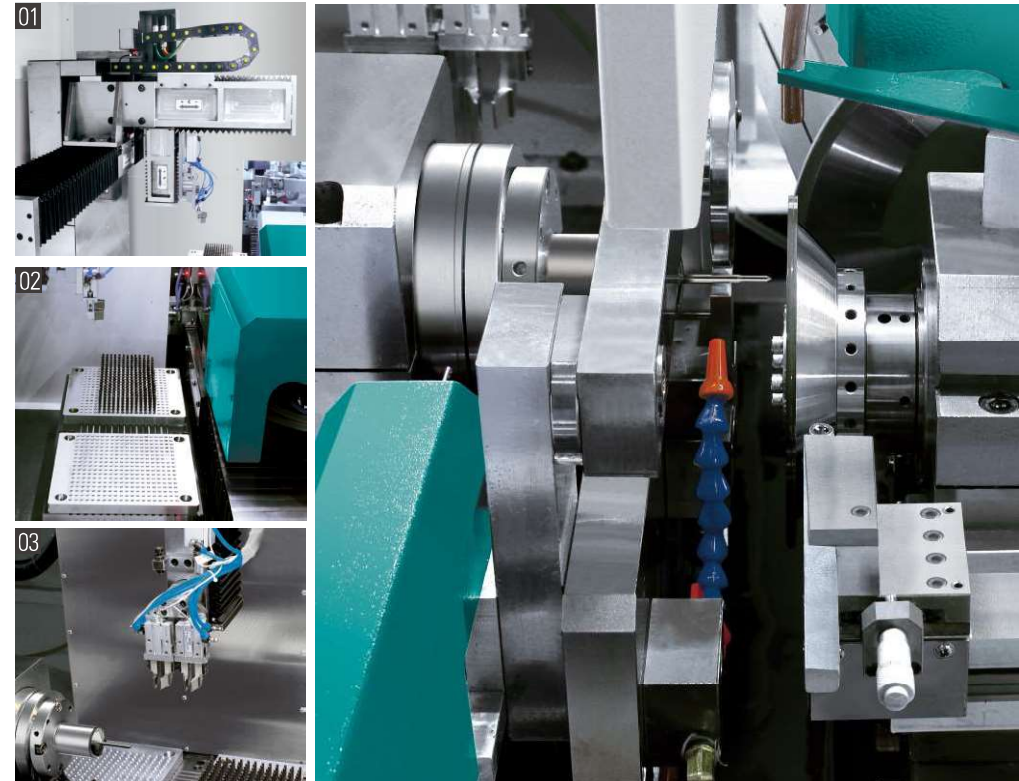
Manipulator/robot



Manipulator automatic scheme



Robot automatic scheme (optional)



01 Manipulator device

Automatic loading and unloading machine manual power supply of 3 ANCA servomotor, through the combination of precision rail and ANCA control system, in the process of feeding and receiving materials, can be efficient, accurate, convenient to complete the whole feeding and receiving process.

02 Tray device

The loading capacity of the material preparation tray and the closing closing is 340~510PCS. The operation is convenient and flexible. It only needs to be lifted and put back at the four holes.

03 Loading and unloading device

Using two pneumatic finger cylinders, unloading products. A rotating cylinder for Angle adjustment, adjustment Angle of 0~90°

Control system



Self-developed control system and software



High-level interface

Allows operators to seamlessly monitor and interact with the data being processed, providing a cutting-edge user experience.

Full customization

Using the latest technology, buttons and ICONS can be freely moved and rearranged to meet the business needs of different users.

Save time

Software brings you cutting edge technologies that bridge the gap between IDE developers and non-programming specialists.

19 inch digital LCD display

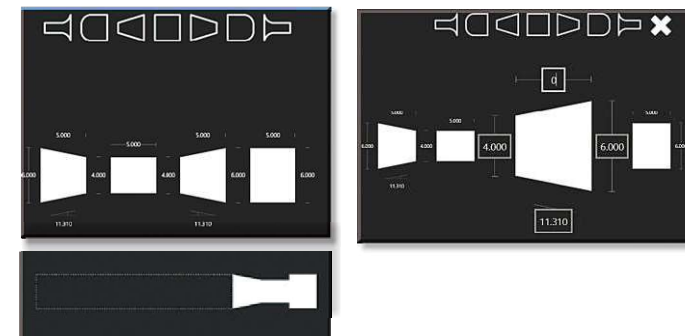
Capacitive multiplex industrial touch screen with full active display area, waterproof and oil proof.



After the workpiece file is opened, click the "Edit" button above, so that the operator can re-edit the cutter type according to the needs, as shown in the figure, and the operator can edit the cutter type and size quickly, as shown in the figure below. Click on each segment of the cutter type and edit the size of the spindle speed row.



The operator can also create a new tool shape. In the case of a T-shaped knife, the tool shape is created by adding it from left to right (as shown in the image above), with the tool face on the far right. According to the desired knife type, click the knife type at the top of the screen to add from left to right, and [X] on the far right is the delete button.



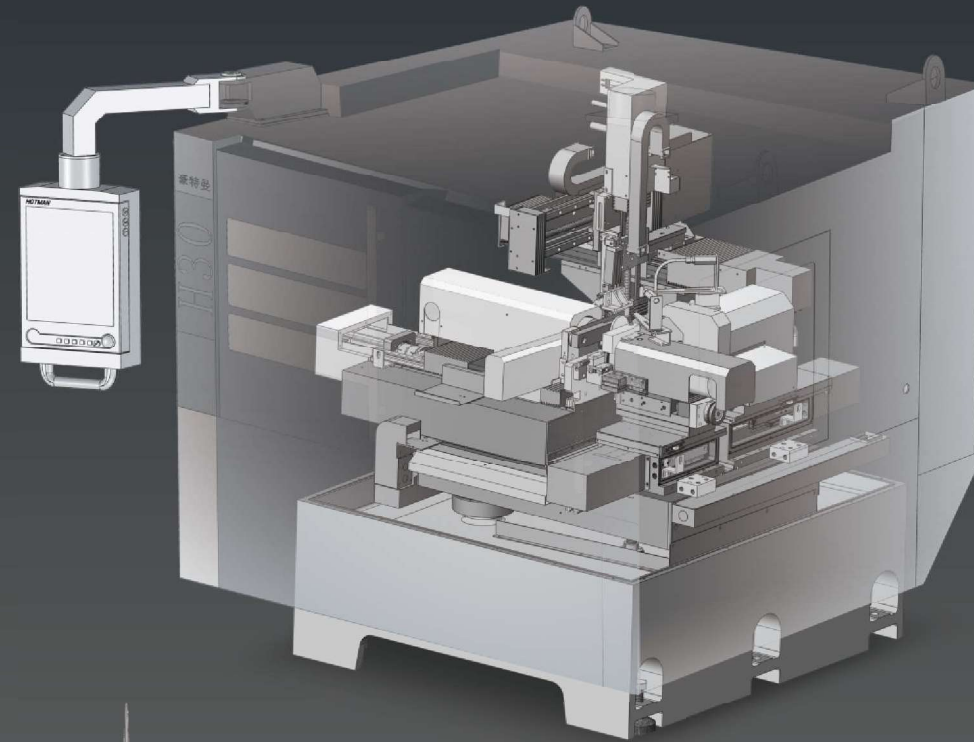
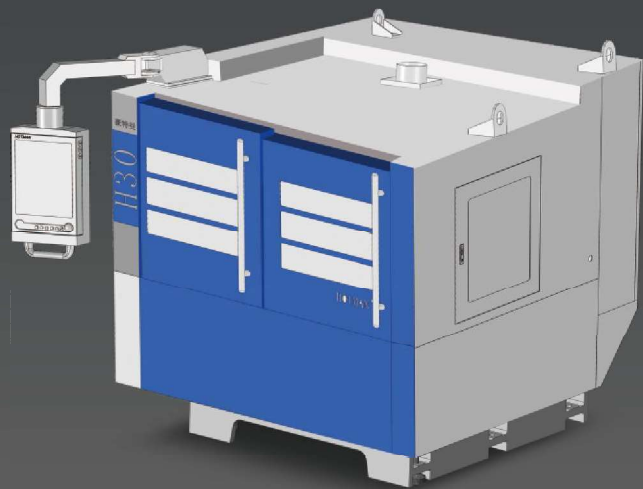
After setting the shape and size of each section, you can easily complete the editing of T-cutter, and set the spindle speed and feed speed of each grinding section.

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- With greater grinding capacity and flexibility, the H30 machine is not only used for processing cylindrical products, but also for non-cylindrical products.
- Especially suitable for machining multi-plane and non-round punches. The chuck of the loading device is now interchangeable and easy to adjust and replace.



Processing case

H2 Economical Step Down Grinder

Multi-step height-length-diameter ratio cylindrical component grinding tool

Peculiarity

- Grinding diameter range: 1~32mm, super power high-speed motorized spindle, hopper type feeding mechanism, with fast and accurate clamping structure.
- The use of core type two-axis linkage grinding mode, high grinding precision, high production efficiency.
- The on-line end measuring system can compensate for the errors caused by the loading of the workpiece in the mass production process.
- Small space can be barrier-free optimization, flexible processing, low energy consumption, low maintenance cost, cost-effective.

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Grinding workpiece diameter range	Ø1~32mm
Clamping workpiece diameter range	Ø2~34mm
Grinding length	80mm
Grinding wheel spindle speed	8000RPM
X / Z axis resolution	0.001mm



Technical Parameters

S614 [see machine details on P 23](#)

Processing capacity	
Work surface size	600×230mm
Work surface movement dimensions	520×180mm
Grinding wheel up-down movement size	max. 350mm
Magnetic table size	400×150mm
Move left and right (Y axis)	
Maximum travel	520mm
Maximum speed	30000mm/min
Linear Motor	max. 1600N
resolution	0.0001mm
Move forward and backward (X-axis)	
Maximum travel	180mm
Maximum speed	12000mm/min
servo motor	1.8KW
Resolution	0.0001mm

Move up and down (Z axis)	
Maximum travel	350mm
Maximum speed	12000mm/min
Servo motor	1.5KW
Resolution	0.0001mm
grinding wheel	max. Ø205mm
Grinding wheel inner diameter	Ø31.75mm
Installed capacity	
Total power	10KVA
Mechanical lubrication	Timing automatic
Machine size (L × W × H)	1750×1800×2000mm
G.W (appx.)	3500kg

Gantry Surface grinder [see machine details on P 18](#)

Item	unit	P1020	P1030	P1040	P1050	P1060	P1530	P1540	P1550	P1560	P1580
Worktable area	mm	1000×2000	1000×3000	1000×4000	1000×5000	1000×6000	1500×3000	1500×4000	1500×5000	1500×6000	1500×8000
Max. grinding area	mm	1400×2300	1400×3300	1400×4300	1400×5300	1400×6300	2000×3300	2000×4300	2000×5300	2000×6300	2000×8300
Min. feed	mm	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001
Distance from work surface to spindle center	mm	1000/1350	1000/1350	1000/1350	1000/1350	1000/1350	1350/1500	1350/1500	1350/1500	1350/1500	1350/1500

Item	unit	P2040	P2060	P2080	P20100	P20120	P2550	P2560	P2580	P251000	P251200
Worktable area	mm	2000×4000	2000×6000	2000×8000	2000×10000	2000×12000	2500×5000	2500×6000	2500×8000	2500×10000	2500×12000
Max. grinding area	mm	2500×4300	2500×3300	2500×8300	2500×10300	2500×12300	3000×5300	3000×6300	3000×8300	3000×10300	3000×12300
Min. feed	mm	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001
Distance from work surface to spindle center	mm	1350/1500	1350/1500	1350/1500	1350/1500	1350/1500	1350/1500	1350/1500	1350/1500	1350/1500	1350/1500

H3 [see machine details on P 29](#)

Grinding range	
Workpiece diameter	Ø0.05~20.0mm
Workpiece clamping diameter	Ø0.05~20.0mm
Clamping workpiece length	max: 300 mm
Grinding workpiece length	max: 200 mm
Working head spindle speed	0~3000RPM
Control System	
CNC 4 axis	X/Y/Z ₁ /Z grinding station
CNC 3 axis	U/V/W Pick-up and drop-off station
X axis	travel: 350 mm/Min. unit: 0.001 mm
Y axis	travel: 100mm/Min. unit: 0.001 mm
Z axis	travel: 29mm/Min. unit: 0.001 mm
Z ₁ axis	travel: 90mm/Min. unit: 0.001 mm
C axis	travel: 0~3000RPM definition: 0.001°
Loading and unloading mechanism load	
Loading diameter	Ø1.0~10.0mm
Total length	15~100mm
Rough grinding electric spindle	
Coarse grinding wheel spindle motor	20KW
Coarse grinding wheel spindle diameter	Ø170mm
Max. linear speed of rough grinding wheel	70~90m/s
Rough grinding spindle speed	0~8500RPM
Grinding wheel size (OD × W × ID)	250×20×31.75 mm
Precision grinding electric spindle	
Precision grinding wheel spindle motor	5.0KW
Precision grinding wheel spindle diameter	Ø120mm
Max. linear speed of precision grinding wheel	70~90m/s
Precision grinding wheel speed	0~14000RPM
Grinding wheel size (OD × W × ID)	150×20×31.75 mm
Machine size (L × W × H)	2450×1980×1998 mm
G.W (appx.)	4800kg