



### SKU : 122415

The HFS NC series is a solution for automatic and semi-automatic surface and flute grinding. This machine offers advantages in terms of precision and efficiency thanks to grinding cycles that can be easily programmed via the touchscreen and the automatic grinding wheel dressing mode. This can be inserted into the machining cycles and compensates dimensions and speed fully automatically. The option of switching between semi-automatic and automatic operation also extends the range of applications from repair workshops and training to series production.

- Automatic grinding wheel dressing cycle
- Magnetic table and built-in demagnetization feature
- Vertical axis with ball screw and servo motor for high precision
- Easy auto-mode programming
- Extensive standard equipment package

## TECHNICAL SPECS

### WORKING AREA

Grinding area (max.)	520 mm x 200 mm
Workpiece weights incl. magnetic clamping plate (max.)	210 kg
Spindle axis-to-table surface distance	470 mm
Dimensions magnetic clamping plate	500 mm x 200 mm
T-slots, width	14 mm
Number of T-slots	1 positions
Division (electronic hand-wheel) Y-axis	0,001 / 0,005 / 0,01 mm

### TRAVELS

Travel X-axis	560 mm
Travel Z-axis	220 mm

### HEADSTOCK

Spindle speed	500 1/min - 3500 1/min
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### RAPID FEED

Rapid feed Y-/Z-axis	0 mm/min - 1200 mm/min
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### FEED

Feed per rotation (electronic hand-wheel) - Y-axis	0,1 / 0,5 / 1,0 mm
Feed per rotation (electronic hand-wheel) - Z-axis	1,0 / 5,0 / 10 mm
Feed speed - X axis (hydraulic)	min. 3 / max. 25 m/min
Feed speed Z-axis	0 mm/min - 1200 mm/min
Autom. feed - Micro-feed Y-axis	0.001 mm - 0.01 mm
Autom. feed - Coarse feed Y-axis	0.005 mm - 0.04 mm
Automatic Z-axis feed	0.1 mm - 15 mm

### DRIVE CAPACITY

Motor rating main drive	3.7 kW
Motor rating hydraulic pump	1.5 kW
Motor rating coolant pump	0.09 kW
Z and y axis servo motor	0,55 / 0,55 kW

### MEASURES AND WEIGHTS

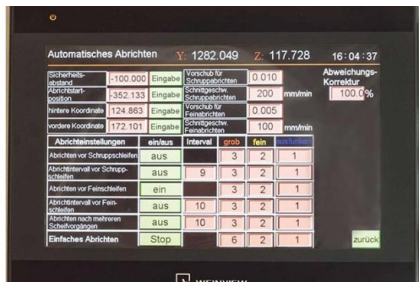
Grinding wheel dimensions	255 mm x 50.8 mm x 25 mm
Overall dimensions (length x width x height)	2.4 m x 1.75 m x 2.4 m
Weight	2050 kg



External hydraulic unit and oil cooler ensure thermal stability during continuous operation



Touchscreen display for easy programming of grinding cycles



Dressing mode for grinding wheels with automatic dimension and speed (rpm) compensation ensures constant grinding rate and can be entered while in

## PRODUCT DETAILS

- Designed for continuous operation at maximum speed, very quiet operation, maximum accuracy and minimal heat accumulation ensure optimum machining results
- Dual guides for linear table motion
- Spindle head and Z-axis move on precision linear guides with preloaded ball screws
- Servo drives on Y- and Z-axis and hydraulic linear table movement can be adjusted via an infinitely variable electronic proportional valve for precise and consistent feed
- 3-step electronic hand-wheel allows for precise positioning of the Y- and Z-axis
- The heavy-duty, rigid grinding spindle head features maintenance-free preloaded high-precision angular ball bearings
- External hydraulic unit and large oil cooler ensures thermal stability
- Automatic central lubrication system

## STANDARD EQUIPMENT

Magnetic clamping plate  
Coolant system with magnetic separator  
Central lubrication  
Hydraulic oil cooler  
Grinding wheel flange  
Diamond dresser with holder  
Balancing station  
Setup feet  
Tool box  
Operator manual

## OPTIONAL EQUIPMENT

- cooling water with magnetic and tape filtration for HFS NC, SKU : 251573