

Conventional Surface Grinders

HFS 52 NC



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 |
|---------------|------------------------|

RAPID FEED

| | |
|----------------------|------------------------|
| Rapid feed Y-/Z-axis | 0 mm/min - 1200 mm/min |
|----------------------|------------------------|

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

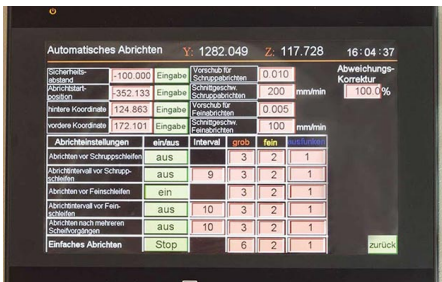
| | |
|--|--------------------------|
| Grinding wheel dimensions | 255 mm x 50.8 mm x 25 mm |
| Overall dimensions (length x width x height) | 2.4 m x 1.75 m x 2.4 m |
| Weight | 2050 kg |



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