Conventional Surface Grinders

HFS 30100 F Advance

SKU : 124941

The HFS F Advanced series is the latest development of our tried and tested surface grinding machines, which have proven themselves in many companies for decades. Although surface grinding is a widespread machining process, the machines in this series with their extensive standard accessories set a high standard as a turnkey solution. The advanced operating functions implemented with Siemens technology are new. These machines are the best choice for customers for whom conventional is too little and CNC is too much.

- Magnetic clamping plate with built-in demagnetizing function
- Vertical axis with ballscrew and servo motor for high precision
- Easy auto-mode programming with Siemens PLC and touchscreen
- Extensive standard equipment package

TECHNICAL SPECS

WORKING AREA

Workpiece weight (max.)	400 kg
Spindle nose-to-table surface distance	580 mm
Table dimensions	1020 mm x 300 mm
Dimensions magnetic clamping plate	1000 mm x 300 mm
Scale ring division Y-axis	0.005 mm
Scale ring division Z-axis	0.02 mm
Autom. transverse feed Z-axis	0.1 mm - 8 mm
Speed	1450 1/min
Autom. vertical feed	0.005 mm - 0.05 mm

TRAVELS

Travel X-axis	1130 mm
Travel Y-axis	340 mm

FEED

Hydr. feed X-axis	7 m/min - 23 m/min
Rapid feed Y-axis	480 mm/min
Rapid feed Z-axis	990 mm/min

DRIVE CAPACITY

Motor rating main drive	4 kW

MEASURES AND WEIGHTS

Grinding wheel dimensions	350 mm x 40 mm x 127 mm
Overall dimensions (length x width x height)	4.4 m x 2.2 m x 1.9 m
Weight	3200 kg

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If set to Auto mode, the user-defined roughing and finishing parameters, number of spark-out strokes, and return to zero are automatically processed

PRODUCT DETAILS

- The cast-iron machine frame features superior rigidity and torsional strength, precision guideways and excellent machining quality
- All guideways are lubricated reliably via a central lubrication system
- The workspace is protected by an easily accessible enclosure
- A powerful coolant pump is combined with a vacuum exhaust unit to clear grinding dust and aerosol during machining operations
- All required parameters for precise grinding spindle feeds are entered and edited via the Siemens touchscreen
- The high-quality preloaded ball screw and a powerful servo-motor ensure high precision and repeatability of positioning on the Y-axis
- The machine features an electronic hand-wheel for configuration tasks and manual movement of the grinding spindle
- If set to Auto mode, the user-defined roughing and finishing parameters, number of spark-out strokes, and return to zero are automatically processed

Grinding spindle

- Large grinding spindle, dynamically balanced, completely sealed with permanent lubrication
- Preloaded precision-bearings ensure maximum grinding performance and high reliability over many production hours

Programming

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- The machine features an electronic hand-wheel for configuration tasks and manual movement of the grinding spindle
- If set to Auto mode, the user-defined roughing and finishing parameters, number of spark-out strokes, and return to zero are automatically processed

Hydraulics

- Extremely quiet operation and minimal heat build-up for optimum work results under continuous operating conditions
- Hydraulically operated linear table movement, infinitely variable, high consistency, and soft reversal of direction
- External hydraulic unit with oil cooler unit ensures perfect temperature stability

Magnetic clamping plate

- A large magnetic setup plate is included and ensures torsion-free clamping, long tool life and high reliability
- The control unit is integrated into the electric system to simplify operation, allowing quick clamping and degaussing for maximum production efficiency

STANDARD EQUIPMENT

2-axis position indicator X.Pos 3.2
Electronic hand-wheel
Grinding wheel flange
Automatic central lubrication
Workspace enclosure
Coolant and suction device
Grinding wheel dresser
Balancing station
Balancing shaft
LED work lamp
Magnetic clamping plate
Adjustment screws
Operating tools
Demagnetization unit
Siemens PLC-control with Touchscreen
Operator manual
Grinding wheel

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OPTIONAL EQUIPMENT

- Coolant system with magnetic separator and paper filter, SKU : 253459
- Parallel grinding wheel dresser, SKU : 253465

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