Conventional Surface Grinders

HFS 3063 F Advance

SKU : 124932

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.)	594 lbs
Spindle nose-to-table surface distance	23 in
Table dimensions	25 in x 12 in
Dimensions magnetic clamping plate	24 in x 12 in
Scale ring division Y-axis	0.0002 in
Scale ring division Z-axis	0.00079 in
Auto. transverse feed Z-axis	0 in - 0.31 in
Speed	1450 rpm
Auto. vertical feed	0.0002 in - 0.00197 in

TRAVELS

Travel X-axis	30.1 in
Travel Y-axis	13 in

FEED

Hydr. feed X-axis	22.89 fpm - 75.21 fpm
Rapid feed Y-axis	19 in/min
Rapid feed Z-axis	39 in/min

DRIVE CAPACITY

Motor rating main drive	5.4 Hp

MEASURES AND WEIGHTS

Grinding wheel dimensions	13.78 in x 1.57 in x 5 in
Overall dimensions (length x width x height)	115 in x 87 in x 75 in
Weight	6160 lbs

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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

- Superior quiet operation and low heat build-up ensure optimum work results in continuous operations
- Hydraulically operated linear table movement, infinitely variable, high consistency, and soft reversal of direction
- The external hydraulics unit with oil cooler 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 system and vacuum system
Grinding wheel dresser
Balancing station
Balancing shaft
LED work lamp
Magnetic clamping plate
Adjustment screws
Operating tools
Degausser
Siemens PLC with touchscreen
Operator manual
Grinding wheel

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OPTIONAL EQUIPMENT

- Fine-pole magnetic chuck, SKU : 253461
- Coolant system with magnetic separator and paper filter, SKU : 253459
- Parallel grinding wheel dresser, SKU : 253465
- Total enclosure of workspace with 2 doors, SKU : 253868
- Grinding wheel flange, SKU : 253986

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