



# Conventional Surface Grinders

## HFS 2550 F Advance

**SKU : 124931**

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.)	396 lbs
Spindle nose-to-table surface distance	18 in
Table dimensions	20 in x 10 in
Dimensions magnetic clamping plate	20 in x 10 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	2850 rpm
Auto. vertical feed	0.0002 in - 0.00197 in

#### MEASURES AND WEIGHTS

Grinding wheel dimensions	7.87 in x 0.79 in x 1.25 in
Overall dimensions (length x width x height)	91 in x 63 in x 67 in
Weight	3960 lbs

#### TRAVELS

Travel X-axis	22 in
Travel Y-axis	11 in

#### FEED

Hydr. feed X-axis	16.35 fpm - 81.75 fpm
Rapid feed Y-axis	19 in/min
Rapid feed Z-axis	31 in/min

#### DRIVE CAPACITY

Motor rating main drive	3 Hp
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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

- 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

### 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