

### SKU : 124938

This series of surface grinders processes large and heavy workpieces with tolerances as required for precision surface grinding or for the preparatory processing step of lapping or polishing. The machine frame is designed in a cross-bed design with a movable column. This construction enables a long table guidance and thus the optimal introduction of weight force over the entire work area. The ability to switch between automatic or manual operation extends the scope for sample production, repair and training.

- Moving column design for maximum stability
- Magnetic clamping plate with built-in demagnetizing function
- Siemens Smart Line PLC control with grinding cycles
- NC-controlled Y/Z axes driven by servo motors
- User-friendly HMI with touchscreen
- Electronic handwheel for Y/Z axes



### TECHNICAL SPECS

#### WORKING AREA

Table dimensions	31 in x 63 in
Spindle center-to-table distance	36 in
Table load capacity (max.)	4400 lbs
Magnetic chuck height	4 in
Dimensions magnetic clamping plate	31 in x 31 in
Number of magnetic chucks	2 positions

#### TRAVELS

Travel X-axis	63 in
Travel Y-axis	32 in

#### FEED

Hydr. feed X-axis	16.35 fpm - 81.75 fpm
Feed Y-axis	2 in/min - 79 in/min
Feed depth, Y-axis	0.000197 in - 0.001969 in
Feed Z-axis	2 in/min - 79 in/min
Automatic Z-axis feed	0 in/min - 2 in/min

#### GRINDING WHEEL

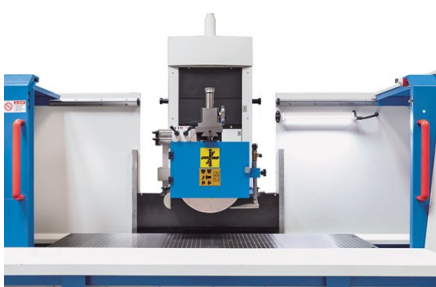
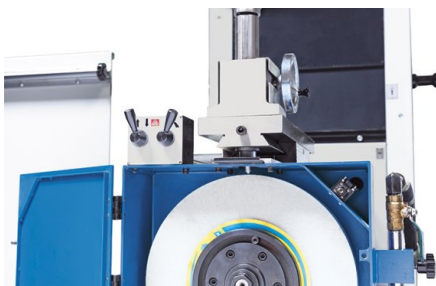
Grinding wheels dimensions	20 in x 3 in x 12 in
Speed	960 rpm

#### DRIVE CAPACITY

Motor rating main drive	24.8 Hp
Hydraulic motor rating	10.1 Hp
Y-axis servo motor	4 Hp
Z-axis servo motor	4 Hp

#### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	189 in x 158 in x 103 in
Weight	23100 lbs



## PRODUCT DETAILS

### Surface Grinding Machine

- The massive, heavily ribbed cross-bed machine frame with traversing column and horizontal spindle is extremely rigid even under heaviest workpiece loads
- The large work area allows machining of single workpieces with large surface areas or machining of several workpieces in one setup
- The workspace is protected by an easily accessible enclosure
- A high-performance cooling system is included in the standard equipment of this series

### Control

- Grinding cycles for automatic face and groove grinding are accessible and editable via touchscreen
- Preloaded ball screws and powerful servo-motors on Y and X ensure high precision and repeatability during grinding wheel feeds
- An electronic hand-wheel for Y- and Z-axis simplifies setup and manual positioning 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

### Hydraulics

- Superior quiet operation and low heat build-up ensure optimum work results in continuous operations
- The hydraulic linear table feed is infinitely variable, maintains a constant speed with smooth travel direction reversals
- The external hydraulics unit with oil cooler ensures perfect temperature stability

### Magnetic clamping plate

- Large magnetic chucks for torsion-free clamping across the entire work surface are included in the standard equipment
- The modern control also ensures reliable operation with firm holding forces and high-grade degaussing

## STANDARD EQUIPMENT

2-axis position indicator X.Pos 3.2  
 Electronic hand-wheel Y/Z axis  
 Grinding wheel flange  
 Workspace enclosure  
 Coolant system  
 Grinding wheel dresser (without dressing diamond)  
 Balancing station  
 Balancing shaft  
 LED work lamp  
 Magnetic clamping plate  
 Adjustment screws  
 Operating tools  
 Operator manual  
 Siemens PLC with touchscreen  
 Grinding wheel  
 Automatic central lubrication

## OPTIONAL EQUIPMENT

- Coolant system with magnetic separator and paper filter, SKU : 253467
- Magnetic separator without reservoir for HFS F NC, SKU : 253469

