

Surface Grinder

HFS F Advance

Precision and ease-of-use for maximum production efficiency



- 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

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

- Extremely quiet operation and minimal heat buildup 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

- Large magnetic chuck allows for torsion-free clamping and is included in standard equipment
- The control unit is integrated into the electric system to simplify operation, allowing quick clamping and degaussing for maximum production efficiency





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

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

Standard Equipment

2-axis position indicator, 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

Specifications HFS Advance		2550 F	3063 F	4080 F	30100 F	40100 F
Working area						
Workpiece weight (max.)	kg	180	270	500	400	600
Spindle nose-to-table surface distance	mm	450	580	580	580	580
Table dimensions	mm	508x254	635x305	813x406	1.020x300	1.020x406
Dimensions magnetic clamping plate	mm	500x250	600x300	800x400	1.000x300	1.000x400
Scale ring division Y-axis	mm	0,005	0,005	0,005	0,005	0,005
Scale ring division Z-axis	mm	0,02	0,02	0,02	0,02	0,02
Autom. transverse feed Z-axis	mm	0,1 - 8	0,1 - 8	0,1 - 8	0,1 - 8	0,1 - 8
Speed	1/min	2.850	1.450	1.450	1.450	1.450
Autom. vertical feed	mm	0,005 - 0,05	0,005 - 0,05	0,005 - 0,05	0,005 - 0,05	0,005 - 0,05
Travels						
Travel X-axis	mm	560	765	910	1.130	1.130
Travel Y-axis	mm	275	340	450	340	450
Feed						
Hydr. feed X-axis	m/min	7 - 23	7 - 23	7 - 23	7 - 23	7 - 23
Rapid feed Y-axis	mm/min	480	480	480	480	480
Rapid feed Z-axis	mm/min	990	990	990	990	990
Drive capacity						
Motor rating main drive	kW	2,2	4	4	4	4
Measures and weights						
Grinding wheels dimensions	mm	200x20x31,75	350x40x127	350x40x127	350x40x127	350x40x127
Overall dimensions (length x width x height)	m	2,3x1,6x1,68	2,9x2,2x1,9	3,6x2,4x1,9	4,4x2,2x1,9	4,4x2,4x1,9
Weight	kg	1.800	2.800	3.400	3.200	3.700
Part No.		124931	124932	124933	124941	124930