



- This machine is designed for continuous operation at high machining speeds and features quiet operation, maximum accuracy and minimal heat-buildup for guaranteed optimum work results
- Dual guides for linear table motion
- Grinding spindle head and Z-axis run in precision linear guides on preloaded ball screws
- Servo drives on Y- and Z-axis and hydraulic linear table movement can be adjusted via an infinitely variable electronic proportional valve for precise and consistent feed
- 3-step electronic hand-wheel allows for precise positioning of the Y- and Z-axis



External hydraulic unit and oil cooler ensure thermal stability during continuous operation

NC Control

- Intuitive dialog-guided programming for automatic and semi-automatic grinding and dressing of grinding wheels, optimized for surface grinding
- Programming of grinding cycles per touchscreen
- Easy adjustment of important parameters and feed rate during machining
- Automatic fault and performance monitoring, display shows error message

Standard Equipment

magnetic clamping plate, coolant system with magnetic separator, central lubrication, hydraulic oil cooler, grinding wheel flange, diamond dresser with holder, balancing station, setup feet, tool box, operator manual

Options

- Cooling and filter system with magnetic separator for HFS NC

Part No.

251573

Specifications HFS NC

		52	73	104	160
Working Area					
Grinding area (max.)	in	20x8	28x12	40x16	67x16
Workpiece weights incl. magnetic clamping plate (max.)	lbs	462	880	1,496	1,870
Spindle axis-to-table surface distance	in	18.5	25.2	25.2	25.2
Dimensions magnetic clamping plate	in	20x8	28x12	39x16	63x16
T-slots, width	in	0.6	0.6	0.6	0.6
Number of T-slots	positions	1	1	3	3
Division (electronic hand-wheel) Y-axis	in	0.00004 / 0.0002 / 0.0004	0.00004 / 0.0002 / 0.0004	0.00004 / 0.0002 / 0.0004	0.00004 / 0.0002 / 0.0004
Division (electronic hand-wheel) Z-axis	in	0.0004 / 0.002 / 0.004	0.0004 / 0.002 / 0.004	0.0004 / 0.002 / 0.004	0.0004 / 0.002 / 0.004
Travels					
Travel X-axis	in	22	31.5	44.1	70.1
Travel Z-axis	in	9	13	17	17
Headstock					
Spindle speed	rpm	500 - 3,500	500 - 2,300	500 - 2,300	500 - 2,300
Rapid Feed					
Rapid feed Y-Z-axis	in/min	(10) 0 - 47	(10) 0 - 47	(10) 0 - 47	(10) 0 - 47
Feed					
Feed per rotation (electronic hand-wheel) - Y-axis	in	0.004 / 0.02 / 0.04	0.004 / 0.02 / 0.04	0.004 / 0.02 / 0.04	0.004 / 0.02 / 0.04
Feed per rotation (electronic hand-wheel) - Z-axis	in	0.04 / 0.2 / 0.4	0.04 / 0.2 / 0.4	0.04 / 0.2 / 0.4	0.04 / 0.2 / 0.4
Feed speed - X-axis (hydraulic)	fpm	min. 3 / max. 25	min. 118 / max. 984	min. 118 / max. 984	min. 118 / max. 984
Feed speed Z-axis	in/min	0 - 47	0 - 47	0 - 47	0 - 47
Autom. feed - Micro-feed Y-axis	in	0.000004 - 0.0004	0.000004 - 0.0004	0.000004 - 0.0004	0.000004 - 0.0004
Autom. feed - Coarse feed Y-axis	in	0.0002 - 0.002	0.0002 - 0.002	0.0002 - 0.002	0.0002 - 0.002
Automatic Z-axis feed	in	0.004 - 0.6	0.004 - 0.6	0.004 - 0.6	0.004 - 0.6
Drive Capacity					
Motor rating main drive	Hp	5	5	7.4	7.4
Motor rating hydraulic pump	Hp	2	2	3	3
Motor rating coolant pump	Hp	0.1	0.2	0.2	0.2
Z- and Y-axis servo motor	Hp	0.7 / 0.7	0.7 / 0.7	0.7 / 0.7	0.07 / 1.3
Measures and Weights					
Grinding wheel dimensions	in	10x2x1	15.75x5x1.57	15.75x5x1.57	15.75x5x1.57
Overall dimensions (length x width x height)	in	95x69x95	115x75x99	150x79x99	256x119x99
Weight	lbs	4,510	5,500	6,710	11,880
Part No.		122415	122420	122425	122430



Dressing mode for grinding wheels with automatic dimension and speed (rpm) compensation ensures constant grinding rate and can be entered while in auto mode