

4.8 Technical Specifications

Type	Units of Measurement	HSFDB1800	HSFDB2500
Material Processing Specifications			
Maximum Plate Width	Inches (mm)	72 (1800)	96 (2500)
Minimum Plate Width	Inches (mm)	6 (150)	6 (150)
Maximum Plate Thickness	Inches (mm)	3 (75)	3 (75)
Minimum Plate Thickness	Inches (mm)	1/4 (6)	1/4 (6)
Maximum Plate Length	Feet (m)	20 (6)	20 (6)
Minimum Plate Length	Inches (mm)	52 (1320)	52 (1320)
Minimum Plate Drop Off (trailing edge)	Inches (mm)	12 (305)	12 (305)
Maximum Dump Table Capacity	Inches (mm) wide x long	96 x 24 (2500 x 600)	96 x 24 (2500 x 600)
Maximum Plate Weight	Pounds (kg)	20,000 (9000)	20,000 (9000)
General Machine Data			
Machine Dimensions (height x width x length)	Approx. inches (approx. mm)	154 x 226 x 90 (3904 x 5740 x 2286)	154 x 244 x 90 (3904 x 6200 x 2286)
Machine Weight	Approx. pounds (approx. kg)	31,500 (14.300)	36,000 (16.400)
Machine Passline	Inches (mm)	40 (1016)	40 (1016)
Drill Specifications			
Number of Drill Spindles	--	Single	Single
Maximum Hole Diameter	Inches (mm)	3 (76)	3 (76)
Spindle Speed	RPM	0-2250	0-2250
Spindle Horsepower	HP (kW)	48 (36)	48 (36)
Maximum Drill Thrust	Lbs (kN)	11,600 (51,6)	11,600 (51,6)
Maximum Drill Torque	ft-lbs (N-m)	241 (325)	241 (325)
Drill Feed Rate	Inches/min (mm/min)	0-315 (0-8000)	0-315 (0-8000)
Machine Speeds			
Maximum X-axis Speed	Inches/min (mm/min)	600 (15.240)	600 (15.240)
Maximum Y-axis Speed	Inches/min (mm/min)	600 (15.240)	600 (15.240)
Compressed Air Supply Criteria			
Standard Pressure	psi (bar)	120 (8,3)	120 (8,3)
Standard Volume	cu. ft/min (cu. m/hr)	40 (68)	40 (68)
Maintenance Unit Connection Size	--	1" NPT	1" NPT

Type	Units of Measurement	HSFDB1800	HSFDB2500
Hydraulic Power Unit Specifications			
Max. Hydraulic Pressure	psi (bar)	1500 (103,4)	1500 (103,4)
Motor Power	Hp (kW)	10 (7.46)	10 (7.46)
Power Unit Reservoir Capacity	Gallons (Liters)	30 (113,5)	30 (113,5)
Operating Power Requirements			
Voltage	--	460/380	460/380
Phases	--	3	3
Full Load Current	Amps	128/155	128/155
Power	kVA	102	102
Largest Load Amp Rating	--	100/121	100/121
Frequency	Hz	60/50	60/50
Control Information			
Control Type	--	Siemens CNC	Siemens CNC
Standard Hydraulic Oil Specifications			
Minimum Temperature	°F (°C)	54 (12)	54 (12)
Standard Operating Temperature	°F (°C)	100-120 (38-49)	100-120 (38-49)
Maximum Temperature	°F (°C)	130 (55)	130 (55)
Standard Operating Viscosity Range	SSU (CST)	80-1000 (17-180)	80-1000 (17-180)
Viscosity Range @ 100°F (38°C)	SSU (CST)	150-250 (30-50)	150-250 (30-50)
Maximum Start-Up Viscosity	SSU (CST)	4000 (1000)	4000 (1000)
HPR 260 Plasma Torch Capabilities (Mild Steel)			
Maximum Material Thickness (for edge start)	Inches (mm)	2 1/2 (64)	2 1/2 (64)
Maximum Material Thickness (for material pierce)	Inches (mm)	1 1/4 (32)	1 1/4 (32)
Typical Cutting Speeds	--	8 ipm, 2 1/2 inch material, 260 amps, O ₂ Plasma/Air Shield	8 ipm, 2 1/2 inch material, 260 amps, O ₂ Plasma/Air Shield
	--	180 ipm, 3/8 inch material, 260 amps, O ₂ Plasma/Air Shield	180 ipm, 3/8 inch material, 260 amps, O ₂ Plasma/Air Shield
Oxy-Fuel Torch Capabilities			
Typical Cutting Speeds	--	11 ipm, 2 1/2 inch material, Oxy-Acetylene	11 ipm, 2 1/2 inch material, Oxy-Acetylene
	--	22 ipm, 3/8 inch material, Oxy-Acetylene	22 ipm, 3/8 inch material, Oxy-Acetylene

Type	Units of Measurement	HSFDB1800	HSFDB2500
Tool Changer Specifications			
Type of Changer	--	Rotary	Rotary
Capacity	--	8 Tools	8 Tools
Maximum Tool Length (gauge line to end of tool)	Inches (mm)	13.75 (350)	13.75 (350)
Tool Change Time	Seconds	Under 16	Under 16
Basic Accuracy			
True Position Tolerance	--	+/- .01" plus .0015" per foot accumulative error (+/- 0,254 mm plus 0,038 mm per 300 mm accumulative error)	+/- .01" plus .0015" per foot accumulative error (+/- 0,254 mm plus 0,038 mm per 300 mm accumulative error)
Additional Error	--	+/- .03" (+/- 0,76 mm) between torch-cut edges and drilled holes	+/- .03" (+/- 0,76 mm) between torch-cut edges and drilled holes