

Rush Machinery PCD Grinders

			FC-200D	FC-300D	FC-500D
Grinding Capabilities	Tool Processing	Tip Grinding Radii	0 to 6mm (0.236")	0 to 8mm (0.315")	0 to 8mm (0.315")
		Round Tool Shank Diameters <i>See options below</i>	Diameters: 3 mm (0.118") to 26 mm (1.02") - Requires Round Tool Grinding Attachment Option		
		Shank Types <i>See options below</i>	Tools with integral shanks (#40, HSK63, etc.) - Requires Fine Round Tool Grinding Attachment		
	Tool Materials	Polycrystalline Diamond (PCD)	✓	✓	✓
		Thick-film Diamond (CVD)	✓	✓	✓
Polycrystalline Cubic Boron Nitride (PCBN)		✓	✓	✓	
Tungsten Carbide		✓	✓	✓	
High Speed Steel		✓	✓	✓	
Machine Data	Grinding Spindle	Speed (RPM)	0 to 3600		
		Power	3 HP, 3-Phase, 220 V, 60 Hz (2.2KW)		
		Height Adjustment (Vertical Travel)		130mm (5.12")	130mm (5.12")
	Grinding Wheel	Oscillation Frequency (Strokes/Minute)	0 to 50	0 to 50	0 to 50
		Oscillation Stroke	0 - 35mm (1.378")	0 - 50mm (1.969")	0 - 60mm (2.362")
		Oscillation Stroke Range	0 - 130mm (5.118")	0 - 210 mm (8.268")	0 - 420mm (16.535")
		Inclination Angle	-3° to 25°	-3° to 25°	-3° to 25°
		Motorized position & stroke	Push button controls on operator console		N/A
		Grinding Wheel Size	150 X 40 X 40mm (6 X 1.5 X 1.5 ")		
	Work Table	Cross table clamping surface	210mm (8.27 in.) X 160mm (6.30 in.); with 4 "T" slots		
		Cross table slides	Travel up to 95mm (3.74 in.) each		
		Controlled infeed travel - up to	55mm (2.29 in.)	75 mm (2.953")	130mm (5.118")
		Rapid travel	To/From grinding position (pneumatic) up to 70mm (3.15 in.)		
		Cross table swiveling angle - up to	200°	200°	200°
		Cross table hand wheel division	0.01mm (0.00039")(1μ)		
		Grinding force pressure regulator	Quickly adjustable from 0 to 450N (101 lbs.) - pneumatic		
		Slideway bearings	Anti-friction (Schneeberger)		
	DRO (2-Axis)	Infeed (switchable)	0.001mm (0.00005")		
		Swivel Angle	0.05 degrees (3 minutes) increments		
	Video System	Video optical measuring system with zoom	15X to 120X magnification range with B&W monitor. <i>Note: The system moves with the worktable and shows the work piece in both the grinding and the retracted positions</i>		
	Standard Accessories	Work lights	Two halogen light units mounted on adjustable joint arms		
		Standard quick-clamping fixture (Solid base is for conical relief only)	Comes with 4 tool holders in sizes: 13, 20, 26 & 32mm (½, ¾, 1, 1-¼")		
		Air operated brake for pivot	Button (standard) Foot pedal activated brake to speed grinding time (option)	Foot pedal activated brake to shorten grinding time. Locks pivot angle at desired position.	
		Coolant system Paper roll filter & 5μ cartridge filter	100 liters (26.4 gal.)		
		Splash shield	Plastic window on flexible arm with magnetic base		
		Central lubrication system	Capacity .75 liters (25 oz) (auto operated)		
		Dimensions (Width X Depth X Height)	Machine	1340 X 1300 X 1900mm (52.75" X 51.2" X 74.8")	1800 X 1600 X 1800mm (52.75" X 51.2" X 74.8")
Machine in crate	163cm x 158cm x 191cm (64.2" x 62.2" x 75.2")		173cm x 173cm x 185cm (68.1" x 82.3" x 72.8")	224cm x 209cm x 200cm (88.2" x 82.3" x 78.7")	
Weights	Machine alone	1320 kg (2910 lbs)	1500kg (3307 lbs)	2160 kg (4762 lbs)	
	Machine crated	1560 kg (3440 lbs)	1740kg (3840 lbs)	2400 kg (5291 lbs)	
	Coolant system alone	62 x 60 x 110 cm (24.4" x 23.6" x 43.3")			
	Coolant system crated	77 x 75 x 125 cm (30.3" x 29.5" x 49.2")			

Rush Machinery PCD Grinders

		FC-200D	FC-300D	FC-500D	
<b>Options</b>	<b>Brake Truing Device</b>	Offset bracket enables mounting in standard or optional quick-clamping fixtures	✓	✓	✓
	<b>Motorized Brake Truing Device</b>	Enables wheel truing without changing the tool set up			✓
	<b>Universal Work Table</b>	Rotates and inclines in 3 planes	✓	✓	✓
	<b>Universal Quick-Clamping Fixture</b>	Rotates 360 degrees and inclines -20 to +20 degrees in two planes to allow conical relief, cylindrical relief, or a combination of both.	✓	✓	✓
	<b>Motorized Round Tool Grinding Attachment</b>	0-60 rpm variable speed drive and 24-position dividing plate (other divisions available). Comes standard with (23) ER-40 collets to hold shank sizes from 3mm (1/8 in.) to 26mm (1 in.).	✓	✓	✓
	<b>Fine Round Tool Grinding Attachment</b>	With #40 or HSK63 taper spindle and fine adjustment of angle. Comes with a 24-position index plate (other divisions available) and removable tail center <i>Other spindle tapers available.</i>			✓