

BarCenter-34

OPERATION & MAINTENANCE
(1st Edition)

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SECTION 1 MACHINE SPECIFICATIONS

1. SPECIFICATION TABLE

	BAR CENTER-34
Machining capacity Bar capacity, round for main spindle	Maximum 34 mm (1.312 in.) Minimum 12 mm (0.5 in.)
Chuck work capacity, round	75 mm (3 in.)
Maximum work length for bar work for chuck work for center work	150 mm (5.9 in.) 80 mm (3.15 in.) 175 mm (6.89 in.)
Main spindle Collet chuck system	<u>USA</u> B&S #22 B&S #22C HARDINGE 5C Step chuck HARDINGE S12 Pad type HARDINGE S15 Pad type
	<u>Europe</u>
	DIN 171E Crowford M673
Spindle Nose O.D. of spindle nose	Flat 110 mm (4.331 in.)
Inner diameter of draw tube	36 mm (1.417 in.)
Chucking system	Hydraulic cylinder
Spindle speed range	200 to 6000 min ⁻¹
Spindle drive Spindle motor (Variable speed AC)	AC 3.7/5.5 kw
	infinitely variable

BAR CENTER-34	
Turret slide Axis controlled	2
Turret stations	8
Maximum index clearance	φ 390 mm (φ 15.354 in.)
Distance across flat	200 mm (7.874 in.)
I. D tool hole size	φ 25 mm (1 in. diameter)
Tool shank size	20 mm by 20 mm (0.75 by 0.75 in.)
Maximum slide stroke (X-axis)	100 mm (4 in.)
(Z-axis)	185 mm (7.3 in.)
Rapid traverse rate (X-axis)	12 m/min (472 IPM)
(Z-axis)	12 m/min (472 IPM)
X-axis servo motor	BL-MC50J-20S
Z-axis servo motor	BL-MC50J-20S
Index time	0.2 sec/station 1.0 sec/180°
Index motor	AC 0.5 Kw (0.67 HP)
Tail stock	
Max. slide stroke	175 mm (6.89 in.)
Rapid traverse rate	8 m/min (315 IPM)
Max. slide force	435 Kg (1030 Lbs)
Sleeve size	MT.No2 (No.1, No.3)
Operated by	Hydraulic
Hydraulic equipment	
Tank capacity	7 ℓ (1.85 Gal)
Pump motor	AC 200V 0.75Kw (1 HP) 4P
Pump capacity	50 Hz : 10 ℓ/min (2.64 Gal/min)
Hydraulic pressure	45 Kg/cm ² (640 PSI)
Detection of pressure	Pressure switch
Lubricating	
Tank capacity	2 ℓ (0.53 Gal)
Pump motor	AC 100V 3W (0.004 HP)
Pump capacity	1 to 3 cc/cycle
Standard setting discharge	2 cc/cycle
Detection of oil level	Level switch
Distribution method	Resistance type distribution method

4. Spindle

	BAR CENTER-34
Coolant	
Tank capacity	120 ℓ (32 Gal)
Pump motor	AC 200V 0.18Kw (0.24 HP) 2P
Pump capacity	90 ℓ /min (23.5 Gal/min)
Size of the machine	
Floor space	1990 by 1355 mm (78.35 by 53.4 in.)
Weight	2500 Kg (5500 Lbs)
Power supply	
Voltage	AC200/200-220V+5%.-10%
Cycle	50/60 Hz ±1% 3 Phase
Capacity	9.5 kw / 13.5 KVA
High-pressure coolant	
Pump motor	0.4 Kw (0.54 HP)
Pump capacity	11 ℓ /min (2.9 Gal/min)