

CM Series

Precision Compact Mill

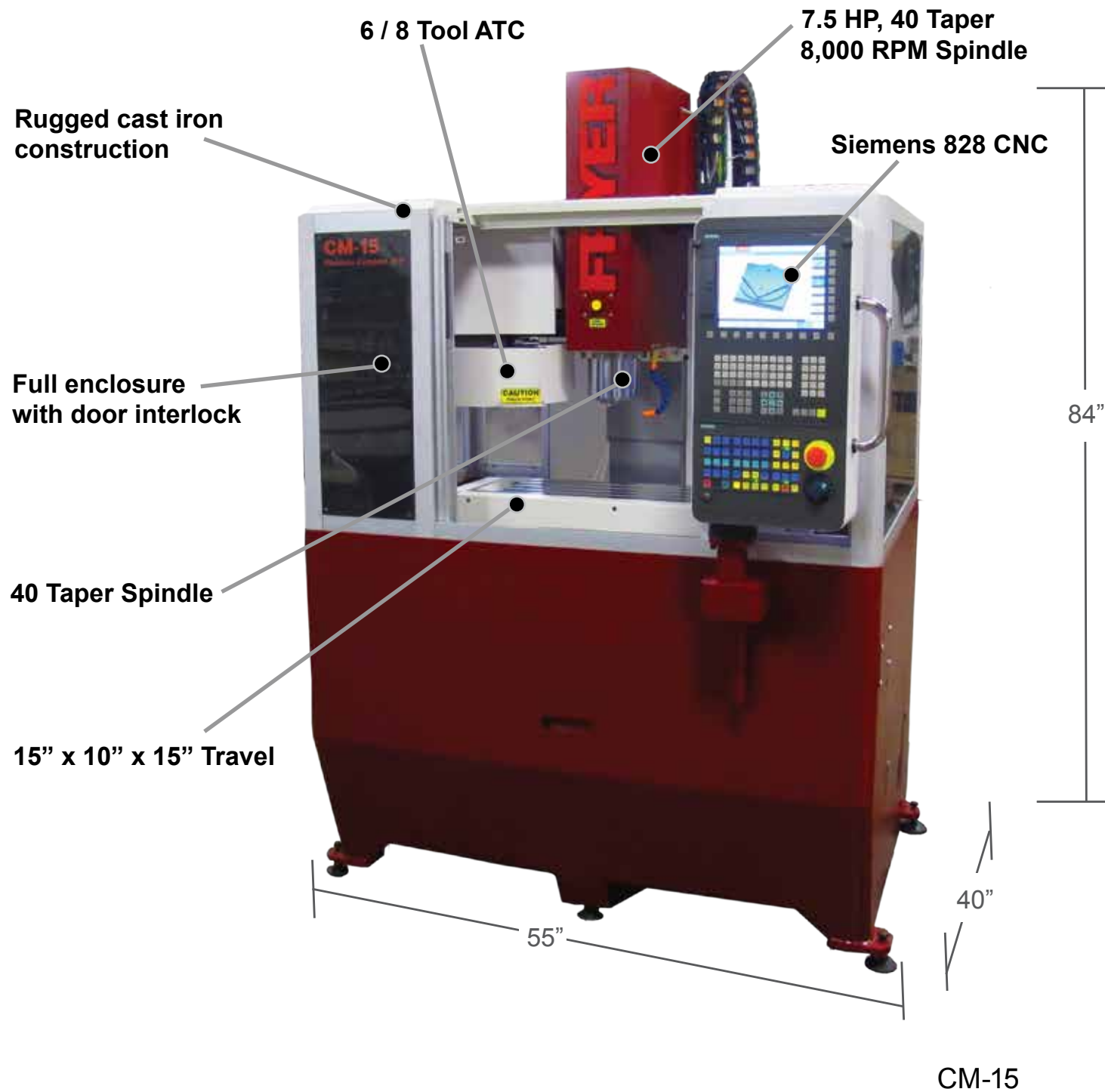


FRYER

MACHINE SYSTEMS[®]

Precision Built Solutions™

The Fryer CM Series is the perfect mill for education and industry alike. Educational users like the full enclosure with lots of glass for excellent visibility of part machining. Industrial users like the small size and easy portability. Everyone loves the powerful Siemens 828 CNC with fast set-up cycles, conversational programming, full G-Code programming and 3D graphics. Built on a cast iron platform and using high precision ballscrews, spindle and ATC, the CM Series provides the performance needed for tight tolerance work. All of this is bundled into a package that is extremely affordable for education and industry.



Siemens 828 CNC

The advanced Siemens CNC is the perfect control for training use. It includes G code and conversational programming as well as advanced graphics. Animated set-up screens, USB, high speed machining and tool life management make it the most versatile CNC available.

- Conversational programming
- G code programming
- Solid model 3D graphics
- High speed machining
- Fast set-up cycles
- USB file transfer
- PC control simulator (optional)



Fanuc Oi Mate CNC

The industry standard Fanuc Oi Mate CNC is the perfect control for training use. The Fanuc CNC control system is used on millions of machines worldwide. Featuring USB file transfer, high speed machining and tool life management. It also features available full 4th axis contouring and electronic probing making it the most versatile CNC available.

- Fanuc reliability
- G code programming
- High speed machining
- Fast set-up cycles
- USB file transfer
- Tool life management



Rugged Construction

- Precision ground ballscrews
- Cast iron construction
- Steel cutting capacity
- Precision linear ways



Precision Ground Table

- Hardened to 45 RC
- Precision ground
- 4 tee-slots
- C3 grade ground ballscrew



40 Taper Spindle

- 8,000 RPM
- Built-in coolant nozzles
- 7.5 HP motor
- CAT or BT-40

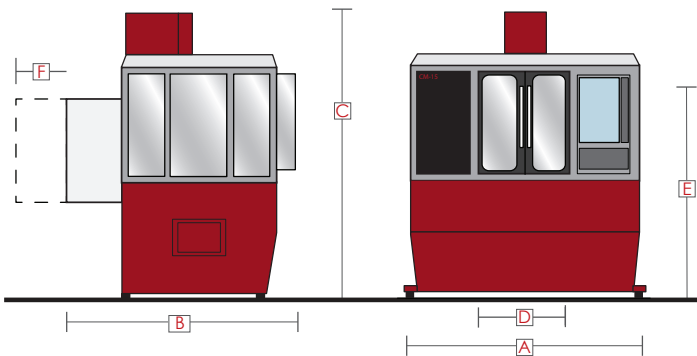


Automatic Tool Changer

- 6 / 8 Tool - 40 taper
- Fast 5 second change time
- Large 3.5" maximum tool diameter
- Up to 8" long tools



CM SERIES SPECIFICATIONS		CM 15	CM 20
MACHINE CAPACITY	X Travel	15"	20"
	Y Travel	10"	14"
	Z Travel	15"	20"
	Ballscrew Size	0.630"	1.00"
	Table Load (Evenly Distributed)	350 lbs.	450 lbs.
	Table Size	10" x 32"	12" x 24"
	T-Slots (No./Width)	4 / 0.630"	3 / 0.630"
	Table Top to Floor	32"	30"
SPINDLE	Motor HP (Peak)	7.5 HP	
	Spindle Speed (RPM)	60 - 8,000 RPM	
	Spindle Torque (Max)	35 ft/lbs. @ 350 RPM	
	Tool Type/Taper	CAT 40 (BT optional)	
	Spindle Nose to Table (Max to Min)	4" - 19"	3" - 23"
	Spindle Center to Column	11"	15"
ATC	Tool Storage Capacity	8 Station	10 Station
	Tool Change Time	5 Seconds	
	Max. Tool Diameter (Full)	3.5"	
	Max. Tool Weight	10.4 lbs.	
	Max. Tool Length	8"	
PERFORMANCE	Positioning Accuracy	+/- 0.0002"	
	Positioning Repeatability	+/- 0.0001"	
	Resolution	0.0001"	
	Rapid Traverse	500 IPM	
	Cutting Feed Rate	0.001 - 400 IPM	
	Servo Type	AC Digital Brushless	
	Axis Thrust (Peak)	2,200 lbs. X, Y, Z	
GENERAL INFO	Air Pressure Requirements	90 PSI; 3 CFM	
	Coolant Capacity	10 Gallons	
	Coolant Flow	2 Gal/Min	
	Power Requirements	40 AMP; 200-250 VAC 3 PHASE (380-500 optional)	
	Door Open Width	23"	30"
	Shipping Dimensions* (WxDxH)	55" x 52" x 71"	65" x 80" x 80"
	Operating Dimensions (WxDxH)	55" x 52" x 80"	65" x 80" x 80"
	Machine Weight	2,350 lbs.	4,300 lbs.



	CM 15	CM 20
Overall Width (A)	55"	65"
Overall Depth (B)	52"	80"
Maximum Machine Height (C)	80"	80"
Door Width (D)	23"	30"
Console Height (E)	63"	63"
Electrical Cabinet Swing (F)	30.5"	30.5"