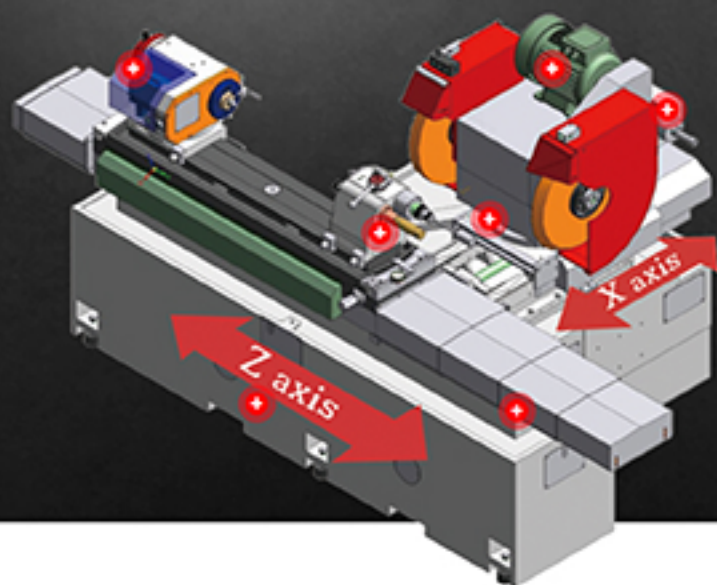


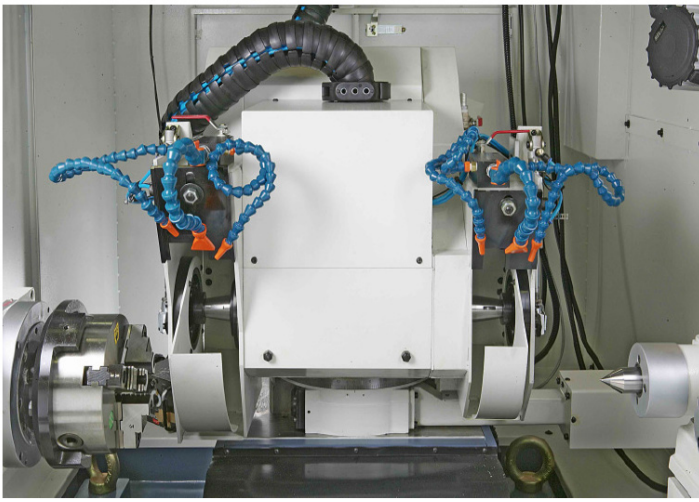
# CINCINNATI MACHINES



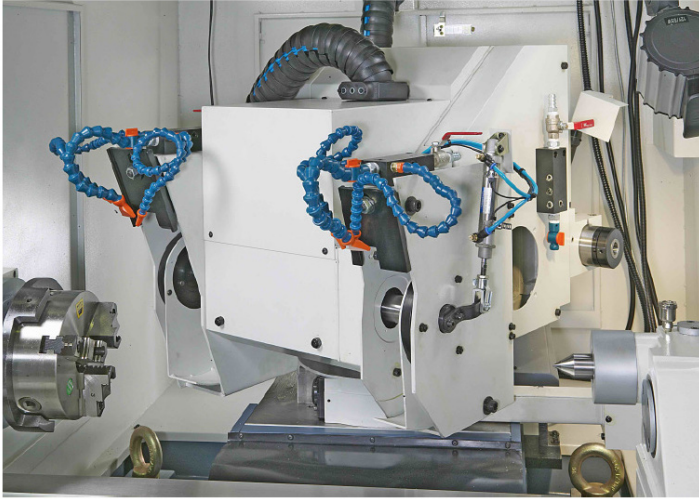
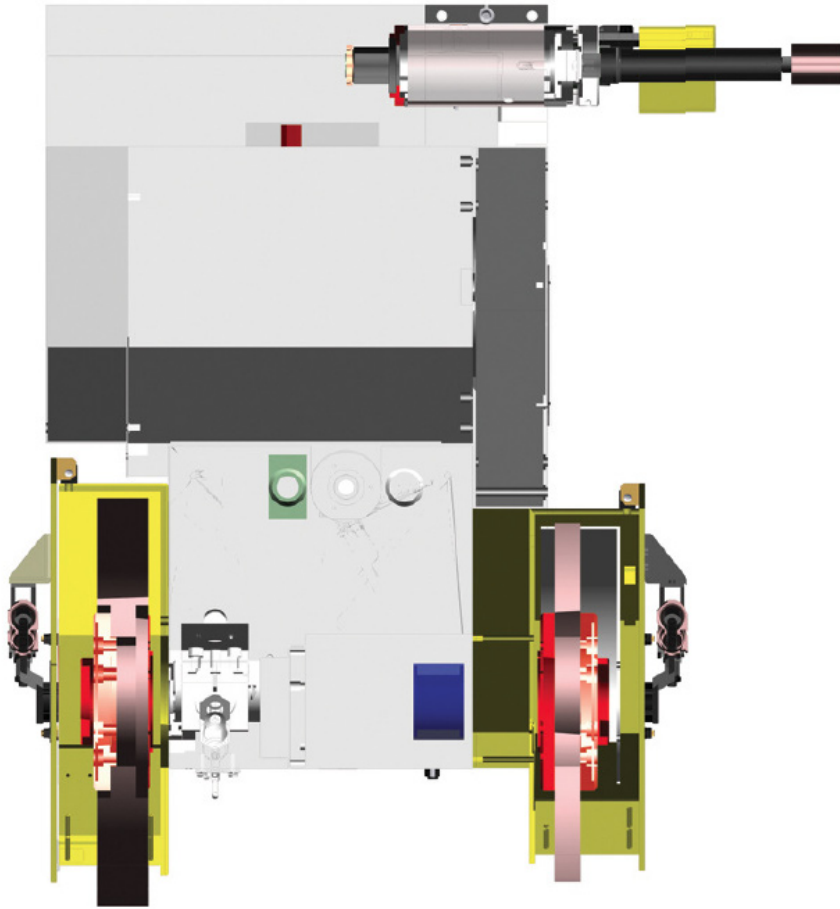
## TriCentric 3-Spindle Multi-Axis ID/OD Grinding Center

Machine Design Feature





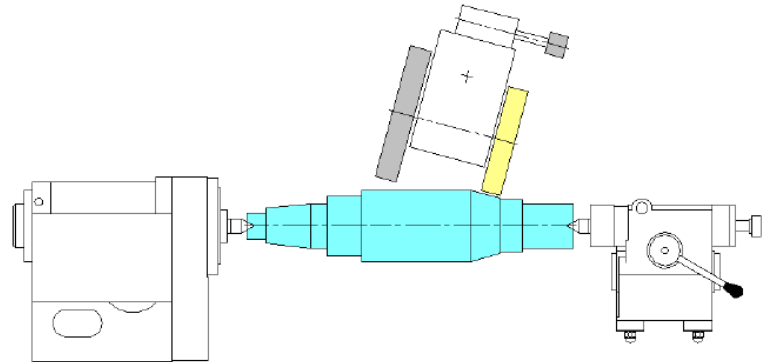
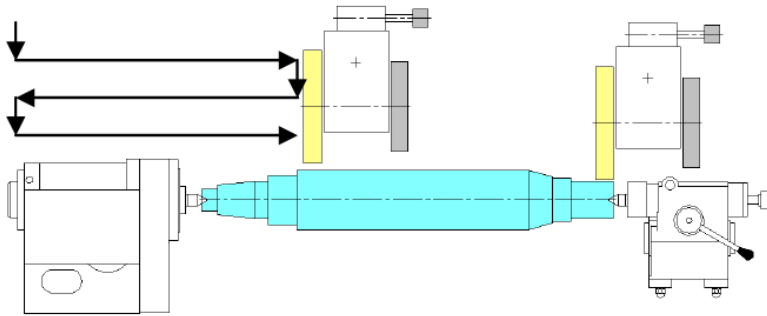
3 Spindles (2 OD 1 ID) that are indexed via B-Axis under CNC Control provide Optimum User Ease of use and performance characteristics.



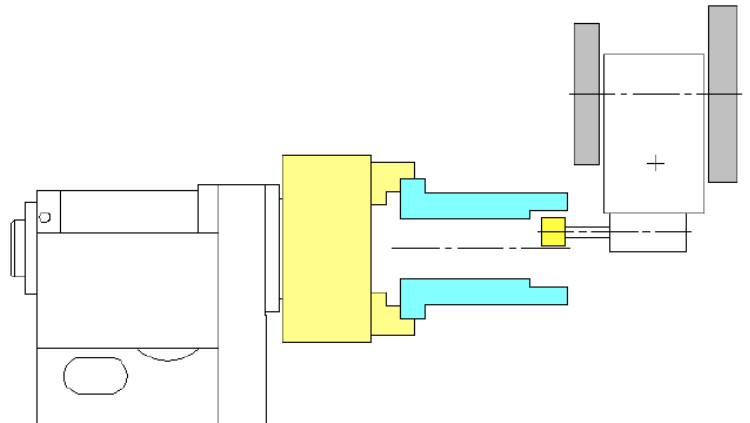
**Grinding Examples:**

- 1. Long Shaft Straight OD Grinding  
Left-Hand-Side Grinding Wheel

- 2. Long Shaft Straight Taper Grinding  
Right-Hand-Side Grinding Wheel



- 3. ID Grinding



SPECIFICATIONS		TriCentric 650	TriCentric 1000
General Capacities	Swing Over Table	Ø320 (Ø12.6")	Ø320 (Ø12.6")
	Distance between Centers	650 (25.6")	1000 (39.4")
	Max. Grinding Diameter	Ø300 (Ø12")	Ø300 (Ø12")
	Max. Load between Centers	100 kgs (220 lbs)	100 kgs (220 lbs)
X-axis	Traverse Stroke	250 (10")	250 (10")
	Automatic Feeding Amount	Ø0.001~Ø0.999 mm	Ø0.001~Ø0.999 mm
	MPG Increment per Graduation	0.001 / 0.01 / 0.1 mm	0.001 / 0.01 / 0.1 mm
	X-axis Servo Motor	1.2 kw	1.2 kw
Wheel Head	OD Spindle Motor	5 HP	5 HP
	OD Spindle Speed (Variable)	2065 rpm	2065 rpm
	OD Wheel Size (Left Hand Side)	Ø355 x 50 x Ø127(Ø14" x 2" x Ø5") / Opt. Ø405 x 50 x Ø127 (Ø16" x 2" x Ø5")	
	OD Wheel Size (Right Hand Side)	Ø305 x 25 x Ø127 (Ø12" x 1" x Ø5")	
	ID Spindle Speed	10500 or 16500 or 29000 rpm	10500 or 16500 or 29000 rpm
	ID Spindle Motor	3 HP	3 HP
	B-axis Swivel Type	Automatic	Automatic
	B-axis Swivel Angle	-35° ~ 190°	-35° ~ 190°
	Swivel Servo Motor (B-axis)	1.2 kw	1.2 kw
Z-axis	Table Swivel Angle	9°(CCW/CW)	7°(CCW/CW)
	Rapid Traverse Speed	10 m/min	10 m/min
	MPG per Graduation	0.001 / 0.01 / 0.1 mm	0.001 / 0.01 / 0.1 mm
	Z-axis Servo Motor	1.2 kw	1.2 kw
Work Head	Swivel Angle	10°CW ~ 90°CCW	10°CW ~ 90°CCW
	Spindle Rotation (variable)	30 ~ 350 rpm	30 ~ 350 rpm
	Spindle Servo Motor	1.5 kw	1.5 kw
	Center	MT 4 (Opt. MT 5 / 5C)	MT 4 (Opt. MT 5 / 5C)
	Center Rotation Type	Fixed & Rotary	Fixed & Rotary
Hydraulic Tailstock	Center	MT 3	MT 3
	Sleeve retraction	25	25
Coolant System	Tank Volume	120 L	120 L
	Processing Capacity	40 L/min	40 L/min
	Motor	1/4 HP(4P)	1/4 HP(4P)
Lubrication System	Tank Volume	20 L	20 L
	Motor	1/4 HP(2P)	1/4 HP(2P)
Hydraulic System	Tank Volume	60L	60L
	Motor	2 HP(4P)	2 HP(4P)
Machine Appearance / Dimension / Weight	Machine Cover	Fully Enclosure w/h Manual Door	Fully Enclosure w/h Manual Door
	Net Weight	5800 kgs	6500 kgs
	Gross Weight	6300 kgs	7200 kgs
	Packing Dimension (LxWxH)	3640 x 2280 x 2130 mm	4540 x 2280 x 2130 mm