

MONASET CUTTER & TOOL GRINDER



CM-2 / CM-A

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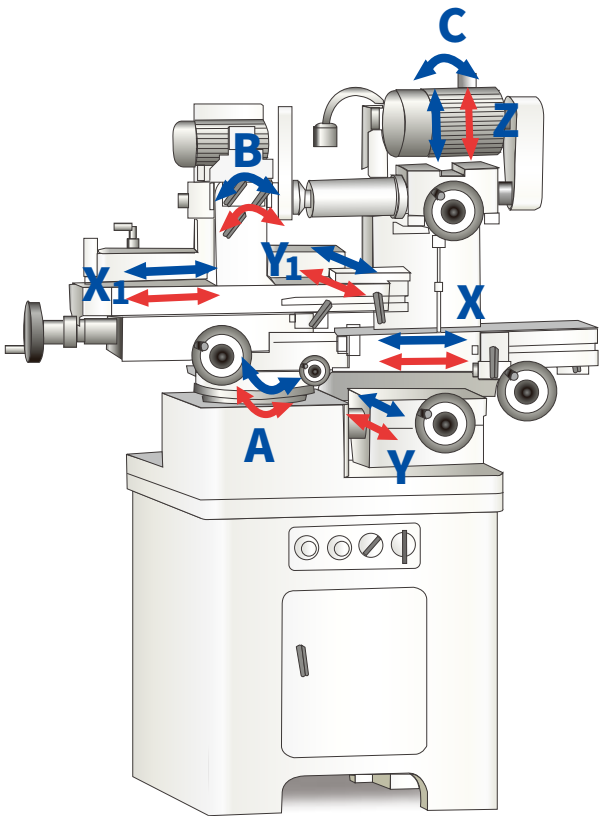
Monaset its capability for multiple grinding operations at a single chucking of the workpiece, this saves setup time ; assures excellent concentricity.



We looked at our successful Monaset grinder very closely before we came up with the engineering refinements which, when combined with its field concepts, make it an even better tool for sharpening, reconditioning or making small cutters from solid stock.

An excellent grinder for irregular and complex form milling cutters and parts. The multi-function grinding can be done in a single clamp to save hours of work for replacing accessories.

Features

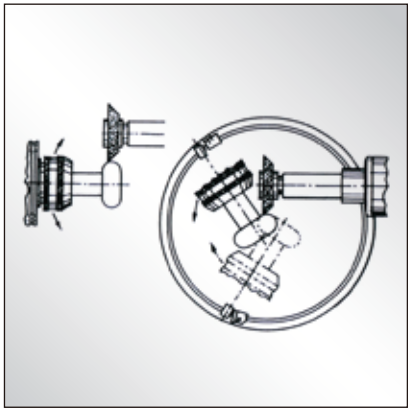


Ideal for production of small hard tools
 Monaset still maintains its versatility for generating straight or tapered, right or lefthand, infinitely variable leads from a simple built-in lead mechanism.

Turntable mounting of entire workhead slide assembly, adjustable through 210 degrees in the horizontal plane, has proven to be a real asset when grinding radii.

Workhead that is adjustable on separate main slide with dual handwheel control has proven to be a boon for setups.

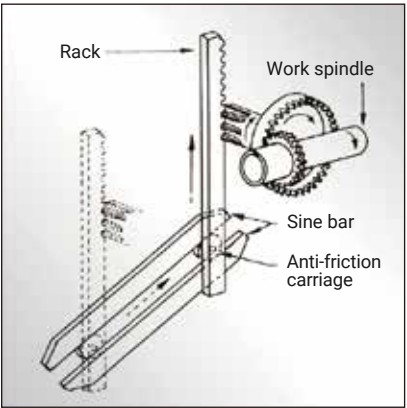
CM-2 7-Axis **CM-A 8-Axis**



The Monaset grinder's combination of swivelling turntable and movable offset slide, provide your shop with versatile capability to quickly set up and accurately generate convex and concave radii of varying sizes.



This part, a helix angle adjustment device combined with the machine, is adjustable with a handle and usable for dressing the helix angle.



Spiral mechanism generates diverse variable leads.

CCD Camera System

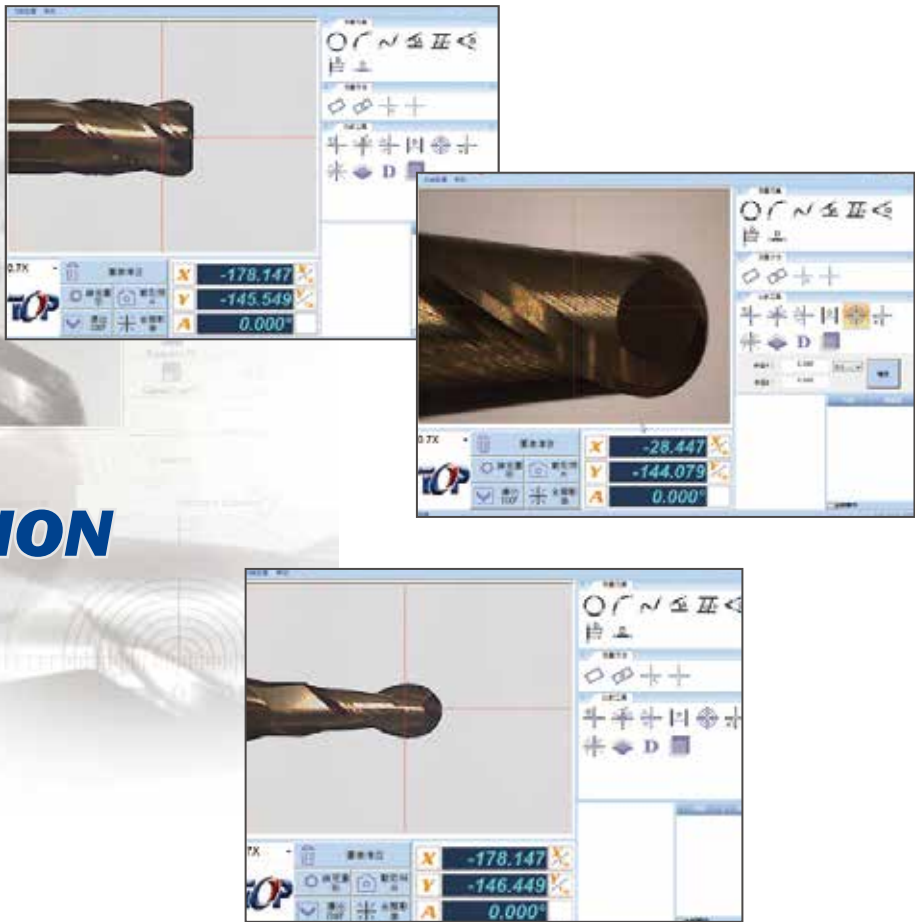


CCD Camera System (CM-A)

The CM-A is equipped with an optical encoder and 1/2" CCD camera system, which provide modern functionality for workpiece setting and inspection.

Online measuring process greatly improves the efficiency and quality of production, especially for the angle, arc, and high-precision generation and regrinding of various small cutters.

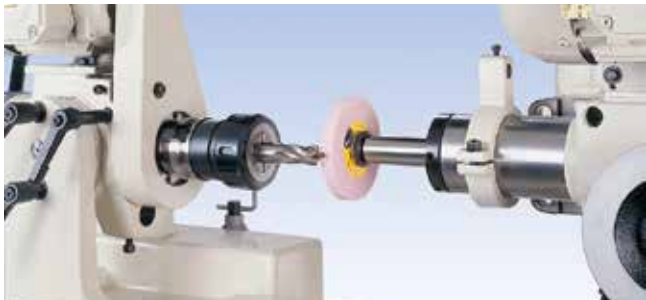
- For irregular and complex tools and parts regrinding.
- Online measuring system
(24" magnification for full screen : Max. 135x)
- Tool comparison software (including DXF import)



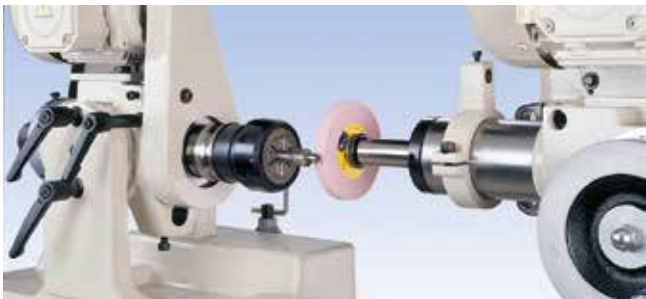
Application



Spiral Flut Grinding



Outside Diameter Grinding



End Mill Grinding



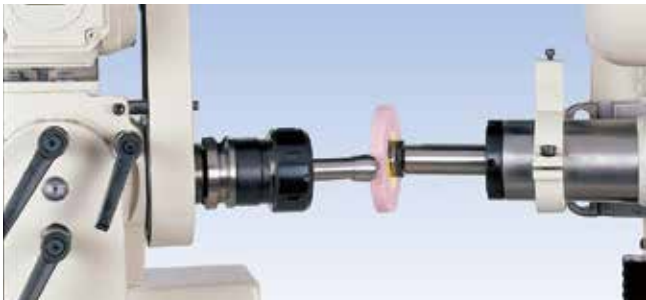
Side Milling Cutter Grinding



Form Cutter Grinding



Cylindrical Milling Cutter Grinding

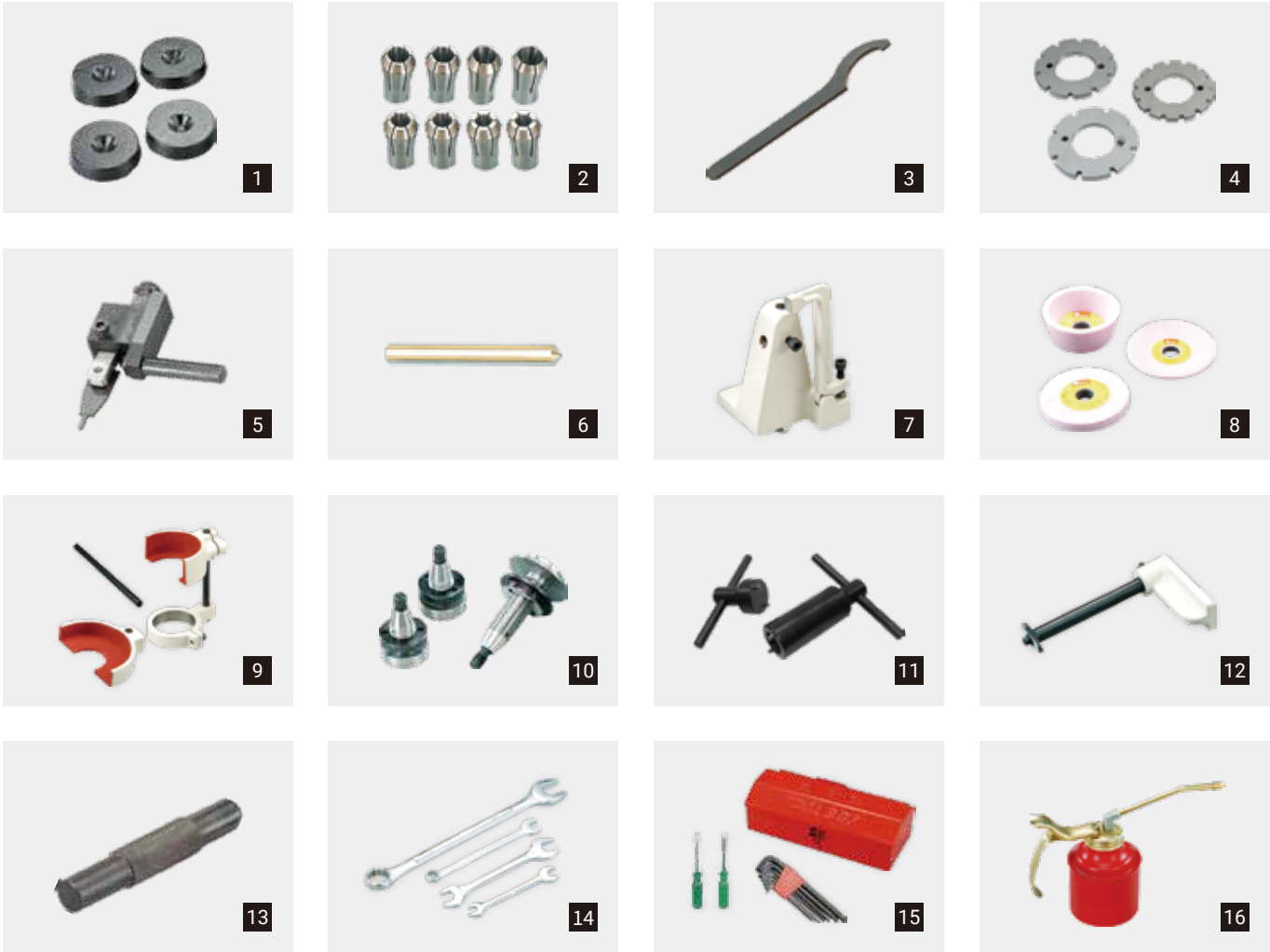


Radius Grinding



Adjustable Tailstock Support Unit (opt.)

Standard Accessories



1.Levelling Blocks	10.Grinding Wheel Flanges (2 Standard and 1 Extended Flanges)
2.Collets (Ø6/Ø8/Ø10/Ø12/Ø16/Ø20/Ø25/Ø32 mm)	11.Wheel Spanner
3.Collet Wrench	12.Cutter Holder Center Gauge
4.Indexing Plates (8T/10T/12T)	13.Workhead Gauge for Zeroing
5.Spring-loaded Index Pawl for Workhead Indexing Plate	14.Wrench Set
6.Diamond Dressing Tool	15.Tool Box & Adjusting Tool
7.Diamond Dressing Tool Holder or Tool Support Bracket	16.Oil Bottle
8.Grinding Wheels (WA, Including Flat/Bowl/Dish Types)	
9.Grinding Wheel Guards with Extension Bar	

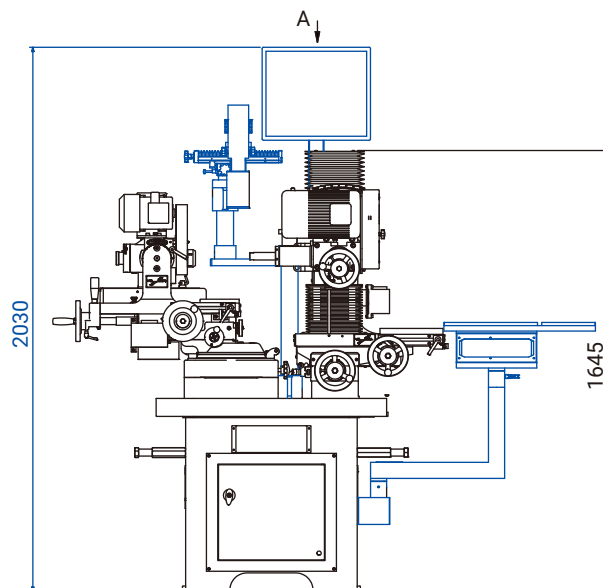
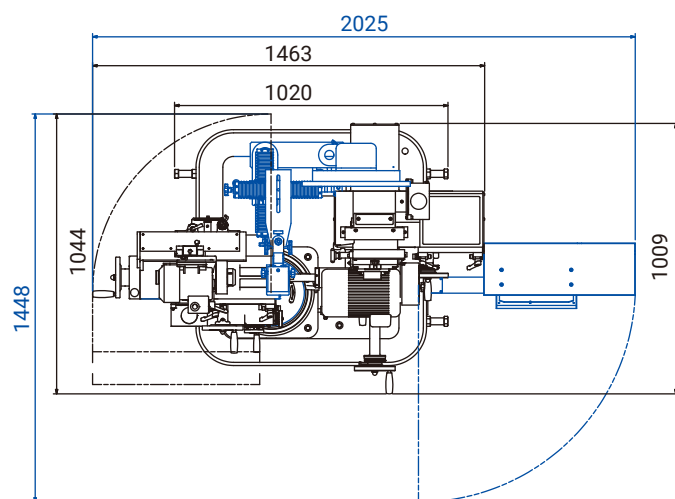
Optional Accessories



1.Indexing Plate- 24T	10.Adjustable Tailstock Support Unit
2.1/2" Wheel Flange and Spanner	11.Dust Collector
3.Wheel Flange with 2 Collets (Ø3/Ø6 mm) for Internal Grinding	12.Wet Grinding Attachment
4.ER11 Collet Set (Ø3/Ø2/Ø1 mm) with Wrench & Extension Bar	13.Dry and Wet Coolant Tank (45L; 1/2 HP)
5.Wheelhead Toothrest Set with Extension Bar	14.Dry and Wet Coolant Tank (80L; 1/2 HP) with Magnetic Device
6.4" Six-jaw Chuck for Workhead	15.Frequency Converter of Grinding Wheel Spindle (1/2 HP/1 HP/2 HP)
7.Grinding Device for Large Face Milling Cutters	16.Upgrading Motor of Grinding Wheel Spindle (1 HP/2 HP)
8.Lathe Tool Grinding Attachment	17.Safety Shield
9.Tool Support Bracket	18.CE Safety Device

Specification/Model		CM-2	CM-A
Workhead	Max. Swing Diameter	304 mm	304 mm
	Max. Collet Working Diameter	32 mm	32 mm
	Min. Collet Working Diameter	5 mm	5 mm
	Max. Helix Angle	60°	60°
	Max. Distance Between Spindle Nose and Tailstock Center	135 mm	135 mm
Workhead Stroke	X1-axis - Slide Travel	130 mm	130 mm
	Y1-axis - Offset Slide Travel	100 mm	100 mm
	Front of Center	50 mm	50 mm
	Rear of Center	50 mm	50 mm
Adjustment of Workhead Angle	A-axis - Rotation of Horizontal Plane	±105° (210°)	±105° (210°)
	B-axis - Rotation of Vertical Plane	±40° (80°)	±40° (80°)
Grinding Wheel Head	Grinding Wheel Diameter	100 mm	100 mm
Grinding Wheel Head Stroke	X-axis - Left-Right Slide Travel	110 mm	110 mm
	Y-axis - Total Front-to-Rear Slide Strokes	170 mm	170 mm
	Z-axis - Total Vertical Slide Stroke	240 mm	240 mm
		-	±15°(30°)
Spindle Speed	Workhead Speed	370/440 rpm (50/60 Hz)	370/440 rpm (50/60 Hz)
	Grinding Wheelhead Speed	4000/6000/8000 rpm	4000/6000/8000 rpm
Motor	Workhead AC	1/4 HP (0.186 kw)	1/4 HP (0.186 kw)
	Grinding Wheelhead AC	1/2 HP (0.373 kW)	1 HP (0.75 kW)
Dimension	Dimensions (W x D x H)	1450 x 1463 x 1645 mm	2070 x 2025 x 2030 mm
	Weight	970 kg	1070 kg

※ All specifications are subject to alternations without prior notice.



※ CM-A including Blue part.

Unit : mm

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