

# ACRA®

## UNIVERSAL CUTTER AND TOOL GRINDER



ATC-MN2



THE LEADER IN QUALITY AND RELIABILITY

## Illustration

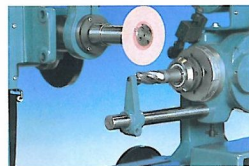
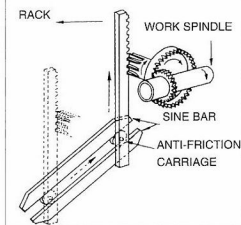
### ACRA ATC-MN2 Universal Tool & Cutter Grinder FEATURES:

Capability for multiple grinding operations at single chucking of workpiece saves setup time, assures excellent concentricity.

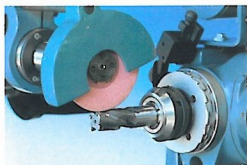
Versatility for generating straight or tapered, right or left hand, infinitely variable leads from a simple built-in lead mechanism

Turntables mounting of entire workhead slide assembly, adjustable through 235 plus degree in the horizontal plane has proved to be a real asset when grinding radius,

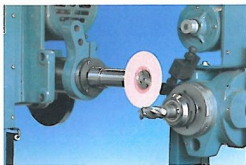
Adjustable is workhead on separated slide with dual handwheel control has proved to be a boost for setups.



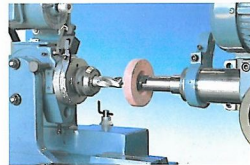
CENTERING DEVICE



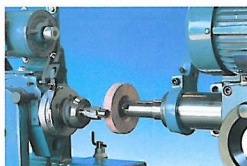
SCREW SLOT SURFACE GRINDING



SCREW ANGULAR GRINDLING



MILLING CUTTER END GRINDING



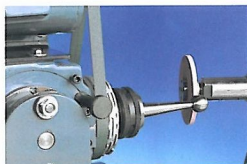
GRINDING OUTER DIAMETER



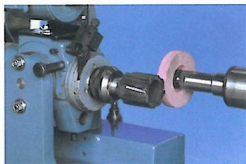
SIDE MILLING CUTTER GRINDING



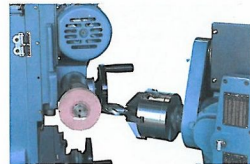
FORMED MILLING CUTTER GRINDING



ARC GRINDING



VERTICAL MILLING CUTTER GRINDING



DRILL BIT GRINDING

## Standard Equipment

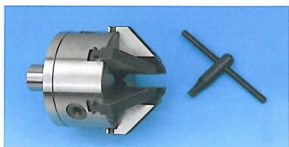
- 1 Wheelhead Tool rest Assembly with extension bar
- 2 Grinding Wheel Guards with extension bar
- 3 Front Stock Support
- 4 Straight Cylindrical Collets:  
(Please select "A" or "B")  
(A) Metric sizes: 3,5,6,8,10,12,16,20,25 & 32 m/m.  
(B) Inch sizes:  $\frac{1}{8}$ ,  $\frac{3}{16}$ ,  $\frac{1}{4}$ ,  $\frac{5}{16}$ ,  $\frac{3}{8}$ ,  $\frac{7}{16}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1,  $1\frac{1}{8}$  &  $1\frac{1}{4}$ "  
Also including set of 3 taper collets:  
No. 2,3,4 morse taper
- 5 Set of (5) Grinding Wheel flanges. (4) standard and (1) extension flange
- 6 Diamond Holder Bracket

- 7 Wrench for workhead
- 8 Tooth rest Centering Gauge
- 9 Adjustable Tailstock Support Unit
- 10 Spanner for Grinding Wheel
- 11 Levelling Blocks
- 12 Standard Arbor
- 13 Screw Driver
- 14 Set of wrenchs
- 15 Double-end spanner
- 16 Set of (4) Index Plates for Spindle Lead Mechanism  
0,8,10 & 12 divisions
- 17 Tool box
- 18 Oil can

## Optional Attachments



Large cutter radius grinding attachment. No.01



Four-inch universal three-jaw chuck for workhead. No.02



Additional index plates for spiral lead indexing unit  
(\*Please indicate your sizes of specification) No.03



Additional diamond truing tool with diamond tip. No.04



Grinding wheel flange for mounting grinding wheel with  $\frac{1}{2}$ " hole No. 05



Spring-loaded Index Pawl for Workhead Index Plates. No.06



Additional straight cylindrical collets.  
(\*Please indicate your sizes of specification) No.07



Set of (3) taper collets: Nos. 5, 7 & 9 Brown and Sharpe. No.08  
(\* Available for U.S.A only)



## Specifications

### Capacity

Workhead:	
Swing over main slide, max dia	12" (304mm)
Collet work dia, max	1.25" (31mm)
min	0.12" (3mm)
Lead generated by spiral lead mechanism,	
min	1.81" (45mm)
Length between spindle nose and tail center,	
max	6" (152mm)
Wheelhead:	
Grinding wheel dia, max	4" (101mm)

### Range

Workhead:	
Main slide travel	5.75" (146mm)
Offset slide travel, total	5.25" (133mm)
-front of center	3" (76mm)
-rear of center	2.25" (57mm)
Workhead angular adjustment:	
Horizontal plane (turntable base)	235°
Vertical plane, above center	40°
below center	40°
Wheelhead:	
Longitudinal slide travel	6" (152mm)
Vertical slide travel, total	9.50" (241mm)
-above center	4.50" (114mm)
-below center	5" (127mm)

Cross slide travel, total	7.50" (190mm)
-front of center	3" (76mm)
-rear of center	4.50" (114mm)

### Spindle Speeds

(±0%, -8% variation allowable)	
Workhead, one speed	436 rpm
Wheelhead, three speeds	4000, 5729
(motor speed @ 3600 rpm)	and 800rpm
Internal grinding attachment (extra cost),	
Three speeds, approx	16410, 23510 and 32820 rpm

### Motors, Electric

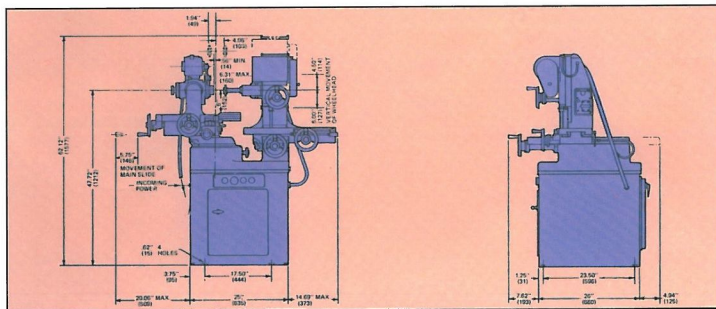
Workhead, drive, AC	includes reverse 1/4 hp (.186 kilowatts)
Wheelhead drive, AC	1/2 hp (.373 kilowatts)

### Floor Space and Weight

Area of base only	25" × 26" (635mm × 660mm)
Area required for machine (including swivel and overtravel movements)	60" × 67" (1542mm × 1701mm)
Height from floor to center of workhead spindle	47.72" (1212mm)
Height, overall with wheelhead raised	62.12" (1577mm)
Net weight	
(including motors and controls)	1525 lbs (691 kilograms)

NOTE: We reserve the right to modify the specifications without advise.

## Dimensional Drawing



All illustrations and specifications contained in this - literature are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice in prices, materials, equipment, specifications, and models, and to discontinue models. In addition, all nominal dimensions are subject to an allowable variation of  $\pm 0.25"$  unless otherwise specified.



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