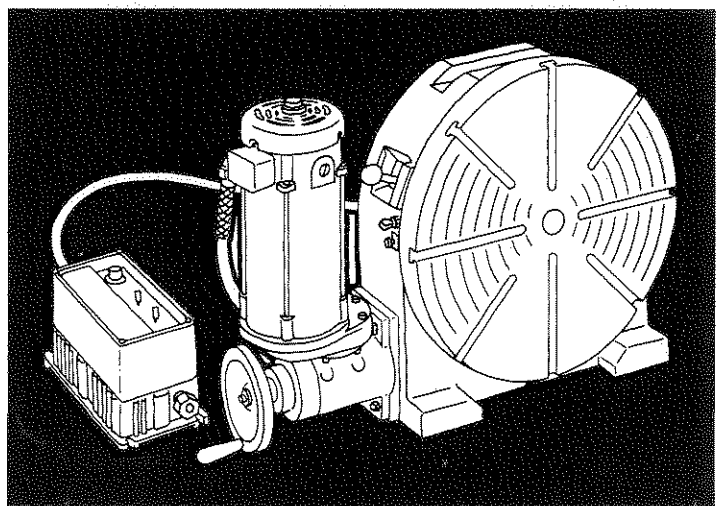
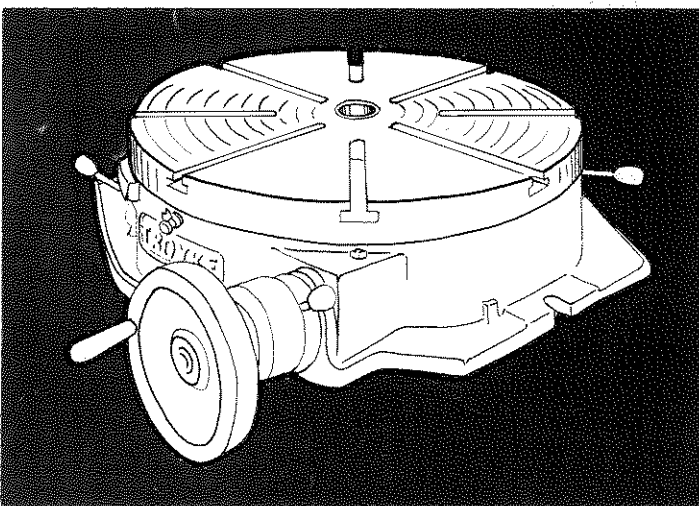
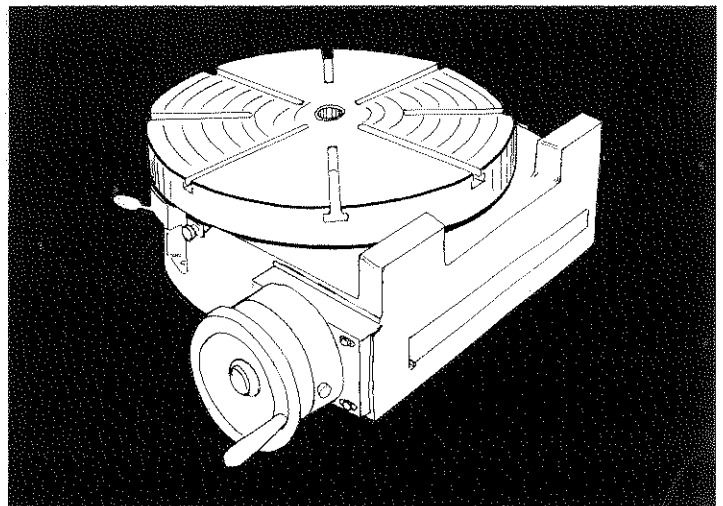
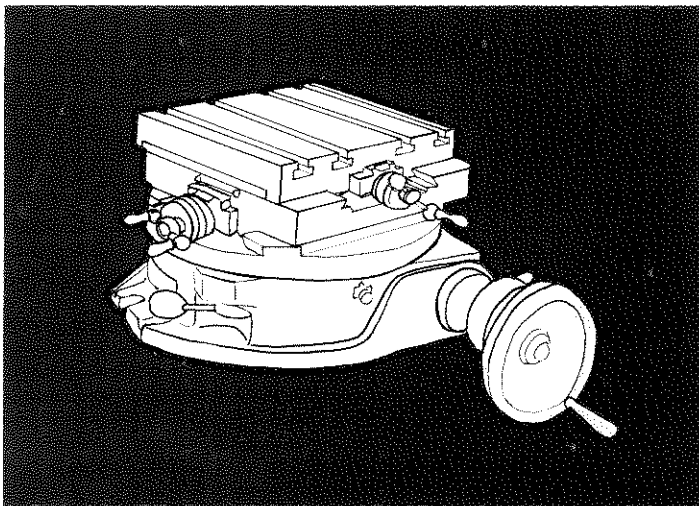
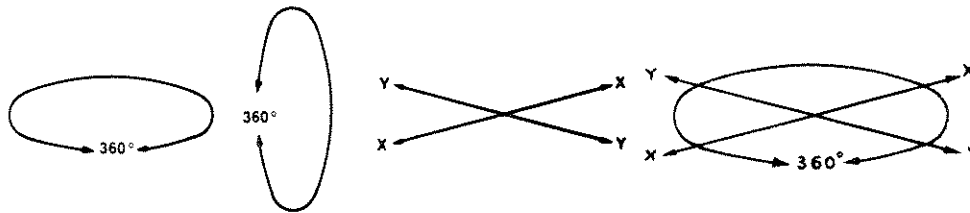


Troyke

CATALOG 40-94

...the industry standard for
ROTARY TABLES



Troyke

ACCURACY PRODUCING FEATURES

Certain of the products shown in this catalog are covered by one or more of the following United States Patents. Additional Patents are pending.

2679787 300469 3100636 3170340

WORM and WORMWHEEL—All worms and wormwheels are cut on special machines of extreme accuracy in our own shop. The precision worm and shaft are one piece, cut from a solid alloy-steel bar. All wormwheels are hobbled on a single purpose, special hobbing machine which produces gears as accurate as it is possible to machine. All wormwheels are detachable and replaceable.

DISENGAGEABLE WORM—All Troyke Rotary Tables, except UP Models and the Power Operated Models, are equipped with disengageable worms which affords quick rotation of the Rotary Table for indicating work pieces, etc.

WORM ADJUSTMENT—A convenient method of adjustment is provided to compensate for wear. Adjustment for end play in the wormshaft is also provided.

DIALS—The adjustable satin chrome dials are extremely large in diameter. All dials are precision ground and graduated in degrees and minutes.

VERNIERS—The easy-to-read satin chrome verniers offer fifteen second readings in either direction. Five Second Reading is standard on UP Models.

BASE—The extremely rugged base casting, which is totally enclosed, supports the split tapered center bearing in which the turntable revolves. This bearing is readily adjustable. Top and bottom of bases are precision ground and are parallel within .0005".

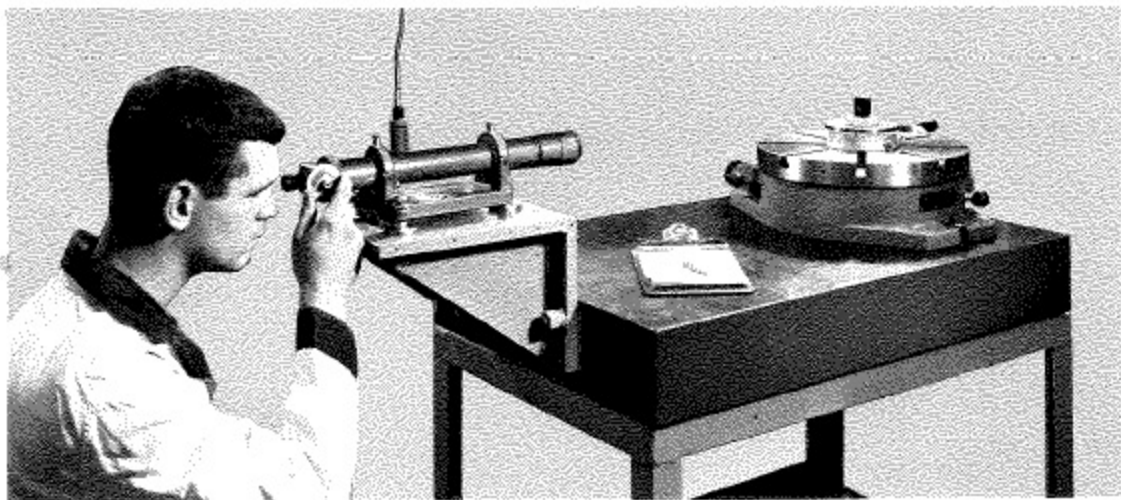
TURNTABLE—All turntables are heavily ribbed and made of High Grade Semi-Steel Castings. These tables are precision ground and parallel within .0005". All T-Slots are machined. Graduations are accurately cut on a special graduating machine in increments of one degree.

LOCKING NON-INFLUENCING—Locking facilities are provided to lock the turntable to the base as one rigid unit.

OILING—Oiling facilities are provided for all moving parts.

Angular Accuracy of each Troyke Rotary Table is Checked with an Auto-Collimator

The National Bureau of Standards approves the use of the Auto-Collimator and calibrated polygon as a highly accurate method for checking Rotary Tables.



All accuracies stated in this catalog are **TOTAL** through 360° rotation of the turntable. (Not plus or minus)

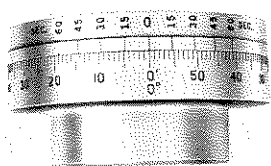
20 Seconds—.00029" on a 6" Diameter	45 Seconds—.00066" on a 6" Diameter
30 Seconds—.00044" on a 6" Diameter	60 Seconds—.00087" on a 6" Diameter

Repair and Reconditioning Service offered at nominal cost.

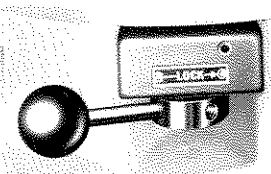
Larger sizes, special design features, available on request.

Troyke

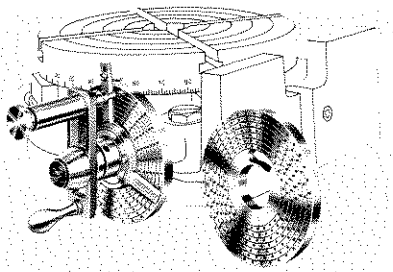
STANDARD PRECISION HORIZONTAL ROTARY TABLES 12"-15"-18"-21"



DIAL and VERNIER — Large Satin Chrome Accurately Graduated Dials and Verniers. Dials graduated in single minute increments as well as degrees. Verniers readable to 15 seconds in either direction.



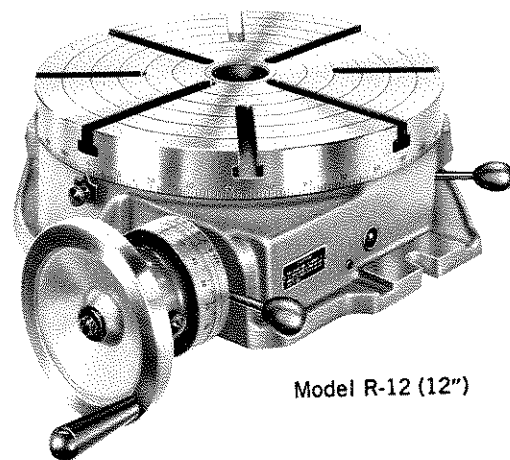
LOCK - The new internal non-influencing positive locking arrangement is one of the many features offered. Models R-15, R-18, R-21, R-25, T-18 and T-21 are provided with two locks. (Patent No. 3100636)



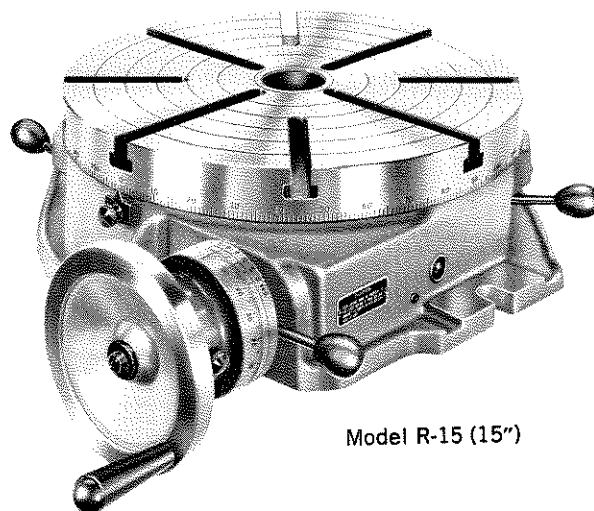
DIVIDING ATTACHMENTS Pat. No. 3170340

The DA-9-A Dividing Attachment (Not shown but similar to the DA-15-A) is for use with the Model U-9.

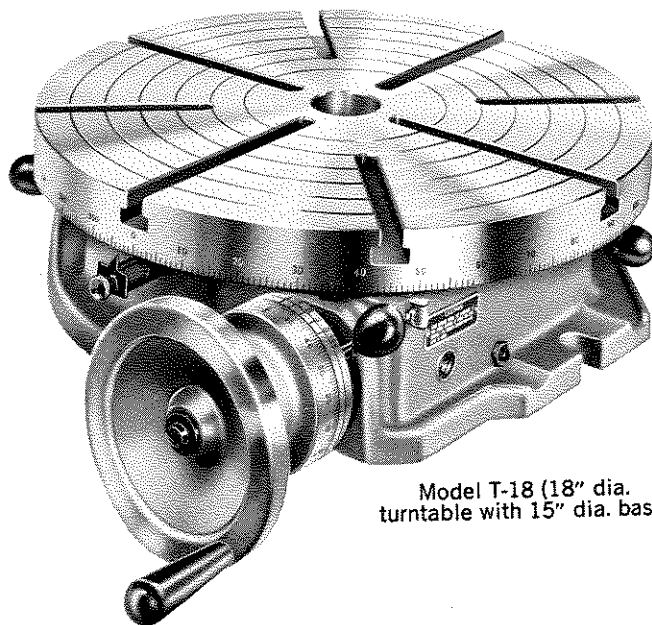
The DA-15-A Dividing Attachment is for Models R-12, R-15, T-18, T-21, U-12 and U-15.



Model R-12 (12")



Model R-15 (15")



Model T-18 (18" dia. turntable with 15" dia. base)

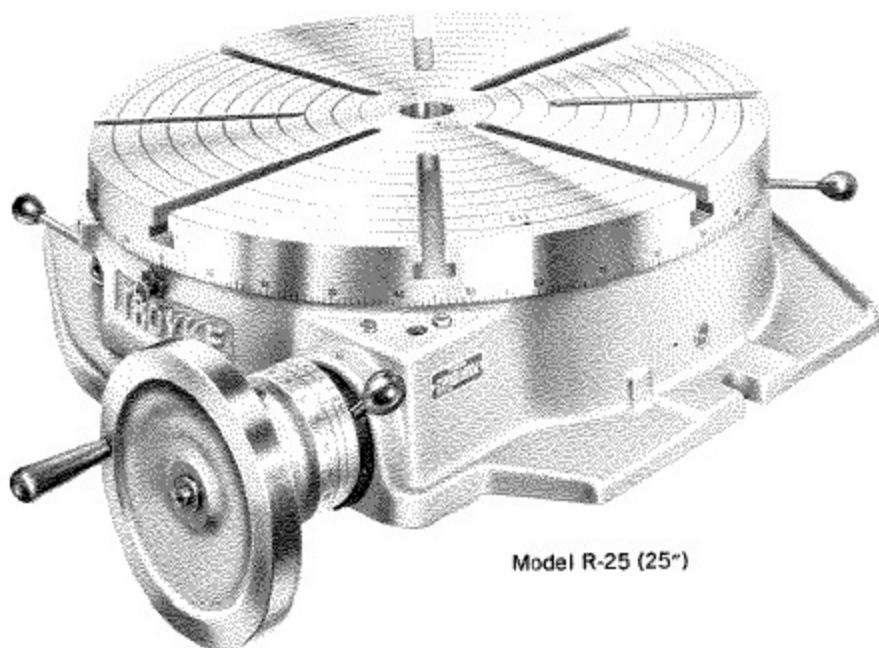
DIMENSIONAL SPECIFICATIONS AT RIGHT

Troyke

HEAVY DUTY STANDARD PRECISION HORIZONTAL ROTARY TABLES 18"-21"-25"

GUARANTEED ANGULAR ACCURACY

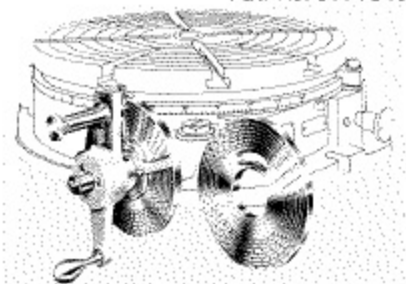
(See Chart Below)



Model R-25 (25")

DIVIDING ATTACHMENTS

Pat. No. 3170340



DA-25-A Attachment

Dividing Attachments are available for all models as optional equipment. Each Dividing Attachment includes two index plates with four sides of hole circles. These index plates are adjustable circumferentially to permit finding the nearest hole in the plate without rotating the work. A Spring, with adjustable tension, is provided to hold the Bronze Sector Assembly against the Ground Index Plate. Special or Blank Plates can also be furnished.

Divisions — All numbers from 2 to 52. All those divisible by 2 or 5 from 52 to 100, and many divisions above. Ask for sample chart.

The DA-25-A Dividing Attachment is for Models R-18, R-21, R-25, and U-18.

DA-20-A Dividing attachment for models UP-20, UP-25 and UP-30

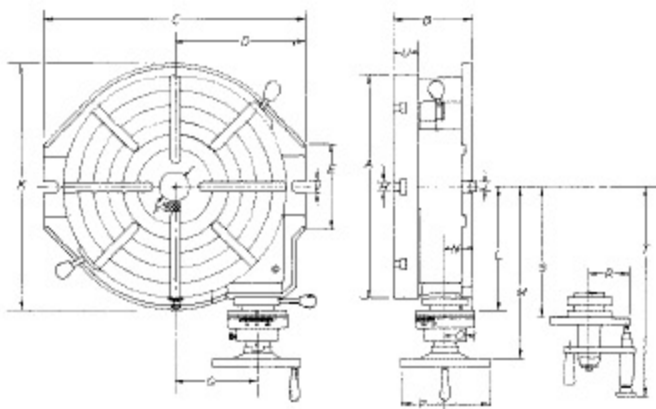
DA-100-A Dividing Attachment for models DMT-12, DMT-15 and DMT-18

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N
R-12	12 5/8	15 1/4	7 1/4	3 3/4	2	4 1/4	3/8	1/8	13 1/2	7 1/8	11 1/8	2 1/8	
R-15	15 5/8	17 1/2	8 1/4	5 1/4	2	5 1/4	3/8	1/8	16 1/2	8 1/8	11 1/8	2 1/8	
T-18	18 5/8	17 1/2	8 1/4	5 1/4	2	5 1/4	3/8	1/8	16 1/2	8 1/8	11 1/8	2 1/8	
T-21	21 5/8	17 1/2	8 1/4	5 1/4	2	5 1/4	3/8	1/8	16 1/2	10 1/8	13 1/8	2 1/8	
R-18	18 5/8	22 3/8	11 1/8	10 1/2	2	7 1/4	1/8	1/8	20	10	13 1/8	1 1/8	
R-21	21 6 1/4	24 1/2	12 1/2	12 1/2	2	7 1/4	1/8	1/8	23 1/4	11 1/2	15 1/4	1 1/8	
R-25	25 6 3/8	28 1/4	14 1/8	15	2	8 1/4	1/8	1/8	27 1/2	13 3/8	17 1/4	1 1/8	

Model No.	O	P	R	S	T	U	V	Ratio Worm to Wormwheel	Weights
									Net Ship
R-12	2	6	2 1/2	8 1/8	13 3/8	1 1/8	1 1/8	1:90	133 150
R-15	2	6	2 1/2	8 1/8	14 3/8	1 1/8	1 1/8	1:120	192 213
T-18	2	6	2 1/2	8 1/8	14 3/8	1 1/8	1 1/8	1:120	212 237
T-21	2	6	2 1/2	10 1/8	15 3/8	1 1/8	1 1/8	1:120	235 260
R-18	2	8	3 1/2	10 1/2	15 1/4	1 1/8	1 1/8	1:120	300 332
R-21	2	8	3 1/2	12	17 1/4	1 1/8	1 1/8	1:120	415 460
R-25	2	8	3 1/2	13 1/8	19 1/4	1 1/8	1 1/8	1:120	550 595

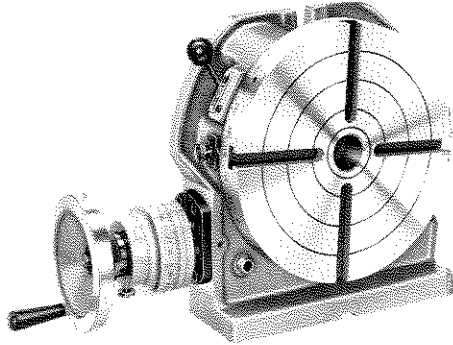
WEIGHT CAPACITY ANGULAR ACCURACY

MODEL NO.	HORIZ.	
R-12	250#	30 Sec. (.0008 on 12" Dia.)
R-15	350	30 " (.0011 on 15" ")
T-18	350	30 " (.0013 on 18" ")
T-21	350	30 " (.0015 on 21" ")
R-18	700	20 " (.0009 on 18" ")
R-21	900	20 " (.0010 on 21" ")
R-25	1000	20 " (.0012 on 25" ")

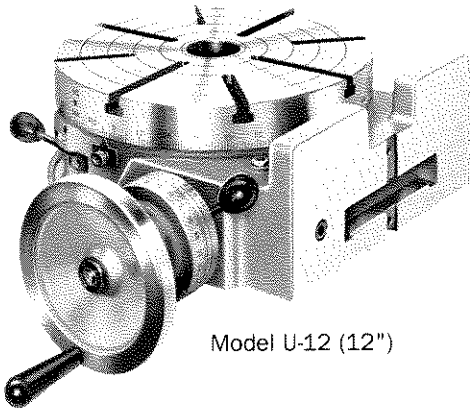


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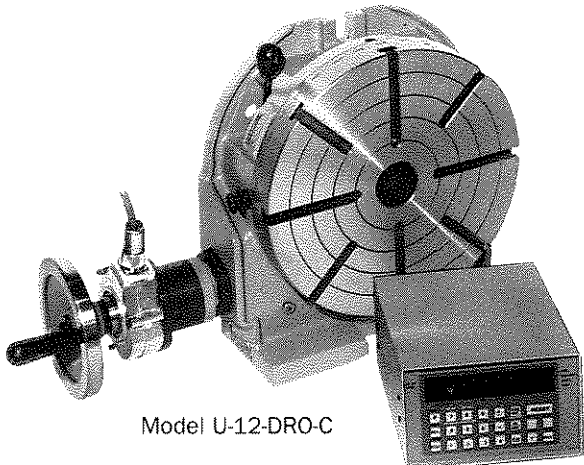
STANDARD PRECISION HORIZONTAL-VERTICAL ROTARY TABLES 9"-12"-15"-18"



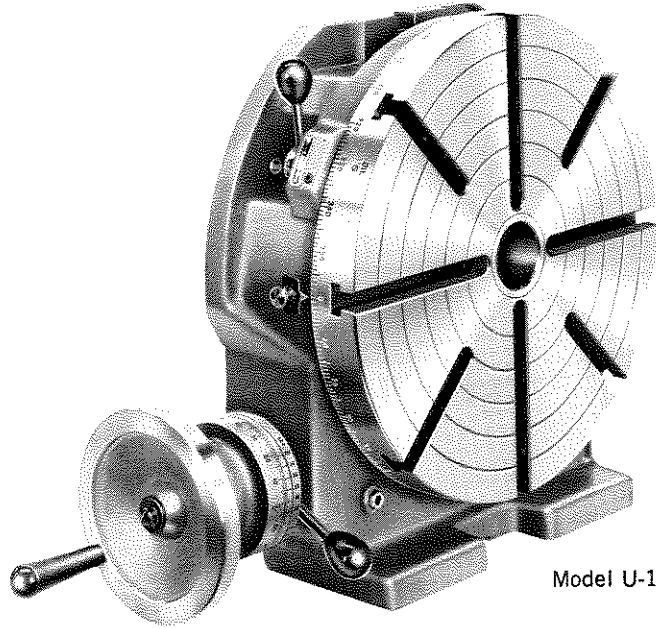
Model U-9 (9")



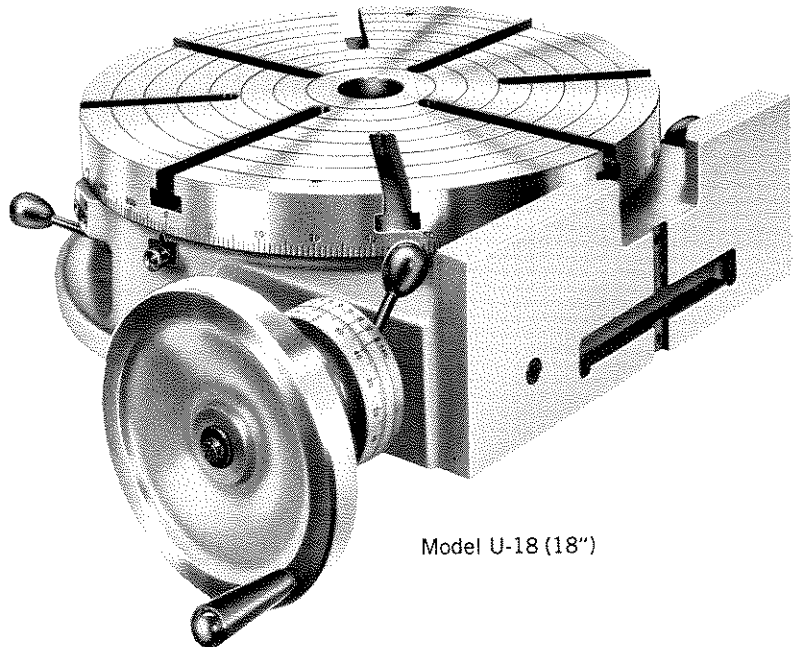
Model U-12 (12")



Model U-12-DRO-C



Model U-15 (15")



Model U-18 (18")

DIGITAL READOUT OPTIONS

DRO-C C-tek Readout

DRO-H Heidenhain Readout

FOR TABLE DESIGN FEATURES, SEE PAGES 3 AND 4

DIMENSIONAL SPECIFICATIONS AT RIGHT

HEAVY DUTY PRECISION HORIZONTAL-VERTICAL ROTARY TABLES SHOWN ON PAGE 7.

HORIZONTAL-VERTICAL ROTARY TABLES

20" Model UP-20

25" Model UP-25

30" Model UP-30

Models UP-20 to UP-30 meet the demand for a super-precision, heavy duty, large diameter Rotary Table which can be used in either the horizontal or vertical plane. All models fill the most exacting requirements found in either manufacturing or inspection.

FEATURES

Table rotates in a super-precision, tapered bore, cylindrical roller bearing. / Large easy-to-read satin chrome one minute dial. / Vernier with five second reading in either direction. / Table graduated in one degree increments. / One piece worm-shaft mounted in tapered roller bearings. / Non-influencing positive locks. / Totally enclosed base. / Worm and Wormwheel run in a bath of oil. / All surfaces are precision ground. / Lifting Bar is furnished for ease in handling.

A Dividing Attachment, DA-20-A is available for use on the UP-20, UP-25, and UP-30. This DA-20-A Dividing Attachment is similar to the DA-15-A attachment shown and described on page 4.

GUARANTEED ANGULAR ACCURACY

(See Chart Below)

See Page 3 for converting seconds to decimal of inches on a 6" diameter.

DIMENSIONAL SPECIFICATIONS BELOW

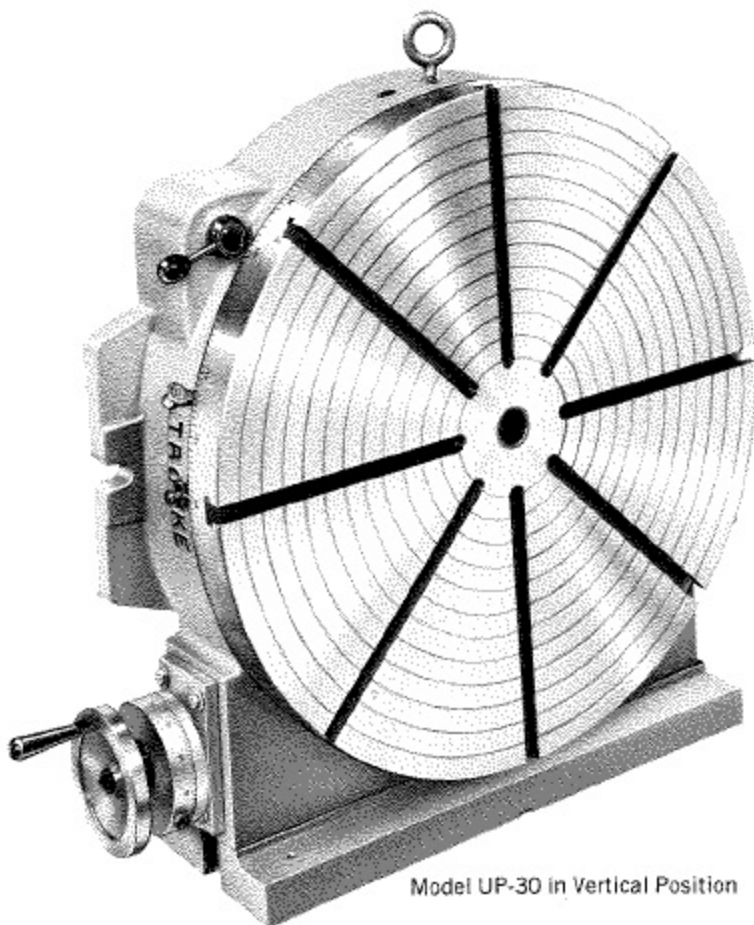
Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N
U-9	9	3 1/4	10 1/4	5 1/4	9 1/4	1	2 1/4	1/4	1/2	10 1/2	5 1/2	8 1/4	1 1/4
U-12	12	5 1/4	13 1/4	7 1/4	11 1/2	2	4 1/4	1/4	1 1/2	13 1/4	7 1/2	10 1/2	2 1/4
U-15	15	5 1/4	16 1/4	9 1/4	12	2	5 1/4	1/4	1 1/2	16 1/4	8 1/4	11	2 1/4
U-18	18	5 1/4	19 1/4	10 1/4	16 1/2	2	7 1/4	1/4	1 1/2	19 1/4	9 1/4	12 1/4	2 1/4
UP-20	20	7 1/4	21 1/4	11 1/4	19 1/2	1 1/2	8 1/4	1/4	1 1/2	19	11 1/2	13 1/4	3 1/4
UP-25	25	7 1/4	26 1/4	14 1/4	19	1 1/2	8 1/4	1/4	1 1/2	19	11 1/2	13 1/4	3 1/4
UP-30	30	8 1/4	32 1/4	17 1/4	27	1 1/2	11 1/4	1/4	1 1/2	33 1/2	15	17	3

Model No.	O	P	R	S	T	U	V	Ratio Worm to Wormwheel	Weights	
									Net	Ship.
U-9	1 1/2	4 1/2	2 1/2	6 1/2	11 1/2	1 1/2	5	1:90	63	78
U-12	2	6	2 1/2	8 1/2	13 1/2	1 1/2	6	1:90	151	170
U-15	2	6	2 1/2	8 1/2	14 1/2	1 1/2	6	1:120	207	227
U-18	2	8	3 1/2	10 1/2	16	1 1/2	8	1:120	330	360
UP-20	2 1/4	6	3 1/2	10 1/2	16 1/2	2	16	1:120	485	521
UP-25	2 1/4	6	3 1/2	10 1/2	16 1/2	2	16	1:120	600	695
UP-30	2 1/4	6	3 1/2	14 1/2	19 1/2	2 1/2	—	1:180	1200	1350

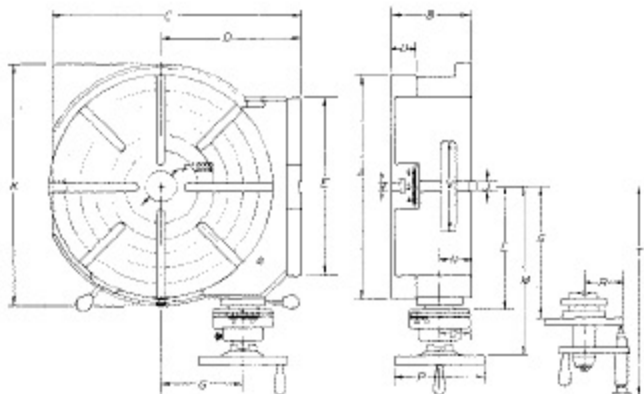
WEIGHT CAPACITY

ANGULAR ACCURACY

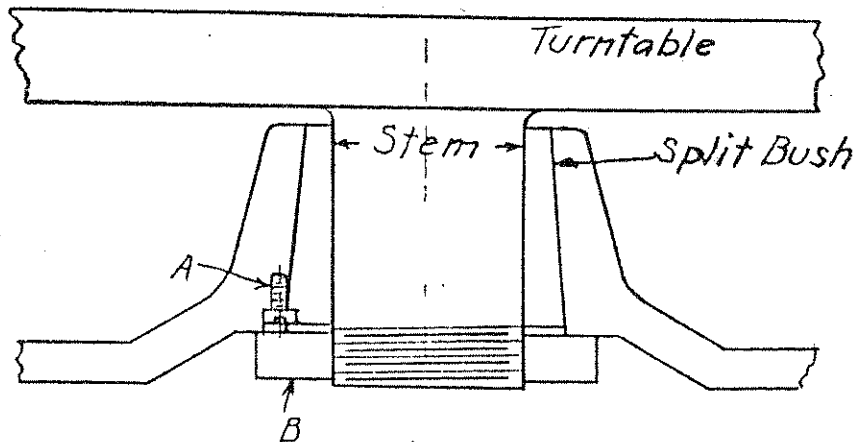
MODEL NO.	HORIZ.	VERT.	
U-9	100#	50#	30 Sec. (.0006 on 9" Dia.)
U-12	250	200	30 " (.0011 on 12" ")
U-15	350	300	30 " (.0013 on 15" ")
U-18	700	400	20 " (.0009 on 18" ")
UP-20	1500	500	20 " (.0010 on 20" ")
UP-25	1500	500	20 " (.0012 on 25" ")
UP-30	2000	1000	20 " (.0014 on 30" ")



Model UP-30 in Vertical Position



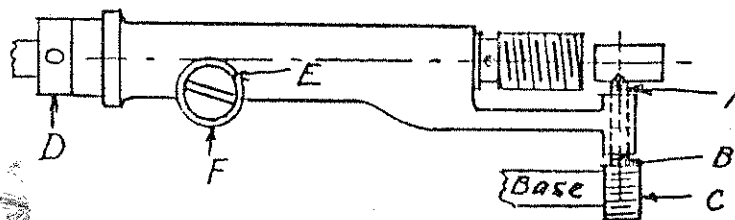
TROYKE ROTARY TABLE



Turntable Revolves on "Stem" and rests on full Diameter Track.

To adjust "Split Bush" Remove Collar "B".

Tap "Split Bush" home. Drive Screw "A" down to hold "Split Bush" in place.



ADJUST WORM

Remove Screw "C". Disengage Worm.

Draw down stud "E" (held by set screw at "F").

Adjust nut "D" to remove end play.

Remove screw "B". Turn screw "A" Counter-clockwise not over $\frac{1}{4}$ turn.

Replace screws "B" and "C" and test.

This adjustment between Worm and Wormwheel is a "cut and try" method but it is positive and permanent.

TROYKE MFG. CO.

11294 ORCHARD STREET SHARONVILLE, CINCINNATI 41, O.

