

ROCKWELL DELTA TOOLMAKER GRINDERS

MACHINE DATA

Table

Ground Work Surface	5 3/4" x 13"
T-Slot (One)	7/16"
Longitudinal Travel (Rack and Pinion)	13 1/2"
Ways (Teflon Lined)	One Flat and One V
Height from Floor	40"

Cross Slide

Transverse Travel (Covered Lead Screw)	7"
Micrometer Collar	Each Rev. .100"; Each Grad. .001"
Ways	One Flat and One V

Head (On 4" Column with Key and Gib)

Vertical Travel (Covered Lead Screw)	15"
Down Feed (Zero-Backlash Lead Screw)	5/8"
Micrometer Collar	Each Rev. .050"; Each Grad. .0005"
Rotation	360°

Capacities

Surface Grinds	6 x 13", With 13" Under 7" Wheel
Max. Dia. Cutter Sharpens	
Between *Centers	With Cup Wheel 8"; With Dish Wheel 10"
With *Tool and Cutter Attach. and *Unihead	16"
Takes Magnetic Chuck	5 x 10" or 6 x 12"

Spindle

Ball Bearings	Oil Bath, Preloaded, Angular Contact
Wheel Adapter (Mounts on Spindle Nose Taper)	
Takes Wheels With Hole	1 1/4"
Has Flanges for	
Straight Wheel	7 x 1 1/2"
Cup Wheel	4 x 1 1/2"
Dish Wheel	6 x 1 1/2 x 5/16"
Speeds (With 3450 RPM Motor)	3300, 3700 and 5600 RPM

Motor 1/2 HP, 3450 RPM, Special Balance,
Delta No. 6 Frame, Totally Enclosed

Overall Dimensions

Height	.67"
Width (Table in Center Position)	.34"
Front to Rear	.36 1/2"

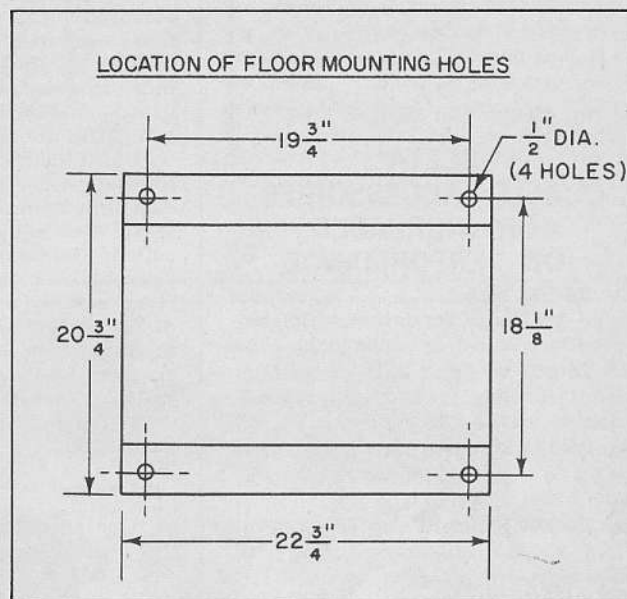
Cabinet Base Dimensions

Width	.22 3/4"
Front to Rear	.20 1/2"

Shipping Weight With Electricals

(Approx.) 800 lbs.

*Accessory Item



CATALOG LISTING

No. 24-151 TOOLMAKER Tool and Cutter Grinding Machine. Consists of 24-150 Basic Surface Grinder on cabinet with 24-822 Tool and Cutter Grinding components. Components are partially mounted. 882 lbs.

No. 24-152 TOOLMAKER Single Point Tool Grinding Machine. Consists of 24-150 Basic Surface Grinder on Cabinet with 24-823 Coolant Attachment, mounted and ready to use, and 24-902 Univise. 819 lbs.

No. 24-150 Basic TOOLMAKER Grinding Machine without

MOTORS AND CONTROLS (Factory Mounted and Wired)

MOTOR	MOTOR CONTROL	MOTOR ENCLOSURE	HERTZ AND MOTOR RPM	MOTOR VOLTAGE	SHIP. WT. (LBS.)	CATALOG NUMBER	CAT. NO. 200V
Single Phase, 1/2 Horsepower	Push Button Switch Only	TEFC	60—3450	115/230	32	49-752	
	24V Push Button Station, Magnetic Starter, Transformer and Overload Protection (LVC)	TEFC	60—3450	115/230	40	49-753	
Three Phase, 1/2 Horsepower	Push Button Switch Only	TEFC	60—3450	230/460	32	49-754	52-033
	24V Push Button Station, Magnetic Starter, Transformer and 3-Leg Overload Protection (LVC)	TEFC	60—3450	230/460	41	49-757	52-036

NOTE: Single phase electricals will be supplied wired for 115 V, unless 230 V is specified. Three phase electricals will be supplied wired for 230 V, unless 460 V is specified. Power Cord and Plug supplied for single phase

24-822 Tool and Cutter Grinding Components, 24-823 Coolant Attachment, 24-902 Univise or electricals. For use as a surface grinder which will grind accurate, flat surfaces where surface pattern and RMS finish are not critical. Can produce surfaces to 20 RMS. Includes cabinet, motor pulley (5/8" bore), flat belt, guard for belt and pulleys, guard for straight wheel, wheel adapter, holder for diamond wheel dresser, 1/2 pint oil for spindle bearings, wrenches and instruction manual. 800 lbs.

*NOTE: Shipped only with specially balanced motor and motor control which are factory mounted, wired and tested.

only.† No. 49-000 "JIC" Type Control Kit. Specify this Catalog Number, in addition to Three Phase Cat. No. 49-757, in order to obtain TOOLMAKER Grinder with "JIC" type electricals, factory mounted and wired.

MOTOR AND BELT REPLACEMENT PARTS

No. 24-800 consists of ½ HP, 115/230 V, single phase motor; motor pulley and 49-085 Belt, balanced together for field installation. 32 lbs.

No. 24-803 consists of ½ HP, 230/460 V, three phase motor; motor pulley and 49-085 Belt, balanced together for field installation. 32 lbs.

No. 24-804. Same as 24-803 except 200 V. 32 lbs.

No. 24-802. Same as 24-803 except 575 V. 32 lbs.

No. 49-085 Flat Belt, ¾" wide, 35" OC.

DELTA QUALITY ACCESSORIES FOR INCREASED JOB PERFORMANCE

No. 24-807 Wheel, 7 x ½", aluminum oxide, 1¼" hole, for soft material, balanced to within 1/8-ounce inch. 2 lbs.

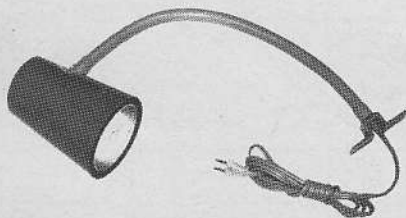
No. 24-808 Wheel, 7 x ½", aluminum oxide, 1¼" hole, for hard material, balanced to within 1/8-ounce inch. 2 lbs.

No. 24-973 Standard Dish Wheel, Type 12, 6 x ½ x 5/16", aluminum oxide, 1¼" hole. 5 lbs.

No. 24-974 Standard Cup Wheel, Type 11, 4 x 1½", aluminum oxide, 1¼" hole. 5 lbs.

No. 24-820 Adapter for wheels with 1¼" hole. Has 2½" flange for straight wheels, 4 x 1½" type 11 cup wheels and 6 x ½ x 5/16" type 12 dish wheels, plus a 2½" flange for 3½ x 1½" cup wheels. Same as adapter supplied with 24-150 Surface Grinder, except has holes and slots needed for use with 24-823 Coolant Attachment. Order extra adapters for each kind of wheel to be used to obviate centering or dressing wheel each time it is mounted on spindle. 2 lbs.

No. 24-805 Diamond-pointed Wheel Dresser, with 7/16 x 2" body. ½ lb.



No. 25-857 Lamp Attachment, for 115 V. Includes 18" flexible gooseneck, reflector and 8-foot cord with 2-prong plug. Uses standard bulb (not included) up to 75 watts. 3 lbs.

No. 24-812 Spindle and Way Oil, Velocite-E. ½ pt. can.

No. 24-819 Attachment Package for Dust Collector. 20 lbs. See Section D1 for complete information.

NOTE: See Section D1 for Dust Collectors recommended for Toolmaker Grinders.

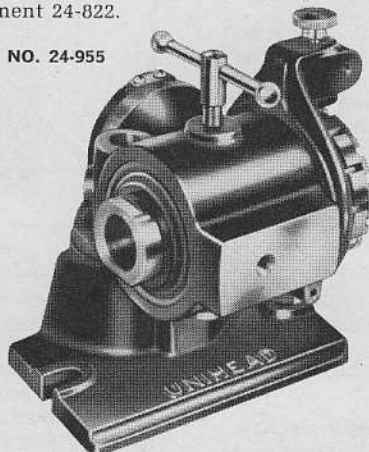
THE UNIHEAD® WITH INDEXING FEATURE IS UNIVERSALLY ADJUSTABLE WORK HEAD

The Unihead is a universally adjustable work head designed for use with the Toolmaker Cutter Grinder and other makes of machines, especially if the No. 24-970 Tooth Stop Unit is used with it.

Unit consists of a heat treated sleeve arranged with a No. 9 Brown & Sharpe taper accurately mounted in lubricated-for-life ball bearings. The adjustable index stop collar and dog can be disengaged or set in any position that is convenient to the operator. It is equipped with a 12-tooth index collar with selector plate which permits the dog to engage automatically either 2, 3, 4, 6 or 12 selected equal spaces. Other plain collars (without selector plate) are available as listed.

Has a push-out nut arranged at the back of the sleeve for pushing out tightly fitted adapters. Swivel bracket with 360 graduations. Base with removable keys that engage the table. Can also be used with Tool and Cutter Grinding Attachment 24-822.

NO. 24-955



No. 24-955 Unihead arranged with sealed-for-life ball bearings and sleeve for No. 9 B & S taper. With one 12-tooth collar with selector plate to engage 2, 3, 4, 6 or 12 selected equal spaces. 23 lbs. No. 24-970 tooth stop unit not furnished. Indexing collars listed below cover a varied range of combination spacing and should be ordered separately as required.

INDEXING COLLARS

No. 24-957 Plain, 36-tooth, for 2, 3, 4, 6, 9, 12, 18 and 36 equal spaces. ¾ lb.

No. 24-958 Plain, 34-tooth, for 17 and 34 equal spaces. ¾ lb.

No. 24-959 Plain, 33-tooth, for 3, 11 and 33 equal spaces. ¾ lb.

No. 24-960 Plain, 32-tooth, for 2, 4, 8, 16 and 32 equal spaces. ¾ lb.

No. 24-961 Plain, 30-tooth, for 3, 5, 6, 10, 15 and 30 equal spaces. ¾ lb.

No. 24-962 Plain, 28-tooth, for 4, 7, 14 and 28 equal spaces. ¾ lb.

No. 24-963 Plain, 26-tooth, for 13 and 26 equal spaces. ¾ lb.

No. 24-964 Plain, 24-tooth, for 2, 3, 4, 6, 8, 12 and 24 equal spaces. ¾ lb.

No. 24-965 Collar, blank. ¾ lb.

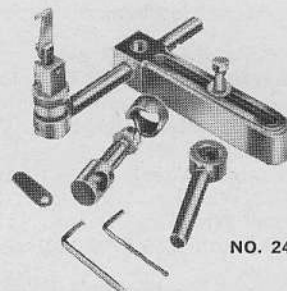
ADAPTERS

No. 24-967 Adapter for Unihead with No. 9 B & S outside taper arranged with 1"-8 R.H. threaded end to receive 6" Face Plate (No. 937). 1¼ lbs.

No. 24-968 Adapter for Unihead with No. 9 B & S outside taper arranged with No. 33 Jacobs taper to receive drill chucks. 1¼ lbs.

TOOTH STOP UNIT

The Unihead uses the same tooth stop unit regularly furnished with the Tool and Cutter Grinder Attachment (No. 24-822). If the Unihead is to be used on another make of machine, it may be advisable to obtain the No. 24-970 Tooth Stop Unit.



NO. 24-970

No. 24-970 Tooth Stop Unit consisting of 1 bracket, 2 bars, 1 clamp and tooth stop with 2 fingers (included with No. 24-822 Grinder Attachment). 5 lbs.

THE UNIVISE® FIRST TRULY UNIVERSAL VISE FOR GRINDING, DRILLING AND MILLING

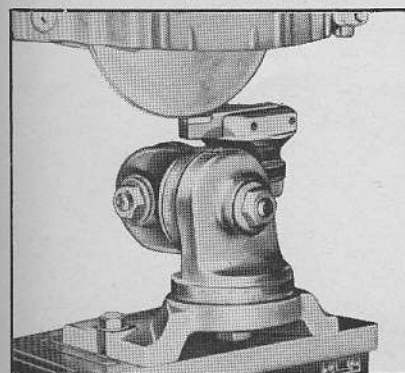
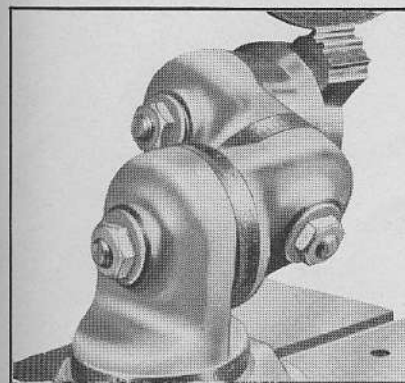
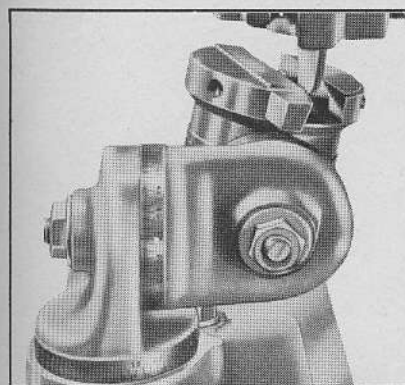
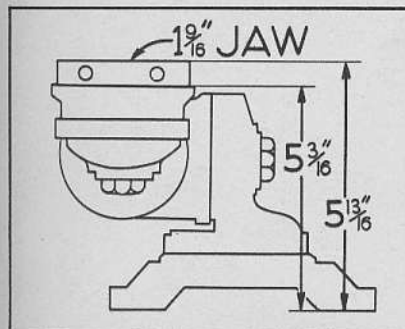
NO. 24-902



The Univise is a heavy, rigid, massive vise completely universal so that it can be set at ANY angle desired. It is composed of four separate parts, each of which can be rotated and independently set so that there are four separate distinct planes of adjustment. This means that ANY angle desired can be easily and readily obtained. It means, also, that for duplicate grinding the vise can be returned EXACTLY to its original setting. Each part has a circular scale of 360 degrees. Each station is

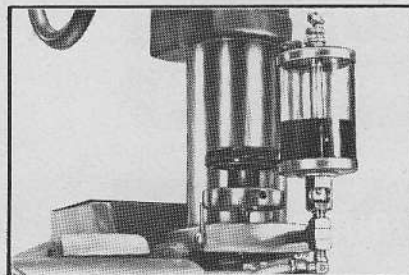
marked so that by making a record of the setting of each scale it is impossible to make an error. Thus, settings can be made direct from the blueprint without fuss or bother. Two of the parts rotate a full 360 degrees. It is $5\frac{1}{16}$ " high, 6" wide and $7\frac{1}{4}$ " long. Jaws take up to $1\frac{1}{2}$ " tools. Fits any surface or tool grinder. Has detachable keys in base which can be removed to permit use on a drill press or other machine without table slots, or on a magnetic chuck.

No. 24-902 Univise, complete. 16 lbs.



"CENTER MIST" COOLANT ATTACHMENT

With instructions for field mounting on any TG-3 Grinder. Supplied as standard equipment on 24-152 TOOLMAKER Single Point Tool Grinder.



No. 24-823 Coolant Attachment complete with sight gravity feed oiler, coolant line, fittings, 24-820 Wheel Adapter with holes and slots for coolant, and instructions. 5 lbs.

GRINDER ATTACHMENT CONVERTS STANDARD SURFACE GRINDER TO A TOOL AND CUTTER GRINDER

The Tool and Cutter Grinding Attachment is designed and engineered to permit conversion of the basic Toolmaker Surface Grinder for tool and cutter grinding work. This complete attachment, when added to the basic Toolmaker Surface Grinder, provides the workholding features for sharpening many types of small tools and cutters.

No. 24-822 Toolmaker Tool and Cutter Grinding Attachment consisting of swivel table with head and tail stocks and No. 24-970 tooth stop unit, 2 wheel guards and support bracket. Standard on 24-151 Grinder. Can be added to 24-150 and 24-152 Toolmaker Grinders. 70 lbs.

