

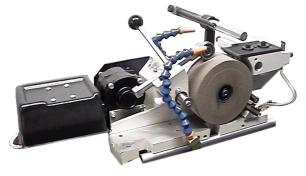
Designers and Builders of DedTru, TruFlute and other Precision Grinding Equipment

UNISON CORPORATION DedTru® Centerless Grinding Product Line

Model C DedTru Grinding Fixture



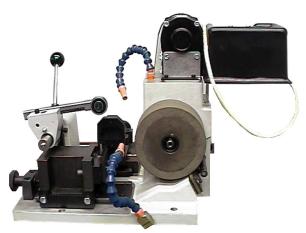
Model PGF Plunae Grind Fixture



Model C6 DedTru Grinding Fixture Model IGF Internal Grind Fixture



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DedTru® Centerless Grinding Product Line

The description of Unison Corporation's DedTru Centerless Grinding product line is presented in the following information. Please contact any member of our Marketing Department to request a detailed quotation for each machine.

DedTru® Systems, 6x18 Grinder

DedTru Centerless Grinding Systems (**388-0000**) includes the DedTru Basic 6 x 18 Grinder with a hole through the column for longer parts; Model C DedTru Unit, dual sine base assembly, 3 hp spindle, coolant system with FilTru Tank Assembly and FilTru Coolant Settling Tank, 1/4" carbide blades for throughfeed (with guides), plunge and infeed work from 1/4" to 1-1/4" diameter, one part stop, one pressure roll assembly, work light and wheel guarding for up to 2" wide wheel. Arranged for 230 or 460 volt (when ordering specify voltage), 3 phase, 60 Hz power supply. For manual operation; maximum part diameter with optional accessories 4". (For diameters to 5" add increased height for grinder, page 9, and 078-0000 (page 6), for diameters from .031" to 1/4" (tooling accessories, page 5).

Shipping Weight and Dimensions: 1345 lbs/46" x 56" x 82" high

DedTru Centerless Grinding System with Model PGF Unit (399-0000) is the same as a Model 388-0000 except it is equipped with a Model PGF DedTru Unit with quick change 5" x 2" regulating roll. This system includes a dual sine base. Maximum part diameter with optional accessories 2-34". (For diameters to 5" add increased height for grinder, page 9 and Special Blade Holder and Rest Assembly, page6)

Shipping Weight and Dimensions: 1335 lbs/46" x 56" x 82" high

DedTru® Centerless Units

*Model C DedTru Centerless Grinding Unit (*050-0000 (metric)) with 4-1/4" x 4" wide regulating roll for use with customer's grinder. Includes Model C DedTru Unit, DC controller, sine base, 1/4" carbide blades (and guides) for throughfeed, infeed and plunge work for parts ranging from 1/4" to 1-1/4" diameter, part stop, pressure roll, infeed slide assembly, coolant pump and hose. Maximum part diameter is 5" with optional accessories.

Shipping Weight and Dimensions: 140 lbs/13" x 32" x 13" high

*Model C6 DedTru Centerless Grinding Unit (***090-0000***) with* 6" x 6" wide regulating roll for use with customer's grinder. Includes a Model C6 DedTru Unit, DC controller, sine base, 1/4" carbide blades and guides for throughfeed, infeed and plunge work for parts 1/4" to 1-1/4" diameter, part stop, pressure roll, infeed slide assembly, coolant pump and hose. Maximum part diameter with optional accessories is 4".

Shipping Weight and Dimensions: 175 lbs/35-3/4" x 15-3/4" x 12-1/2" high

*Model PGF DedTru Centerless Grinding Unit (***141-0000)** with 5" x 2" wide regulating roll for use with customer's grinder. Includes Model PGF DedTru Unit, DC controller, sine base, 1/4" carbide blades for infeed and plunge work for parts 1/4" to 1-1/4" diameter, part stop, pressure roll, infeed slide assembly, coolant pump and hose. Maximum part diameter with optional accessories is 5".

Shipping Weight and Dimensions: 110 lbs/34" x 24" x 12" high

Model IGF DedTru Internal Grinding Unit (350-0000) includes a 5" x 2" wide regulating roll for use with customer's grinder. Also includes a DC controller, 1/4" carbide blade for ID grinding of parts 1/4" OD to 5" OD, part stop and pressure roll. NOTE: Contact factory for mounting dimensions.

DedTru® Unit Tooling and Accessory Equipment

The prices in this section covers equipment for the DedTru Unit such as regulating rolls, blades, guides, work supports, etc which may be necessary to grind specific parts or a range of parts. These items are applicable to DedTru Centerless Grinding Systems and DedTru Units. Please refer to the specific descriptive specifications when ordering to assure proper part.

REGULATING ROLLS

Model C

Standard 4" wide with steel core (use after s/n 434) 050-0110

Standard 4" wide with I" hole (use before s/n 434) **063-0146

**These are for older models. It is recommended that the DedTru Centerless Unit be updated. Refer to company for pricing.

Model C6

6" diameter by 6" wide (replacement part) 090-6103

Model PGF

4" diameter x 2" wide with adaptor (replacement part for PGF s/n 330 and prior) 140-0107

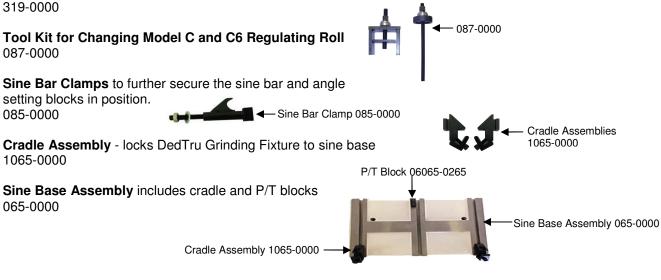
4" diameter x 3" wide with adaptor (replacement part for PGF s/n 330 and prior) 140-1749

5" diameter x 2" wide with adaptor (replacement part for PGF s/n 331and greater) 140-1750

5" diameter x 3" wide with adaptor (replacement part for PGF s/n 331and greater) 140-1751

Model PGF Regulating Roll Kit includes a 4" diameter x 3" wide mounted regulating roll, 3" x 1/4" carbide blade, wiper and clamps. 219-0000

Model PGF Regulating Roll Kit includes a 5" diameter x 3" wide mounted regulating roll, 3" x 1/4" carbide blade, wiper and clamps.



3



DedTru® Unit Tooling and Accessory Equipment

Work Blades – Carbide Tipped

Model C Work Blades

Imperial	Metric	Thrufeed – 8" or 200mm
1"	25.4 mm	(045-0190)
1/4"	6.35 mm	(045-0192)
1/8"	3.17 mm	(045-0194)
1/16"	1.587 mm	(045-0196)



Plunge – 4"	<u>or 100mm</u>
(045-0189)	
(045-0191)	
(045-0193)	
(045-0195)	

For diameters below 1/16" use Graphmo Steel 4" long for thrufeed, plunge and infeed: 1/32" .038mm (044-0187

Complete Set of Blades and Guides for part capacity from 1/32" to 2-1/4" diameter consisting of each of the 4" plunge and 8" thrufeed blade sizes (1", 1/4", 1/8" and 1/16") and one 4" x 1/32" Graphmo only plus one each of he guides (1" (25.4mm), 3/64" (1.14mm), 3/32" (2.44mm), 1-16" (1.587mm) and 1/32" (0.38mm)). 045-0000

Model C6 Work Blades

Imperial	<u>Metric</u>
1"	25.4 mm
1/4"	6.35 mm
1/8"	3.17 mm
1/16"	1.587 mm

Thrufeed – 10" or 254.0mm (093-6154)(093-6156)(093 - 6158)(093-6160)



Plunge – 6" or 152.4 mm (093-6153)(093-6155)(093-6157)(093-6159)

For diameters below 1/16" use Graphmo Steel 6" long for thrufeed, plunge and infeed: 1/32" .038mm (093-6161)

Complete Set of Blades and Guides for part capacity from 1/32" to 2-1/4" diameter consisting of each of the 6" plunge and 10" thrufeed blade sizes (1", 1/4", 1/8" and 1/16") and one 6" x 1/32" Graphmo only plus one each of he guides (1" (25.4mm), 3/64" (1.14mm), 3/32" (2.44mm), 1-16" (1.587mm) and 1/32" (0.38mm)). 210-0000

Model PGF

Imperial 1"	Metric	Plunge – 2" or 50.8mm	Infeed – 2" or 50.8mm	
1/4" 1/8"	25.4 mm 6.35 mm 3.17 mm	(143-0134) (143-0135) (143-0136)	(197-0706) (197-0707)	
1/16" For diamoto	1.587 mm ers below 1/16" use	(143-0137) Granhma Staal	(197-0708)	37
1/32" (0.38n		(143-0133)	(197-0704)	
Imperial	Metric	Plunge – 3" or 76.2mm)	Infeed 3" or 76.2mm)	
1" 1/4"	25.4 mm 6.35 mm	(143-0157) (143-0156)	(197-0715)	
1"	25.4 mm	(143-0157)		0154
1" 1/4" 1/8" 1/16"	25.4 mm 6.35 mm 3.17 mm 1.587 mm	(143-0157) (143-0156) (143-0155) (143-0154)	(197-0715) (197-0716)	0154

Carbide Blade Set includes one of each of those indicated (1" through 1/32") 2" (50.8mm) Plunge 2" (50.8mm) Infeed 3" Plunge (76.2mm) (212-0000)(300-1270)(221-0000)

3" Infeed (76.2mm) (300-1271)

Work Guides used for throughfeed applications

Model C

Imperial 1" 1/8" (Std) 3/32" Model C6	<u>Metric</u> 25.4mm 3.17mm	(067-0178) (052-0128) (067-0177)	Imperial 1/16" 3/64" 1/32"	<u>Metric</u> 1.587mm	(067-0176) (067-0175) (067-0174)	052-0128
model oo						
<u>Imperial</u> 1" 1/8" 3/32"	<u>Metric</u> 25.4mm 3.17mm	(093-6144) (090-6120) (093-6143)	<u>Imperial</u> 1/16" 3/64" 1/32"	<u>Metric</u> 1.587mm	(093-6142) (093-6141) (093-6140)	
Guide Risers two required						
<u>Imperial</u>	Metric		Imperial	Metric		
1"	25.4mm	(060-0171)	1/2"		(060-0173)	
1/8" (Std)	3.17mm	(060-0172)	1/4"	6.35mm	(052-0127)	060-0172
DedTru® Unit Tooling and Accessory Equipment						

For Larger Diameter Work

Model C

Special Work Blade Holder and Rest Assembly allows through feed and plunge work to be performed on parts up to 4" diameter with 1/4" work blade and to 5" diameter with optional 1" blade. For these larger diameters check grinder to be sure proper wheel height is available. 078-0000

Model C6

Special Work Blade Holder and Rest Assembly allows through feed and plunge work to be performed on parts up to 3" diameter with 1/4" work blade and to 5" diameter with optional 1" blade. For these larger diameters check grinder to be sure proper wheel height is available. 092-0000

Model PGF

Special Work Blade Holder and Rest Assembly (2" regulating roll) allows plunge work to be performed on parts up to 5" diameter with optional 1" blade. For these larger diameters check grinder to be sure proper wheel height is available. 224-0000

Special Work Blade Holder and Rest Assembly (3" regulating roll) allows plunge work to be performed on parts up to 5" diameter with optional 1" blade. For these larger diameters check grinder to be sure proper wheel height is available. 230-0000

Work Supports

Rest Plates are used for throughfeed applications to support work as it approaches and leaves the regulating roll

(standard equipment). 052-0000 (Model C) 090-6125 (Model C6)



Steady Rest Assembly is for grinding small diameter steps which are relatively long in length. The unit is of swivel construction with adjustable counterweight to control the supporting pressure.

075-0000 (Model C) 243-0000 (Model C6)



Extension Arm and Roller Support Assembly designed to facilitate throughfeed and plunge of grinding longer parts. Also add Dual Roll Feed Assist option 068-0000 for Model C, 096-0000 for Model C6. 081-0000 (Model C) 098-0000 (Model C6)

Outboard Roller Support for infeed grinding of longer parts.

174-0000

Work Pressure Rolls

These units are for plunge grinding steps, forms, grooves or other secondary operations on either the OD or ID. They consist of one or more rollers that are spring loaded against and rolling on the part. They force the part into contact with the work blade and the regulating roll. Their attitude is adjustable to facilitate feeding the part against the end stop either in or out, according to the application requirements. For soft materials, to prevent marking, the nylon cover options should be ordered.

Pressure Roll Assembly supplied with one 1-1/4" diameter roll and one pressure arm. This Pressure Roll Assembly is used for parts greater than 1/8" diameter which is furnished as standard equipment with machine.

056-0000 (Model C & C6) 300-0387 (Model C & C6) complete with nylon cover (for use with parts of soft material) 378-0000 (Model PGF) 300-0396 (Model PGF) complete with nylon cover (for use with parts of soft material)

Double Pressure Roll Assembly supplied with two rolls, 1-1/4" diameter. 069-0000 (Model C, C6, PGF) 300-0156 (Model C & C6) Complete with arm to facilitate quick change over 300-0161 (Model PGF) Complete with arm to facilitate quick change over 300-0388 (Model C & C6) Complete with arm and nylon covers

300-0397 (Model PGF) Complete with arm and nylon covers

Small Pressure Roll Assembly supplied with one roll, ½" diameter used for parts smaller than 1/8" 070-0000 (Model C, C6, PGF)

300-0157 (Model C & C6) Complete with arm to facilitate quick change over 300-0162 (Model PGF) Complete with arm to facilitate quick change over 300-0389 (Model C & C6) Complete with arm and nylon covers 300-0398 (Model PGF) Complete with arm and nylon covers

Small Double Pressure Roll Assembly supplied with two rolls, 1/2" diameter 071-0000 (Model C, C6, PGF) 300-0158 (Model C & C6) Complete with arm to facilitate quick change over 300-0163 (Model PGF) Complete with arm to facilitate quick change over

300-0390 (Model C & C6) Complete with arm and nylon covers

300-0399 (Model PGF) Complete with arm and nylon covers

Horseshoe Double Pressure Roll Assembly supplied with two 1/2" diameter rolls. This assembly is applied when it is desirable to capture the part at both ends and grind in the center. The rolls cab be individually canted to push (for compression) or to pull so that very fine parts can be ground under tension.

072-0000 (Model C & PGF) 300-0391 (Complete with nylon covers) 222-0000 (Model C6) 300-0394 (Complete with nylon covers)



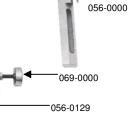
Pressure Roll Arm for use with all pressure rolls to facilitate quick change-over. 056-0129 (Model C & C6) standard, approximately 4" 078-0289 (Model PGF), approximately 6"

Nylon Pressure Roll Covers for use with parts

of soft material 200-0207 for standard rolls, 1-1/4" diameter 200-0208 for small rolls, 1/2" diameter



200-0208 Nylon Cover Pressed on Pressure Roll





071-0000

056-0129

Pressure Roll Arms

300-0389

6

Special Pressure Rolls available for specific applications such as narrow rolls for use between spaced wheel etc. - Consult Factory

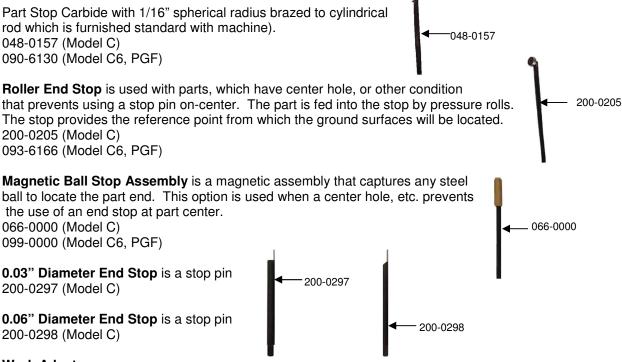
Dual Roller Feed Assist for throughfeed of longer parts up to 1-3/4" diameter. Requires extension arm and roller support assembly (see work supports).

068-0000 (Model C) 300-0392 Complete with nylon covers 096-0000 (Model C6) 300-0393 Complete with nylon covers

Infeed Slide Assembly used for parts, which come to the machine with a head or other projection that prevents feed through grinding. The assembly replaces the pressure roll and its use allows the part to be ground round and true, in an infeed setup, regardless of its condition when it comes to the machine.

074-0000 (Model C, PGF) 374-0000 (Model C6)

Work Stops are supplied to locate the part end or shoulder to provide dimensional reference point.



Work Adaptors

Collet Adaptor for 5C Collets grips parts to facilitate grinding steps (requires 1" work blade). Overall length is 5-3/16" body, 2.00" diameter and 4.25" long. Ranges of sizes are 1-1/16" to 1-1/16" in 1/64" steps. Supplied less the collets.

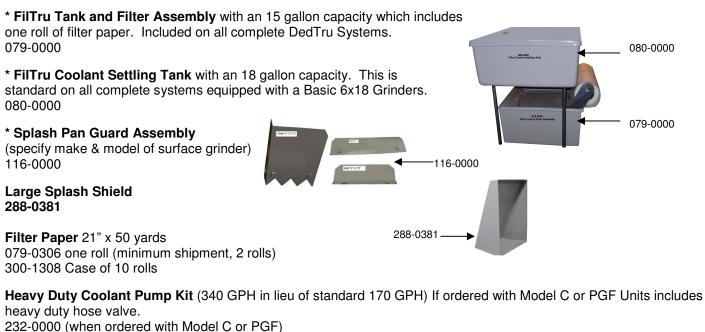
083-0000 (Model c, C6, PGF)

Double Ended Collet Adaptor grips the parts on both ends for the grinding of steps with more accuracy. Useful on many applications. (requires 1" work blade) Overall length is 4-1/4", body 1.375" diameter and 3" long. The ranges of sizes are 3/16" to 1/2" each end in 1/64" steps. Collets are actuated by a hex nut. Collets are Universal 90500 series. Supplied less the collet. 084-0000 (Model C, C6, PGF)

Collet Adaptor for 3AT Collets

082-0000 - Consult Factory

Coolant Accessories and Miscellaneous



232-0000 (when ordered with Model C or PC 091-6429 (pump only)

Standard Coolant Pump 170 GPH (pump only) 060-0426

Drain Hose (4 foot section) 116-1412

Unilube Oil 124-1479 (per gallon)

Wheel Puller Wrench takes adaptor from spindle 025-1255

Spanner Wrench tightens wheel on adaptor 060A-0400

* These items required when DedTru Units are purchased separately for mounting to existing surface grinders.

DedTru Grinding Machine Options

The prices listed in this section covers machine modifications or accessories equipment which will increase the degree of automation, provides improved operating characteristics in certain respects or otherwise provide necessary features for a specific application environment.

025-1255

Wheel Puller Wrench

- 060A-0400 Spanner Wrench

These prices are applicable (unless otherwise noted) when options are purchased with DedTru Centerless Grinding Systems and DedTru Basic Grinding machines and in some cases to other makes of grinding machines.

Some of the DedTru Systems include one or more of these options as standard equipment. Please refer to the specific descriptive specifications to assure no duplication when ordering.

Increased Height DedTru Grinder basic grinder is supplied with 3" riser to increase spindle's maximum height. Required for larger parts. Available for all DedTru Centerless Grinding Product Line (except fixtures). Add "R" to model number (i.e. xxxRxxxx).

XxxRxxxx for increased spindle heights, add Consult Factory

Heavy Duty 2 hp, 1800 rpm Spindle to accommodate 14" wheels in lieu of standard 3600 rpm spindle. Includes spindle nut, woodruff nose key and 12-7/8" long steel barrel with heavy steel flange. (For 6 x 18 grinders only and requires option 288R-0000).

100-2412 (in lieu of standard)\$ Consult Factory

Precision Spindle 3 hp, 3600 rpm for 7" and 8" grinding wheels 100-1404

Fine Downfeed Attachment 0.001" per turn (0.0001" graduation) 300-0339

Metric Fine Downfeed Attachment 1.000mm per turn (0.002mm per graduation). Requires metric screw option (105-0425) 300-0340

Metric Screws and Sliprings in lieu of standard 105-0425

Oscillating Crossfeed Mechanism for improved finish and better control of wheel wear. 102-0000 1102-0000 (Metric)

Automatic Longitudinal Feed Cycle provides rapid approach to work, slow down to feedrate, feed to positive stop, dwell for preset time and automatic rapid carriage return. Slow down position, feedrate, positive stop and dwell time are adjustable. Includes limit switch which gives you start and stop control of regulating wheel. 389-0000 (6 x 18 grinder) 388-0000 (6 x 12 grinder)

Automatic Vertical Wheel Feed Cycle provides rapid approach to work, slow down to feedrate, feed to positive stop, dwell for preset time and automatic rapid wheel return. Slow down position, feedrate, positive stop and dwell time are adjustable. 519-6 (6 x 18 grinder)

1519-5 (Metric, 6 x 18 grinder)

Limit Switch Control Assembly starts regulating roll at the beginning of operation and stops the roll at the end of the operation. (Not required if Automatic Feed Cycle is ordered) * 077-0000

Lubrication Systems is for extreme tolerances and finish. This option isolates the pump from the machine and cools oil to coolant temperatures. 103-0000

Digital Readout is an 8 digit display, vertical and cross motion, with .00005" resolution. 4322-0000

Non-standard Electrical Equipment - Refer to Company

Wheel Guard Extension is supplied in 1" increments for the varying widths. The standard equipment includes one wheel extension to accommodate a 2" wheel. For wider wheels order the necessary number f 1" increments to accommodate the wheel width. 117-1

TilTru Magnetic Chuck 6" x 10", tilting and fits DedTru Model C sine base. Close pole permanent ceramic magnet and comes with two PT blocks. This chuck is instantly interchangeable with the DedTru Model C and PGF Units for conventional and angular precision surface grinding. For 6 x 12 grinders. 107-0000

TilTru Magnetic Chuck 6" x 16", tilting and fits DedTru Model C sine base. Close pole permanent ceramic magnet and comes with two PT blocks. This chuck is instantly interchangeable with the DedTru Model C and PGF Units for conventional and angular precision surface grinding. For 6 x 18 grinders. 108-0000

*These items required when DedTru Units are purchased separately for mounting to existing surface grinders

TilTru Magnetic Chuck 6" x 16", for use with grinder equipped with 3" riser. Tilting and fits DedTru Model C sine base. Close pole permanent ceramic magnet and comes with two PT blocks. This chuck is instantly interchangeable with the DedTru Model C and PGF Units for conventional and angular precision surface grinding. For 6 x 18 grinders. (This model must be ordered for surface work with riser-equipped grinders) 108R-0000

Spindle Tooling (OD Work)

Grinding Wheels for customer's grinder (other than Unison's DedTru Grinder)

Wheel Adaptors 1-1/4", 16LH hardened and ground adaptors for precision mounting of wheels to spindle.

	Wheel Width (thickness)		Wheel Width (thickness)
119-1428	1/2	119-1430	1"
119-1434	1/2" Reversible	119-1477	1/2"
119-1435	1/2" Ext. Type	119-1431	2" (1-1/2" of thread)
119-1429	3/4"	119-1432	3" (1-1/2" of thread)

Wheel Gear Nut Set includes nut, washer and wrench for DedTru Grinders

1127-0000 1-1/4" - 16LH 2127-0000 1-1/4" - 16 RH 3127-0000 1-1/4" - 18 LH

Wheel Balancing Washer

122-0000

Standard Wheel Guard Assembly for up to 8" diameter 114-1241

Wheel Guard for use with 12" to 14" diameter wheels for 6 x 18 grinders only. 114-0000 (for 12" diameter wheels) For 14" Diameter Wheels - Refer to Company

Balancing System

120-0000

ID Spindle

Speedgrind ID Spindle Attachment – (207-00000) complete with 3/32, 1/8 Collect Bushing, 3/16, 1/4 Collet (spindle mounted, 1/4 x 2 Quill (mandrel) 3/8 x 1-5/8 (mandrel short), 3/8 x 2.00 Quill (mandrel long), two Wrenches 3/8 & ½, Wood Carrying Case. Developed for fast changeover from OD setup. Ideal for toolroom, short-lot job shop. The unit attaches to the machine spindle, is belt driven by the spindle at a speed of 18,000 rpm and utilizes transverse (cross slide) for work feed.

207-0458 207-0465	3/32" Bushing 3/16" Collet 1/8" Bushing 1/4" Collet	Quills for 3/8" ID Wheel 207-0460 (long) 207-0461 (short)
		Belt for ID Spindle 207-0463
Quills for 1/4" ID Wheel 207-0459		207-0403

Variable Frequency, Speed AC Motor Driven Spindle is liquid cooled, 1.7 hp, 20,000 – 66,000 rpm for 230 volts, 50 or 60 hz. Supplied with 1/4" diameter collet suitable for maximum wheel diameter of 1.25" and equipped with bracket for mounting parallel to longitudinal. 9921-1

Variable Frequency, Variable Speed AC Motor Driven Spindle is liquid cooled, 0.25 hp, 60,000 – 100,0000 rpm for 230 volts, 50 or 60 hz. Supplied with 1/8" diameter collet suitable for maximum wheel diameter of 5/16" and equipped with bracket for mounting parallel to longitudinal. 992-1

Dressing Equipment

Kooldress Diamond Dressing Tool this triangular 1/2 carat impregnated, metal bonded diamond dressing tool is used to dress the face and both sides of the wheel. It can dress corners to 0.002" radius efficiently. Dresser is designed to force coolant at high velocity directly to the point of wheel and dresser contact. It eliminates wheel variations that result from uneven cooling of the diamond when conventional flood coolant procedures are used. 200-1022 each

300-1307 package of three

Kooldress Dresser, with Compensation this straight dresser is designed for manual dressing and truing procedures while providing automatic compensation for wheel size. It incorporates the Kooldress Diamond Dressing Tool (200-1022). This dresser is designed to minimize the time dress. The dresser mounts on the DedTru Unit. It has provisions for locating the diamond to the same height as the work being performed. A coarse adjustment is provided for quickly locating the approximate height of the diamond nib and a fine differential screw adjustment is supplied for the precise final position. After the dressing tool is located at the proper height, the table is moved longitudinally to bring the dresser to the wheel. The wheel is lowered the desires amount and the cross motion is then operated to dress. 242-0000 (Model C Unit)

Adaptors are available for use with Model C6 and PGF Units.

Work Blade Re-Grind Wheel a diamond wheel mounted and dressed on an adaptor for maintaining wear surface on carbide tipped work blades. 200-1076M

Regulating Roll Dresser a diamond wheel is mounted and balanced on an adaptor for use on machine spindle (for Model C, C6 and PGF DedTru Units) 200-1077 200-1077B for use with riser equipped machines

Contour Dressing

Radial Tangent Dresser manually operates with concave radii adjustable from 0 to 4 inches, convex from 0 to 2-1/4 inches. (Larger radii available with optional dovetail extension) Listed less diamond. 300-0150

Dresser Support Plate required with ID and Plunge Grind Fixture to support Radius Tangent Dresser. 142-0000

Powered Diamond Roll Wheel Dresser – (425-1) for manual or automatic machine applications. This option includes the electric motor driven precision spindle, the elevating, cross motion and level adjusting mechanism for accurate alignment of the dresser. It includes provisions for the starting and stopping of the dresser. Coolant flow is maintained during all operations in order to equalize dresser roll temperature at approximately the same as that of the regulating roll and wheel. (Requires diamond roll of proper form. Refer to company) Installed at factory includes labor to modify DedTru Unit dependent upon application.

UNISON CNC PRECISION GRINDING EQUIPMENT

Model 1500 - Punch Master is an extremely rigid profile grinding system for round, non-round, standard and non-standard O.D. shapes and contours without the use of master cams.

Model 8350 - Combination Cutting Tool/Burr Grinder is a turnkey 8-Axis CNC production grinder shipped with an automated loader, a tooling package, a self-contained coolant system and a complete package of our proprietary software which is included in the base price. Featuring state-of-the-art computer and hardware technology, which is capable of running in a "lights out" environment.



UNISON CNC GRINDING EQUIPMENT

FLEXIBLE GRINDING SYSTEMS (FGS)

Model 2150 - CNC DedTru Grinding System

Model 2050 - CNC Surface Grinder is a precision 3-hp, grinder for surface and profile grinding

Model 2250 - CNC ID Grinder does standard grinding and for generating ID profiles

Model 2350 - CNC TruCut cutter grinder is designed for use by small as well as large tool manufacturers for manufacturing or remanufacturing of end mills, carbide and HSS tools

Model 2450 - CNC Roughing Cutter Grinder is a 5-HP machine designed for grinding the wave on the flute of a roughing end mill

Model 2550 - CNC Special Punch Grinder is a profile grinder designed and programmed specifically for non-round, twodimensional profiles. This punch grinder works well on slotted of keyhole type punches

Model 2650 - Combination Cutting Tool/Burr Grinder is used by many of the largest manufacturers of dental and surgical burrs

TRUFLUTE SYSTEMS

Model 688 - TruFlute is a four axis, rigid, proven, helical grinding system specifically designed for the manufacture of both standard and special cutting tools.

Model 4000 - Super TruFlute utilizes a system of round hydrostatic ways on the X, Y, and Z-axes and a massive "C" axis assembly, which virtually eliminates the possibility of machine deflection during the grind cycle.

Model 9000 - Production Flute Grinder, when equipped with the optional fully automated loader, is an 8 axis turnkey grinder featuring an integrated 25 HP, direct drive, and duel-ended spindle with an operating range of 500 to 10,000 RPM.

You may contact any member of our Marketing Department at 248-544-9500 or <u>sales@unisoncorp.com</u> for information or a quotation on any of the above machines.

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