

GRIND-ALL No. 1 (P/N 010-100)



Harig's benchmark precision v-block fixture has improved toolroom productivity since 1951. The original patent holder, copied but never duplicated, is the most accurate indexer of its kind available today. Time tested for high precision work within "tenths," the Grind-All No. 1 sets the standard for grinding punches, core pins, and EDM electrodes. Also used for precision indexing, inspecting, milling, boring, and radius dressing. Complete line of accessories increase applications and make the Grind-All No. 1 the most versatile v-block fixture ever. Over 20,000 units in action worldwide. When accuracy is of the utmost importance, the Grind-All No. 1 enables you to work with close tolerances. Reliability backed by Harig's trademark service.

- Hardened and ground tool steel with solid one piece construction
- Preloaded ball and race design provides highest accuracy
- V-Block adjusting screw allows for quick movement of v-block to +/- 0.0001 without tapping
- Single screw for fast locking of v-block
- 360 degree graduated dial for convenience
- 24 division index plate with precision index pin locks in every 15 degrees to +/- 10 seconds
- 2 adjustable stops work with stop pin to set accurate angles between index locations
- U-Clamp and screw secure piece part in v-block
- Removable v-block for accurate face-plate work
- Narrow profile maximizes work area under grinding wheel
- Mounting holes on base of unit for use with Harig accessories
- Lightest fixture of its kind for easy handling
- Includes carrying case for protective dust-free storage
- Full repair service and replacement parts available



UNI-DEX (P/N 070-100)



Harig's precision universal 5C collet indexing fixture can be used for a wide variety of toolroom and production applications. Index arrangement ensures extreme positioning accuracy when grinding, inspecting, milling, and boring. Minimal spindle runout means the Uni-Dex is essentially as accurate as your 5C collet and allows you to work with "tenths." Extended base provides exceptional rigidity and minimal deflection even with heavier workpieces. Increase the versatility of the Uni-Dex by pairing it with one of the many Harig accessories. When precise indexing in a 5C collet configuration is a must, trust the Uni-Dex to do the job accurately and efficiently. Reliability backed by Harig's trademark service.

Features

- Hardened and ground tool steel with solid one piece construction
- Preloaded ball and race design provides highest accuracy
- 5C collet holder ground in assembly to under 0.00005 runout
- 360 degree graduated dial for convenience
- 24 division index plate with precision index pin locks in every 15

degrees to +/- 10 seconds

- 2 adjustable stops work with stop pin to set accurate angles between index locations
- Locking screw locks spindle at any position between indexes
- Draw sleeve for quick set-ups of collets and accessories
- Extended base for minimal deflection even with heavier parts
- Mounting holes on base of unit for use with Harig accessories
- Lightest fixture of its kind for easy handling
- 1/2" 5C collet included
- Includes carrying case for protective dust-free storage
- Full repair service and replacement parts available



TRU-DEX (P/N 030-100)



Harig's tangent-radius dresser is the most accurate, easiest to use, and safest wheel dresser available. Dresses wheels up to 12" in diameter with up to 2 1/4" convex and 5" concave radii. Unique 24 division indexing every 15 degrees makes grinding angles on the Tru-Dex easy, while tangent "throw" of 1 7/16" to either side of center facilitates tangent-radius dressing. Dressing done at bottom of the wheel for highest accuracy. Handwheel in back of unit rotates and swings dresser arm keeping hands safely away from grinding wheel. When accurate wheel dressing is necessary, the Tru-Dex will do the job quickly and efficiently. Reliability backed by Harig's trademark service.

- Sturdy and dimensionally stable cast iron housing
- Hardened and ground base plate for minimum wear
- Vernier graduated to 5 minutes for quick setting of any angle with locking screw
- Index plate with precision index pin locks in every 15 degrees to +/- 10 seconds
- 2 adjustable stops work with stop pin to set accurate angles between index locations
- Handwheel in back of unit controls both rotation and offset movements and keeps hands away from grinding wheel
- Tangent "throw" 17/16" to either side of center
- Slide is under spring load to automatically drop into center
- Ground "v" in dresser arm keeps diamond centered



GRIND-ALL No. 2 (P/N 020-100)



Harig's largest precision v-block fixture incorporates the advantages of the Grind-All No. 1 with the greater capacity. 2" diameter v-block and 6 7/8" face-plate diameter fits every toolroom's need for grinding larger punches, core pins, and EDM electrodes. Also used for precision indexing, inspecting, milling, boring, and radius dressing. Time tested to meet close tolerances for high precision work within "tenths." Uniquely designed to also mount horizontally. Complete line of accessories includes optional rotary table mechanism that rotates the Grind-All No. 2 (P/N 021-100) in the horizontal position for milling and index table work. When precision v-block work is required, the Grind-All No. 2 is the most complete large capacity v-block fixture available. Reliability backed by Harig's trademark service.



(P/N 021-100)

Features

- Hardened and ground tool steel with solid one-piece construction
- Preloaded ball and race design provides highest

accuracy bearing

- Graduated 360 degrees for convenience
- 24 division index plate with precision index pin locks in every 15 degrees to +/- 10 seconds
- 2 adjustable stops work with stop pin to set accurate angles between index locations
- Locking screw locks spindle at any position between indexes
- U-Clamp and screw secure piece part in v-block
- Removable v-block for accurate face-plate work
- 67/8" diameter face plate has tapped holes for mounting purposes
- Hand crank for easy rotation is removable when used horizontally
- Optional rotary table mechanism provides geared rotation in the horizontal position
- Full repair service and replacement parts available



SPIN-INDEXER



Manual Spin-Indexer(P/N 122-100)

Harig's durable 5C collet spin fixture offers "production plus" capabilities and is easily motorized. Suitable for a variety of machining applications, this unit quickly becomes the most useful "spinner" in your toolroom. Variable speed motor attachment can be mounted to Spin-Indexer (P/N 120-100) in forward or rearward position and makes accurate production work easy. Most complete line of accessories broadens applications. When production work is called for, the Spin-Indexer can be motorized to do the job even more efficiently. Reliability backed by Harig's trademark service.

Motorized Spin-Indexer (P/N 120-100)



- Sturdy and dimensionally stable cast iron housing
- Large preloaded ball bearings are durable and accurate ideal for motorization
- **➣** 5C collet holder ground in assembly to under 0.0001 runout
- 24 division index plate with precision index pin locks in every 15 degrees to +/- 30 seconds
- Draw sleeve for quick set-ups of collets and accessories
- Extended base for minimal deflection even with heavier parts
- 1/4" diameter mounting hole on top of housing for diamond dresser
- Mounting holes on base of unit for use with Harig accessories
- Crank handle easily removed for motorized set-up
- Unique design allows for mounting of variable speed motor in forward or rearward position
- Full repair service and replacement parts available



DUO-FORM (P/N 060-100)



Harig's dual-purpose radius-tangent wheel dresser & punch grinder facilitates a greater variety of shape production. Unique tangent "throw" allows Duo-Form to swing 9/16" to either side of center and makes radius to tangent wheel dressing easy and efficient. Straight angles and radii can be ground without removing punch from v-block. Timesaving fixture acts like two units in one, for grinding punches and EDM electrodes, precision radius-tangent dressing, indexing and inspecting. Complete line of assessories makes the Duo-Form even more versatile. When high productivity is essential, the Duo-Form fits a variety of precision wheel dressing and punch forming applications. Reliability backed by Harig's trademark service.

- Hardened and ground tool steel with solid one piece construction
- Preloaded ball and race design provides highest accuracy
- V-Block adjusting screw allows for quick movement of v-block to +/- 0.0002 without tapping
- 360 degree graduated dial for convenience
- 24 division index plate with precision index pin locks in every 15 degrees to +/- 15 seconds
- 2 adjustable stops work with stop pin to set accurate angles between index locations
- U-Clamp and screw secure piece part in v-block
- Handwheel controls both rotation and offset movements
- Tangent "throw" 9/16" to either side of center
- Screws provided for locking slide plate off center
- Dresses wheels up to 10" in diameter
- Mounting holes on base of unit for use with Harig accessories
- Includes carrying case for protective dust-free storage
- Full repair service and replacement parts available



ULTRA-GRIND No. 5C-V (P/N 215-100)



Harig's enhanced version of the Grind-All No. 1; this ultra-precise combination 5C collet/v-block fixture is the most versatile unit in the Harig line. Quick, easy changeover from collet to v-block while maintaining "tenths" accuracy, the Ultra-Grind is the toolroom solution for grinding punches, core pins, and EDM electrodes. Also used for precision indexing, inspecting, milling, boring, and radius dressing. Lube and purge port permits additional EDM applications, while advanced bearing is ideal for motorization. Complete line of accessories complements the Ultra-Grind. When a precision combination 5C collet/v-block fixture is needed, the Ultra-Grind is up to any toolroom task. Reliability backed by Harig's trademark service.

Features

Hardened and ground tool steel with solid one piece construction

• Preloaded ball and race design provides highest accuracy bearing, ideal

for motorization

- 360 degree graduated dial for convenience
- 24 division index plate with precision index pin locks in every 15 degrees to +/- 10 seconds
- 2 adjustable stops work with stop pin to set accurate angles between index locations
- Locking screw locks spindle at any position between indexes
- U-Clamp and screw secure piece part in v-block
- Removable v-block makes accurate 5C collet use easy
- Lube and purge port permits more EDM applications
- Narrow profile maximizes work area under grinding wheel
- Mounting holes on base of unit for use with Harig accessories
- Lightest fixture of its kind for easy handling
- 1/2" 5C collet included
- Includes carrying case for protective, dust-free storage
- Full repair service and replacement parts available



MAGNA-DRESS (P/N 095-100)



Features

- Magnetically clamps onto fixture for quick wheel dressing
- Permits bottom and side wheel dressing on a chuck in one set-up
- Avoids time consuming cranking of surface grinder's vertical feed
- Clamps on any surface that takes magnetic hold
- Built in release screw breaks magnetic hold on chuck

Adjusto-Dress

Harig

ADJUSTO-DRESS (P/N 110-100)



- Handy wheel dresser is fast and accurate
- Adjust height up to 10" on dressing unit instead of slow surface grinder vertical feed
- · Angled to fit easily under wheel
- · For both bottom and side wheel dressing



LECTRIC-CENTERS (P/N 025-100)



Harig's original cylindrical grinding fixture used for precision grinding between centers. Dead center design permits "tenths" accuracies to be easily obtained. Quickly converts a surface grinder to cynlindrical grinding applications for grinding punches, pins reamers, cutters, shanks, and shafts. Hold the piece part in the Lectric-Centers to grind angles, grooves, races, and slots accurately and efficiently. Also can be used for critical inspection. Motorized head and two-speed pulley for fast stock removal. When external grinding between centers on a surface grinder is a must, trust the Lectric-Centers fixture to get the job done accurately. Reliability backed by Harig's trademark service.

- Hardened and ground tool steel base allows grinding between centers up to 7"
- Grind and check parts within 0.00005 TIR
- Fan cooled motor and 2 speed pulley for efficient operation
- Interchangeable hardened tool steel centers are male on one end, female on the other
- Tail-stock taper adjustment allows extremely accurate settings to be obtained
- Head-stock center is on lever controlled sliding ram and has adjusting screw for spring tension
- Head-stock and tail-stock are both adjustable for greater flexibility
- Base-Plate & Tail-Stock witrh addition of rail can be used with Harig fixtures
- Built-in diamond holder for quick dressing of grinding wheels



KOOL-GRIND CHILLER (P/N 240-100)



Features

- Includes four quick disconnect fittings for use with Kool-Grind Plate No. 44 and/or Kool-Grind Chuck No. 612
- User sets front panel temperature dial to maintain accurate internal coolant temperature from 50-70 degrees Fahrenheit
- Convenient front panel on/off switch re-circulates coolant to Plate and/or Chuck quickly and quietly
- Highly efficient magnetic drive pump and durable compressor for care-free operation
- Easy top fill with screw cap and large capacity reservoir
- Valved quick disconnect fittings prevent accidental spraying of coolant
- Top mounted carrying handle for easy portability
- Includes detachable 6 ft. flexible power cord and one gallon of Kool-Grind Koolant
- Operation manual included

Specs

Size 12" x 20" x 11"

Temperature settings 50-70 degrees farenheit

Cooling capacity 390 watts at 68 degrees farenheit

Reservoir capacity 1.5 quarts Power required 110V AC

Amps 7.0 at startup, 3.6 running

Weight 47 lbs.

Back to Kool-Grind System

Back to Kool-Grind Plate No. 44 (P/N 240-40)
Back to Kool-Grind Chuck No. 612 (P/N 240-60)



Model E-5 ROTO-SPINDLE (P/N 170-100) Model E-20 ROTO-SPINDLE (P/N 175-100)



Harig's economical EDM spindle mounts to conventional EDM machines to increase productivity. The Roto-Spindle spins your electrode to improve accuracy, decrease electrode wear, and increase hole-making speed up to 50%. Available in 2 models, the E-5 Roto-Spindle (P/N 170-100) uses ER-20 or RD-20 collets up to 1/2", while the E-20 Roto-Spindle (P/N 175-100) holds 20mm tooling. Motor has built-in variable speed control for ideal operation between 10-260 RPM. When looking to improve burning times and accuracy on conventional EDM machines, the Roto-Spindle will do the job economically and efficiently. Reliability backed by Harig's trademark service.

- E-5 Roto-Spindle (P/N 170-100) uses collets from 1/16" to 1/2 "
- E-20 Roto-Spindle (P/N 175-100) uses 20mm tooling
- Compatible with the Harig Flush Chucks used for holding smaller electrodes
- Adapts to all vertical ram conventional EDM machines
- Increases cutting rate up to 50%
- Improves finish and electrode wear
- Allows excellent flushing for efficient operation
- Improves concentricity and allows operator to work with "tenths"
- Variable speed motor operates on 110V from 10-260 RPM
- Spindle housing is insulated from motor
- Current through spindle 10 amp max
- Compact, lightweight, and easy to use
- Full repair service and replacement parts available



KOOL-GRIND PLATE No. 44 (P/N 240-40)



Features

- 4" x 4" Plate with back rail, side rail, and two attached quick disconnect fittings
- Patented internally cooled design instantly draws heat out from workpiece when Plate is connected to Kool-Grind Chiller
- Plate fits on top of existing permanent magnet or electromagnetic chuck
- Plate transfers strong magnetic pull to workpiece from longitudinal or transverse chucks
- Super fine-pole Plate is ideal for grinding small and thing workpieces
- Sleek design allows use on top of sine-chucks
- Includes 6' Plate Tubing with four quick disconnect fittings for easy portability
- Pressure tested for leaks prior to shipment

Specs

Size 4" x 4" x 1"

Square and parallel to 0.0002

Spacing 1/16" poles and 1/32" separators

Poles longitudinal on one side; transverse on flip side

Weight 7 lbs.

Back to Kool-Grind System

Back to Kool-Grind Chiller (P/N 240-100)
Back to Kool-Grind Chuck No. 612 (P/N 240-60)



Model E-5 FLUSH-CHUCK (P/N 155-100)
Model E-20 FLUSH-CHUCK (P/N 160-100)



Harig's Flush-Chucks allow the use of small electrodes in the Harig Roto-Spindle and other EDM rotating spindles. Two models available E-5 Flush-Chuck (P/N 155-100) has 1/2" shank, while E-20 Flush-Chuck (P/N 160-100) has 20mm shank. Unique sealing system permits use of longer electrodes by putting seal close to nose of spindle and cuts downtime for electrode replacement. When small electrodes need to be held securely, the Flush-Chuck increases productivity. Reliability backed by Harig's trademark service.

Features

Model E-5 Flush-Chuck has 1/2" shank
Model E-20 Flush-Chuck has 20mm shank
Uses precision keyless chuck with up to 1/8" capacity

• Includes 3 seals: 1/16", 3/32", and 1/8"

Quick set-up, easy to use

Full repair service and replacement parts available



KOOL-GRIND CHUCK No. 612 (P/N 240-60)



Features

6" x 12" fine-pole electromagnetic Chuck with back rail and side rail Patented internally cooled design draws heat out from workpiece when Chuck is connected to Kool-Grind Chiller

- Universal size handles larger parts and is easily mounted to any 612 surface grinder
- Precision ground watertight design featuring a solid one-piece laminated top-plate
- Strong magnetic holding power even on top edges of working surface
- Longitudinal fine-pole magnets for stronger and more uniform holding of small parts
- Low height for greater wheel head clearance when grinding taller pieces
- Includes 6' Chuck Tubing with quick disconnect fittings
- Pressure tested for leaks prior to shipment

Specs

Size 6" x 12" x 3"

Spacing 1/8" poles and 1/16" separators

Power required 115V DC 60 watts

Weight 45 lbs.

AUTOMATIC RELEASE CONTROL (P/N 240-62)

- For use with the Kool-Grind Chuck No. 612
- 0-100% variable holding power adjustment with automatic release cycle
- Full, variable automatic release and residual modes



MANUAL RELEASE CONTROL (P/N 240-61)

- For use with the Kool-Grind No. 612
- 0-100% variable holding power adjustment



Back to Kool-Grind System

Back to Kool-Grind Plate No. 44 (P/N 240-40)

Back to Kool-Grind Chiller (P/N 240-100)



TWIN-ANGLE No. 1(P/N 040-100)
TWIN-ANGLE No. 2 (P/N 185-100)



Harig's precision holding fixture mounts electrodes in vertical ram of conventional EDM machine and serves as a workholder for wire EDM applications. Also can be used for surface grinding applications. Two sizes available with 2-Vs each to accurately hold workpieces within "tenths." When a multi-purpose work-holding fixture is needed, look no further than the Harig Twin-Angle. Reliability backed by Harig's trademark service.

- Twin Angle No. 1: 2 5/8" x 2 7/8" and 1 3/8" x 1 7/8"
- Twin-Angle No. 2: 3 1/4" x 2 1/4" and 2 1/4" x 2"
- Includes 2 clamps
- Optional 3/4" shank (P/N 40-02) or 20mm shank (P/N 40-04) is available
- Hardened and ground to "tenths" accuracy



ADJUSTA-V

with 1" diameter shank (P/N 190-100) with 20mm diameter shank (P/N 191-100) with 30mm taper shank (P/N 192-100) with 40mm taper shank (P/N 193-100)



Harig's v-block electrode holder mounts to conventional EDM machines and centers electrodes accurately. Can be used as a v-block attachment with any collet fixture. Versatile unit makes centering workpiece with odd or dimensionally varied shank diameters quick and easy. Holder is more rigid than collets and allows operator to work with "tenths." When an electrode needs to be secured in a v-block configuration, there is an Adjusta-V to fit every application. Reliability backed by Harig's trademark service.

- 1 1/4" v-block capacity
- Positioning accuracy to 0.0001"
- 3/4" adjustment to either side of center
- Choice of 4 shank diameters
- Shank has center hole for holding longer electrodes
- Single screw for fast locking v-block
- Hardened and ground tool steel
- Full repair service and replacement parts available



EDGE-MASTER (P/N 050-100)



Harig's precision mounting table permits a variety of machining applications. Ideal for light drilling, milling, boring, jig-grinding, and EDM workholding. Having workpiece overhang edges can extend 6" x 12" capacity. The Edge-Master allows a flush-cup to be mounted beneath the workpiece for EDM reverse flush set-ups. When "tenths" accuracy is needed on an all-purpose mounting table, look no further than the Edge-Master. Reliability backed by Harig's trademark service.

- 6" x 12" capacity can be expanded with workpiece overhang
- 2 rails on vertical mounting blocks provide constant x/y coordinates
- A support block may be used for precise flatness and quick set-ups
- Hardened and ground to "tenths" for accuracy
- Ideal for multiple parts
- Mounting holes provide flexibility
- 2 Flush Cup sizes available: 1" (P/N 50-08), 2" (P/N 50-07), 3" (P/N 50-06)
- Full repair service and replacement parts available

Harig

SYSTEM 3R EDM INDEXERS (P/N 245-100 & 250-100)



minimal deflection

The precision indexing technology in Harig's Grind-All No. 1 head is paired with System 3R's most popular chucks to create two dedicated electrode The marriage of a System 3R chuck with a Harig grinding fixture allows the operator to accurately produce electrodes and easily transfer them between machines. Harig EDM indexers enhance your company's existing System 3R reference system, providing unmatched repeatability, improved precision, and shorter set-up times.

Specs

Center height 3.000" Graduation 360 degree 24 division indexing +/- 10 seconds angles between indexes via adjustable stops 0.0001" square and parallel to

extended base better balance &

20mm EDM INDEXER P/N 245-100

- Accepts 20mm tooling and uses System 3R's #3R-321.2 mini manual chuck
- Incorporates Harig's gear rack to allow for precise offset movements
- System 3R's mini reference system offers unparalleled repeatability and accuracy and is the most widely used electrode holder system
- 13 lbs.

MC EDM INDEXER P/N 250-100

- Uses System 3R's #3R-460.34 manual combi chuck
- System 3R's MacroCombi reference system provides simultaneous access to the highly accurate Macro System or the economical MacroJunior system without adapters
- 11 lbs.



BUR-BEAVER (P/N 265-100)



Harig has acquired Simco's BUR-BEAVER tabletop deburring Model BB-920 and is reintroducing it to the marketplace. The industry standard, still made in the U.S.A., deburrs and cuts perfect 45 degree bevels on the outside edges of flat and square bar stock and rounds. Harig is committed to improving the Simco line of high performance deburring, chamfering, and beveling machines, and proud to have the Bur-Beaver as part of our line of "world class tools".

FEATURES

- Fast, safe easy to operate
- Ideal for steel, aluminum, and plastic
- Cutter has minimum exposure to protect operator
- Table is fixed at standard 45 degrees
- Table moves up and down to easily adjust depth of cut
- Table lifts to change cutter
- One piece cast aluminum housing
- Extra quiet, vibration free, variable speed permanent Magnet motor
- Includes one 18-FLUTE CUTTER (p/n 92048)
- Optional Guide (p/n 265-50) permits deburring the O.D. of flat rounds
- Full repair service and replacement parts available

Specs

Motor 3/4 horsepower

Variable Speed up to 7,000 rpm (no load)

Electrical 115V - 60 Hz
Table 12" long x 4" high
Overall size 10" x 10" x 7" high

Weight 30 lbs.



HO-VEE RISER (P/N 235-100)



Harig's precise adustable riser v-block system plus traveling height gage offers numerous workholding applications. Use with the Basic V-Block to hold workpiece securely and accurately. Use with the Multi-6 V-Block for end finishing of punches, core pins, plugs, and EDM electrodes. Mount a dial indicator to the riser block for use as an accurate travelling height gage. Standard 8" posts with 5" width included. When productivity is a must, the Ho-Vee Systems unmatched versatility makes every toolroom more efficient. Reliability backed by Harig's trademark service.

Accessories

- Basic V-Block (P/N 235-10)
- Multi-6 V-Block (P/N 235-20)
- 10" Posts (P/N 235-40)



PLANNER-GAGE (P/N 035-100)



Features

1" width and beveled ways for minimum deflection Range 1/2" to 10" Fastest way to set radii **Includes case**



BASIC V-BLOCK (P/N 235-10)



Harig's precise adustable riser v-block system plus traveling height gage offers numerous workholding applications. Use with the Basic V-Block to hold workpiece securely and accurately. Use with the Multi-6 V-Block for end finishing of punches, core pins, plugs, and EDM electrodes. Mount a dial indicator to the riser block for use as an accurate travelling height gage. Standard 8" posts with 5" width included. When productivity is a must, the Ho-Vee Systems unmatched versatility makes every toolroom more efficient. Reliability backed by Harig's trademark service.

Features

- V-Block capacity holds parts up to 1" in diameter
- Quick set-ups
- Includes strap clamp
- Hardened and ground to "tenths" accuracy

Back to Ho-Vee Riser (P/N 235-100)
Back to Multi-6 V-Block (P/N 235-20)



COMPAC-VISE (P/N 045-100)



- 4 1/4" x 2" with 2" maximum openings
- Ideal for holding smaller parts
- Sleek design allows unit to go where larger vices cannot
- Movable jaw has both vertical and horizontal "V" to securely hold workpiece
- Hardened and ground to "tenths" accuracy



MULTI-6 V-BLOCK (P/N 235-20)



Harig's precise adustable riser v-block system plus traveling height gage offers numerous workholding applications. Use with the Basic V-Block to hold workpiece securely and accurately. Use with the Multi-6 V-Block for end finishing of punches, core pins, plugs, and EDM electrodes. Mount a dial indicator to the riser block for use as an accurate travelling height gage. Standard 8" posts with 5" width included. When productivity is a must, the Ho-Vee Systems unmatched versatility makes every toolroom more efficient.

Reliability backed by Harig's trademark service.

Features

- 6" x 2" x 1 3/4" height
- Has 6 Vs with 1/2" diameter capacity
- Centers of Vs are 7/8" apart
- For end finishing of multiple parts
- Can be used vertically or horizontally as a "stand alone"
- · Hardened and ground

Back to Ho-Vee Riser (P/N 235-100)
Back to Basic V-Block (P/N 235-10)



SUPER WEE-BLOCKS (P/N 065-100)



- Accurately holds small parts from 0.030" to 9/32" Set consits of 2 wee-blocks and 2 bridges
- Retaining bars: (2) 5/32". (2) 1/8", (1) 1/16"
- Hardened and ground to "tenths" accuracy
- Includes case



PRICE LIST: Grinding Fixtures & Accessories

Effective: January 1, 2015

■ "NEW" HARIG/SIMCO BUR-BEAVER

265-100) BUR-BEAVER MODEL BB-920 (tabletop unit w/1 18 flute cutter)	\$1	900.00
265-50	BUR-BEAVER GUIDE (permits deburring the OD of flat rounds)	\$	209.00
92044	BB-35Q 27-FLUTE CUTTER (for fine finishes min. depth chamfers on steel)	\$	115.00
92045	BB-35R BORAZON WHEEL (deburrs stainless and hardened steel)	\$	132.00
92046	BB-35N 9-FLUTE CUTTER (deburrs and chamfers aluminum, plastic, castiron)	\$	95.00
92047	BB-35S CROSSHATCH CUTTER (for fine finish deburrin of steel)	\$	105.00
92048	BB-35P 18-FLUTE CUTTER (for medium finish chamfers on steel to 1/8")	\$	110.00

- GRIND-ALL NO. 1

010- 100	HARIG GRIND-ALL FIXTURE NO.1 (with carrying case)	\$2882.00
015- 100	BASE-PLATE & TAIL-STOCK (11" with rail)	\$1238.00
016- 100	BASE-PLATE & TAIL-STOCK (18" with rail)	\$2062.00
055- 100	SINE-PLATE (4"x6" single angle with rail)	\$ 924.00
065- 100	SUPER WEE-BLOCKS (with case)	\$ 127.00
075- 100	RECTANGLE-JAWS (with case)	\$ 176.00
085- 100	HITE-ANGLE PLATE (with rail)	\$ 792.00
105- 100	SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$1749.00
135- 100	STEADY-REST	\$ 138.00
10-40	MAGNETIC CHUCK (4" diameter fine pole)	\$1375.00
10-52	RADIUS DRESSER ARM	\$ 171.00

91002	O.D. DIAMOND (#7)	\$ 83.00
91003	I.D. DIAMOND NIB (.020)	\$ 86.00
10-55	BALL-SEAT PUNCH ADAPTOR	\$ 462.00
10-56	NIBS FOR BALL-SEAT PUNCH ADAPTER (1/4" diameter)	\$ 66.00
10-57	NIBS FOR BALL-SEAT PUNCH ADAPTER (5/16" diameter)	\$ 88.00
10-58	NIBS FOR BALL-SEAT PUNCH ADAPTER (3/8" diameter)	\$ 73.00
10-59	NIBS FOR BALL-SEAT PUNCH ADAPTER (1/2" diameter)	\$ 76.00
10-60	NIBS FOR BALL-SEAT PUNCH ADAPTER (3/4" diameter)	\$ 79.00
10-70	MOTO-GRIND (w/ motor, base-plate, belt & case - for light duty work)	\$1199.00
10-90	FACE-PLATE (6" diameter - hardened)	\$ 209.00
10-95	LENGTH-STOP	\$ 209.00

- HARIG GRIND-ALL NO.2

020-100	HARIG GRIND-ALL NO.2	\$4	1279	9.00	
021-100	HARIG GRIND-ALL NO.2 (with rotary table mechanism)	\$4	1729	9.00	
065-100	SUPER WEE-BLOCKS (with case)	\$	127	7.00	
075-100	RECTANGLE-JAWS (with case)	\$	176	6.00	
105-100	SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$	1749	9.00	
135-100	STEADY-REST	\$	138	8.00	
10-52	RADIUS DRESSER ARM	\$	173	1.00	
91002	O.D. DIAMOND NIB (#7)	\$	83	3.00	
91003	I.D. DIAMOND NIB FOR (.020)	\$	86	5.00	
20-60	BALL-SEAT PUNCH ADAPTER	\$	495	5.00	
10-56	NIBS FOR BALL-SEAT ADAPTER (1/4" diameter)	\$	66	5.00	
10-57	NIBS FOR BALL-SEAT ADAPTER (5/16" diameter)	\$	68	8.00	
10-58	NIBS FOR BALL-SEAT ADAPTER (3/8" diameter)	\$	73	3.00	
10-59	NIBS FOR BALL-SEAT ADAPTER (1/2" diameter)	\$	76	6.00	
10-60	NIBS FOR BALL-SEAT ADAPTER (3/4" diameter)	\$	79	9.00	
20-50	ROTARY TABLE MECHANISM KIT	\$	528	8.00	
20-65	CARRYING CASE	\$	123	1.00	
20-70	NO.2 MOTOR ATTACHMENT (w/ motor, bracket & belt - light duty work)	\$	649	9.00	

- HARIG DUO-FORM

060-100 HARIG DUO-FORM (with carrying case)	\$5490.00
015-100 BASE-PLATE & TAIL-STOCK (11" with rail)	\$1238.00
016-100 BASE-PLATE & TAIL-STOCK (18" with rail)	\$2062.00
055-100 SINE-PLATE (4"x6" single angle with rail)	\$ 924.00
065-100 SUPER WEE-BLOCKS (with case)	\$ 127.00
075-100 RECTANGLE-JAWS (with case)	\$ 176.00
085-100 HITE-ANGLE PLATE (with rail)	\$ 792.00

105-100	SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$1	749.0)()
106-100	FINE-POLE SIN-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$2	079.0)()
135-100	STEADY-REST	\$	138.0)()
10-52	RADIUS DRESSER ARM	\$	171.0)()
91002	O.D. DIAMOND (#7)	\$	83.0	00
91003	I.D. DIAMOND NIB (.020)	\$	86.0)()

- HARIG ULTRA-GRIND NO. 5C-V

215-100	HARIG ULTRA-GRIND NO. 5C-V (w/v-block, 1/2" 5C collet & case)	\$3	289	00.6
210-70	ULTRA-GRIND MOTOR ATTACHMENT (w/motor, bracket & belt)	\$	594	1.00
015-100	BASE PLATE & TAIL-STOCK (11" with rail)	\$1	238	3.00
016-100	BASE-PLATE & TAIL-STOCK (18" with rail)	\$2	.062	2.00
055-100	SINE-PLATE (4"x6" single angle with rail)	\$	924	1.00
065-100	SUPER WEE-BLOCKS (with case)	\$	127	7.00
075-100	RECTANGLE-JAWS (with case)	\$	176	5.00
085-100	HITE-ANGLE PLATE (with rail)	\$	792	2.00
105-100	SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$1	749	00.6
106-100	FINE-POLE SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$2	.079	9.00
120-50	FACE-PLATE (5" diameter, soft with adapter shank)	\$	209	00.6
120-60	3-JAW CHUCK (with reversible jaws & adapter shank)	\$1	150	0.00
120-70	MAGNETIC-CHUCK (5" diameter with adapter shank)	\$1	261	00.1
135-100	STEADY-REST	\$	138	3.00
10-52	RADIUS DRESSER ARM	\$	171	00.1
91002	O.D. DIAMOND (#7)	\$	83	3.00
91003	I.D. DIAMOND NIB (.020)	\$	86	5.00

- HARIG UNI-DEX

070-100	UNI-DEX (with 1/2" 5C collet & carrying case)	\$2370.00	
015-100	BASE-PLATE & TAIL-STOCK (11" with rail)	\$1238.00	
016-100	BASE-PLATE & TAIL-STOCK (18" with rail)	\$2062.00	
055-100	SINE-PLATE (4"x6" single angle with rail)	\$ 924.00	
085-100	HITE-ANGLE ANGLE PLATE (with rail)	\$ 792.00	
105-100	SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$1749.00	
106-100	FINE-POLE SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$2079.00	
120-50	FACE-PLATE (5" diameter, soft with adapter shank)	\$ 209.00	
120-60	3-JAW CHUCK (with reversible jaws & adapter shank)	\$1150.00	
120-70	MAGNETIC CHUCK (5" diameter with adapter shank)	\$1261.00	
135-100	STEADY-REST	\$ 138.00	

- HARIG SPIN-INDEXER

120-100	MOTORIZED SPIN-INDEXER	\$1	74	6.00	
122-100	MANUAL SPIN-INDEXER	\$1	34	0.00	
105-100	SINE-CHUCK (6" x 6" permanent magnet single angle with 2 rails)	\$1	74	9.00	
106-100	FINE-POLE SINE-CHUCK (6" x 6" permanent magnet single angle with 2 rails)	\$2	207	9.00	
120-50	FACE-PLATE (5" diameter, soft with adapter shank)	\$	20	9.00	
120-60	3-JAW CHUCK (with reversible jaws & adapter shank)	\$1	15	0.00	
120-70	MAGNETIC CHUCK (5" diameter with adapter shank)	\$1	26	1.00	
120-80	MOTOR ATTACHMENT (w/motor, bracket & belt - motorizes manual unit)	\$	54	5.00	
125-100	SINE-PLATE (4.5"x6" single angle with rail)	\$	94	6.00	
130-100	ADAPTER-PLATE (12" long)	\$	97	9.00	
135-100	STEADY-REST	\$	13	8.00	
140-100	MANUAL COLLET CLOSER	\$	9	9.00	
145-100	COLLET STOP SET (4 piece set)	\$	7	7.00	
150-100	COLLET STOP	\$	5	5.00	
165-100	AIR COLLET CLOSER (for use with motorized Spin-Indexer)	\$	90	9.00	
91005	DIAMOND NIB	\$	3	0.00	

- HARIG TRU-DEX

030-100	TRU-DEX WHEEL DRESSER (with 12" wheel capacity arm & case)	\$5	080.00
035-100	PLANNER-GAGE (with case)	\$	451.00
91002	O.D. DIAMOND NIB (#7)	\$	83.00
91003	I.D. DIAMOND NIB (.020)	\$	86.00

- HARIG LECTRIC-CENTERS

025-100	LECTRIC-CENTERS (with 11" base-plate & carrying case)	\$2692.00
15-30	18" BASE-PLATE (with rail)	\$1490.00
055-100	SINE-PLATE (4"x6" single angle with rail)	\$ 924.00
105-100	SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$1749.00
106-100	FINE-POLE SINE-CHUCK (6"x6" permanent magnet single angle with 2 rails)	\$2079.00
25-03	HEAD STOCK CENTER	\$ 235.00
15-03	TAIL STOCK CENTER	\$ 190.00
91005	DIAMOND NIB	\$ 30.00

• **NEW!** HARIG KOOL-GRIND SYSTEM

240-40	KOOL-GRIND PLATE #44 (w/6' Plate Tubing quick disconnect fittings)	\$1199.00
240-60	KOOL-GRIND CHUCK #612 (6' Chuck Tubing quick disconnect fittings)	\$2519.00
240-100	KOOL-GRIND CHILLER (quick disconnect fittings and 1 gallon Koolant)	\$2354.00
240-61	MANUAL RELEASE CONTROL (for Kool-Grind Chuck No. 612)	\$ 627.00
240-62	AUTOMATIC RELEASE CONTROL (for Kool-Grind Chuck No. 612)	\$1210.00
240-04	4' UNIVERSAL EXTENSION TUBING (w/quick disconnect fittings)	\$ 121.00
240-10	KOOL-GRIND KOOLANT (1 gallon)	\$ 40.00

• NEW! HARIG & SYSTEM 3R EDM INDEXERS(other mfg. models also available)

245-100 20mm EDM INDEXER (#3R-321.2 mini manual chuck)w/carrying case	\$6658.00
250-100 MC EDM INDEXER (#3R-460.34 manual combi chuck) w/carrying case	\$6858.00

- HARIG EDM TOOLING

255-100	EDM MAGNETIC REFERENCE CHUCK (6" x 6")	\$1309.	.00
170-100	MODEL E-5 ROTO-SPINDLE	\$1749.	.00
170-70	COLLET SET OF 12 (for use with E-5 Roto-Spindle)	\$ 495.	.00
170-71	(.039079) ER-20 or RD-20 COLLETS	\$ 44.	.00
170-72	(.079118) ER or RD-20 COLLETS	\$ 44.	.00
170-73	(.118157) ER or RD-20 COLLETS	\$ 44.	.00
170-74	(.157192) ER or RD-20 COLLETS	\$ 44.	.00
170-75	(.192236) ER or RD-20 COLLETS	\$ 44.	.00
170-76	(.236276) ER or RD-20 COLLETS	\$ 44.	.00
170-77	(.276315) ER or RD-20 COLLETS	\$ 44.	.00
170-78	(.315354) ER or RD-20 COLLETS	\$ 44.	.00
170-79	(.354394) ER or RD-20 COLLETS	\$ 44.	.00
170-80	(.394433) ER or RD-20 COLLETS	\$ 44.	.00
170-81	(.433472) ER or RD-20 COLLETS	\$ 44.	.00
170-82	(.472512) ER or RD-20 COLLETS	\$ 44.	.00
175-100	MODEL E-20 ROTO-SPINDLE	\$1886.	.00
161-100	E-20 COLLET CHUCK	\$ 138.	.00
155-100	MODEL E-5 FLUSH-CHUCK (with 1/2" diameter shank)	\$ 462.	.00
160-100	MODEL E-20 FLUSH-CHUCK (with 20mm diameter shank)	\$ 562.	.00
040-100	TWIN-ANGLE NO.1 (with 2 clamps)	\$ 572.	.00
185-100	TWIN-ANGLE NO.2 (with 2 clamps)	\$ 649.	.00
40-02	3/4" DIAMETER SHANK (for Twin-Angle)	\$ 53.	.00
40-04	20mm DIAMETER SHANK (for Twin-Angle)	\$ 75.	.00
190-100	ADJUSTA-V (with 1" diameter shank)	\$1045.	.00
191-100	ADJUSTA-V (with 20mm diameter shank)	\$1045.	.00
192-100	ADJUSTA-V (with 30mm taper shank)	\$1067.	.00

193-100	ADJUSTA-V (with 40mm taper shank)	\$10	067.00
050-100	EDGE-MASTER (with clamps and support blocks)	\$12	265.00
50-06	3" DIAMETER FLUSH CUP	\$	64.00
50-07	2" DIAMETER FLUSH CUP	\$	61.00
50-08	1" DIAMETER FLUSH CUP	\$	57.00

- HARIG HO-VEE SYSTEM

235-100	HO-VEE RISER (with 8" posts)	\$1144.00
235-10	BASIC V-BLOCK (with strap clamp)	\$ 286.00
235-20	MULTI-6 V-BLOCK (with strap clamp)	\$ 770.00
235-40	10" POSTS (set of 2)	\$ 138.00

- HARIG MULTI-USE ACCESSORIES

035-100	PLANNER-GAGE (with case)	\$ 451.00
045-100	COMPAC-VISE	\$ 385.00
065-100	SUPER WEE-BLOCKS	\$ 127.00
095-100	MAGNA-DRESS	\$ 105.00
110-100	ADJUSTO-DRESS	\$ 297.00
91004	DIAMOND NIB (for Magna-Dress & Adjusto-Dress)	\$ 35.00

TERMS: NET 30

MINIMUM ORDER \$15.00

PRICES ARE F.O.B. HARIG MFG. NILES, IL. 60714

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

REPLACEMENT PARTS ARE AVAILABLE PER SEPARATE PRICE LIST.



REPLACEMENT PARTS: Price List

Effective: January 1, 2015

- HARIG GRIND-ALL NO.1

10-03	V-BLOCK	\$ 143.00
10-06	INDEX PIN ASSEMBLY	\$ 42.00
10-08	DIAL (graduated)	\$ 48.00
10-09	U-CLAMP WITH SCREW	\$ 30.00
10-10	T-NUT ASSEMBLY	\$ 42.00
10-11	ADJUSTABLE STOP (large precision)	\$ 44.00
10-15	STOP PIN	\$ 17.00
10-30	CRANK LEVER & REVOLVING KNOB	\$ 51.00
10-33	V-BLOCK ADJUSTING SCREW	\$ 17.00
10-35	ADJUSTABLE STOP (small regular)	\$ 35.00
10-48	INSTRUCTION MANUAL	\$ 5.00
10-50	CARRYING CASE	\$ 99.00
120-30	MOTOR (#10758/#30386/#23A0582014G1)	\$ 473.00
10-77	DRIVE BELT (for Moto-Grind)	\$ 8.00
41002	SET OF BEARING BALLS	\$ 21.00
44001	FELT SEAL (housing)	\$ 4.00

- HARIG GRIND-ALL NO.2

20-03	V-BLOCK	\$ 290.00
20-06	INDEX PIN ASSEMBLY	\$ 120.00
20-08	U-CLAMP SCREW	\$ 20.00
20-09	U-CLAMP WITH SCREW	\$ 84.00
20-10	ADJUSTABLE STOP	\$ 54.00
20-15	STOP PIN	\$ 22.00
20-18	CRANK LEVER & REVOLVING KNOB	\$ 73.00
20-33	FELT SEAL (housing)	\$ 4.00
20-52	PINION FOR ROTARY	\$ 83.00
20-56	HANDLE (for rotary table mechanism)	\$ 47.00
20-71	MOTOR (#147255/#32878)	\$ 506.00
120-38	DRIVE BELT (for No.2 Motor Attachment)	\$ 8.00
41002	SET OF BEARING BALLS	\$ 21.00
49004	REVOLVING KNOB (large)	\$ 35.00

- HARIG DUO-FORM

10-03	V-BLOCK	\$ 143.00
10-06	INDEX PIN ASSEMBLY	\$ 42.00
10-09	U-CLAMP WITH SCREW	\$ 30.00
10-10	T-NUT ASSEMBLY	\$ 42.00
10-11	ADJUSTABLE STOP (large precision)	\$ 44.00
10-15	STOP PIN	\$ 17.00
10-30	CRANK LEVER & REVOLVING KNOB	\$ 51.00
10-33	V-BLOCK ADJUSTING SCREW	\$ 17.00
10-48	INSTRUCTION MANUAL	\$ 5.00
10-50	CARRYING CASE	\$ 99.00
41002	SET OF BEARING BALLS	\$ 21.00
44001	FELT SEAL (housing)	\$ 4.00

- HARIG ULTRA-GRIND 5C-V

10-06	INDEX PIN ASSEMBLY	\$ 42.00
10-09	U-CLAMP WITH SCREW	\$ 30.00
10-11	ADJUSTABLE STOP (large precision)	\$ 44.00
10-15	STOP PIN	\$ 17.00
10-35	ADJUSTABLE STOP (small regular)	\$ 35.00
10-48	INSTRUCTION MANUAL	\$ 5.00
10-50	CARRYING CASE	\$ 99.00
120-30	MOTOR (#10758/#30386/#23A0582014G1)	\$ 473.00
210-06	DRIVE BELT (for Ultra-Grind Motor Attachment)	\$ 8.00
215-03	COLLET DRAW NUT	\$ 31.00
215-05	V-BLOCK	\$ 242.00
41001	SET OF BEARING BALLS	\$ 21.00
44001	FELT SEAL	\$ 4.00
49004	REVOLVING KNOB (large)	\$ 35.00
70-06	CRANK LEVER WITH REVOLVING KNOB	\$ 72.00

- HARIG UNI-DEX

10-06	INDEX PIN ASSEMBLY	\$	42.00
10-15	STOP PIN	\$	17.00
10-48	INSTRUCTION MANUAL	\$	5.00
10-50	CARRYING CASE	\$	99.00
10-77	DRIVE BELT (for Moto-Grind)	\$	8.00
30-25	ADJUSTABLE STOP	\$	44.00
120-05	DRAW NUT	\$	31.00
120-30	MOTOR (#10758/#30386/#23A0582014G1)	\$.	473.00
41002	SET OF BEARING BALLS	\$	21.00

44001	FELT SEAL (housing)	\$ 4.00
49004	REVOLVING KNOB (large)	\$ 35.00
70-06	CRANK LEVER WITH REVOLVING KNOB	\$ 72.00

- HARIG SPIN-INDEXER

120-02	SPINDLE BEARING	\$ 28.00
120-05	DRAW NUT	\$ 31.00
120-06	MAIN SPINDLE ASSEMBLY	\$ 231.00
120-07	SEAL (spindle)	\$ 7.00
120-09	ROTARY HANDLE (manual)	\$ 31.00
120-20	INDEX PIN ASSEMBLY	\$ 77.00
120-30	MOTOR (#10758/#30386/#23A0582014G1)	\$ 473.00
120-38	DRIVE BELT	\$ 8.00
120-39	MOTOR MOUNTING BRACKET	\$ 48.00

. HARIG TRU-DEX

30-09	PINION SHAFT	\$ 132.00
30-10	KNOB-MAIN SHAFT (aluminum)	\$ 28.00
30-11	KNOB-ACUTATING (plastic)	\$ 19.00
30-14	INDEX PIN ASSEMBLY	\$ 42.00
30-16	DRESSER ARM	\$ 163.00
30-22	STOP PIN	\$ 17.00
30-24	LOCK ASSEMBLY	\$ 32.00
30-25	ADJUSTABLE STOP	\$ 44.00
30-50	CARRYING CASE	\$ 138.00
91002	O.D DIAMOND (#7)	\$ 83.00
91003	I.D. DIAMOND (.020)	\$ 86.00

- HARIG LECTRIC-CENTERS

15-02	TAIL STOCK ASSEMBLY	\$ 572.00
15-03	TAIL STOCK CENTER	\$ 190.00
15-05	TAIL STOCK LOCKING ASSEMBLY	\$ 66.00
25-01	MOTOR	\$ 130.00
25-02	MOTORIZED HEAD STOCK	\$1454.00
25-03	HEAD STOCK CENTER	\$ 235.00
25-07	2 SPEED PULLEY (on motor)	\$ 39.00
25-08	MAIN PULLEY (on headstock)	\$ 132.00
25-09	MAIN PULLEY BEARING	\$ 28.00
25-17	DRIVE BELT	\$ 8.00
25-30	CARRYING CASE	\$ 132.00
91005	DIAMOND	\$ 30.00

. HARIG EDM TOOLING

170-30	ROTO-SPINDLE MOTOR	\$ 490.00
120-38	DRIVE BELT (for Roto-Spindle)	\$ 8.00
155-10	SET OF FLUSH-CHUCK SEALS (package of 6)	\$ 10.00
170-02	COLLET NUT (for E-5 Roto-Spindle)	\$ 50.00
170-09	SPINDLE SEAL	\$ 17.00
170-10	BRUSHES (each)	\$ 6.00
170-15	OPEN END WRENCH (for Roto-Spindle)	\$ 26.00
170-16	CARRYING CASE (for Roto-Spindle)	\$ 121.00
170-20	SET OF SEALS FOR E-5ROTO-SPINDLE (package of 8)	\$ 13.00
170-25	EXTRA WASHERS TO HOLD RUBBER SEALS (package of 8)	\$ 11.00
40-03	TWIN-ANGLE CLAMPS (set of 2)	\$ 51.00
50-09	EDGE-MASTER CLAMPS (set of 2)	\$ 52.00

• VARIABLE SPEED MOTOR (#30386A)

120-34	SPEED CONTROL	\$ 65.00
120-35	SWITCH (on/off/reverse)	\$ 12.00
120-36	FUSE HOLDER (tube or micro)	\$ 11.00
120-37	FUSE (tube or micro)	\$ 7.00
120-40	CORD (8' long with plug)	\$ 29.00
120-41	ARMATURE WITH BEARING	\$ 154.00
120-42	BEARING FOR ARMATURE (both ends the same)	\$ 22.00
120-43	BEARING FOR ARMATURE (large front)	\$ 15.00
120-44	BEARING FOR ARMATURE(small rear)	\$ 13.00
120-45	BRUSH HOLDER	\$ 9.00
120-46	BRUSH	\$ 10.00
120-47	BRUSH HOLDER CAP	\$ 4.00
120-48	KNOB FOR SPEED CONTROL	\$ 9.00

■ HARIG/SIMCO BUR-BEAVER

265-50	BB-37 OPTIONAL GUIDE (for round parts)	\$ 209.00
265-35	SPEED CONTROL KNOB	\$ 6.00
265-34	SPEED CONTROL	\$ 145.00
265-31	MOTOR BRUSH	\$ 10.00
265-30	MOTOR	\$ 363.00
265-08	CUTTER ADAPTER	\$ 50.00
265-07	KNURLED TABLE ADJ. KNOB	\$ 10.00
265-06	LOCK DOWN KNOB	\$ 5.00
120-47	BRUSH HOLDER CAP	\$ 4.00
92048	BB-35P 18-FLUTE CUTTER	\$ 110.00
92047	BB-35S CROSSHATCH CUTTER	\$ 105.00
92046	BB-35N 9-FLUTE CUTTER	\$ 95.00

92045 BB-35R BORAZON WHEEL \$ 132.00 92044 BB-35Q 27-FLUTE CUTTER \$ 115.00

NOTE: SCREWS, WASHERS, SPRINGS, ETC. - ASK FOR PART NO. AND PRICES WHEN ORDERING.

TERMS: NET 30

MINIMUM ORDER \$15.00

PRICES ARE F.O.B. HARIG MFG. NILES, IL. 60714

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

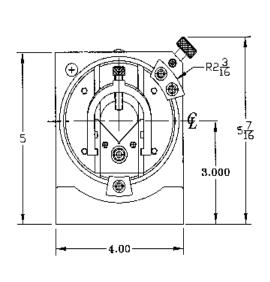


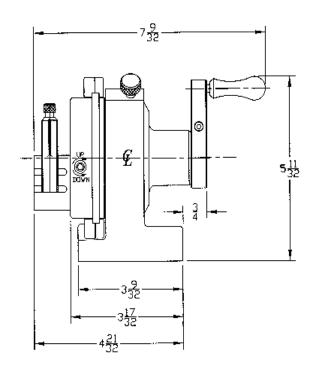
GRIND-ALL No. 1 (P/N 010-100)

Specs

V-Block capacity 1 1/4"
Center height 3.000"
Through hole 1 3/16"
Graduation 360 degree
24 division indexing +/- 10 seconds

V-block within 0.0001 Square and parallel to 0.0001 Weight 12 lbs





Print for clearer image.

Grind-All No. 1

Order Form

Accessories
Tradeshows
Contact Us

Price List Repl Repairs Warranty World Class Tools

Replacement Parts

<u>Catalog</u>





Accessories for the Grind-All No. 1

SUPER WEE-BLOCKS P/N 065-100

- Accurately holds small parts from 0.030" to 9/32"
- Set consists of 2 wee-blocks and 2 bridges
- Retaining bars: (2) 5/32", (2) 1/8", (1) 1/16"
- Hardened and ground to "tenths" accuracy
- Includes case

BASE-PLATE AND TAIL-STOCK P/N 015-100

- 4" x 11" with rail
- 6" capacity between centers
- 18" base-plate also available
- · Hardened and ground tool steel

SINE-CHUCK P/N 105-100

- 6" x 6" with 2 rails
- Permanent magnet
- Single angle (5" sine)

BALL-SEAT PUNCH ADAPTER P/N 10-55

- Accurately locates and clamps ball-seat punch
- Nibs available in 1/4", 5/16", 3/8", 1/2", and 3/4" diameters

SINE-PLATE P/N 055-100

- 4" x 6" with 2 rails
- Single angle (5" sine)
- 0.200 minute angle step
- Hardened and ground tool steel

MOTO-GRIND P/N 10-70

- For light duty work
- Includes motor, base plate, drive belt, and case
- Variable speed from 50-550 rpm











1/15 horsepower 110v AC motor

LENGTH STOP P/N 10-95

• For multiple piece parts

RECTANGLE-JAWS P/N 075-100

- For holding rectangular parts from 0.070 to capacity of v-block
- Hardened and ground to "tenths" accuracy
- Includes case

FACE PLATE P/N 10-90

- 6" diameter
- Hardened and ground tool steel

STEADY-REST P/N 135-100

- Assists in grinding very small diameters
- Magnetic base
- Spring loaded plunger

RADIUS DRESSER ARM P/N 10-52

- For dressing wheels up to 10" diameter
- OD diamond nib (P/N 91002)
- ID diamond nib (P/N 91003)

MAGNETIC CHUCK P/N 10-40

- 4" diameter
- Fine pole permanent magnet

HITE-ANGLE PLATE P/N 085-100

- 9 1/2" x 5" x 4" wide
- Allows for horizontal use of Harig fixtures
- Includes side rail and mounting holes
- Hardened and ground tool steel













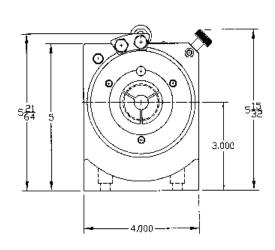


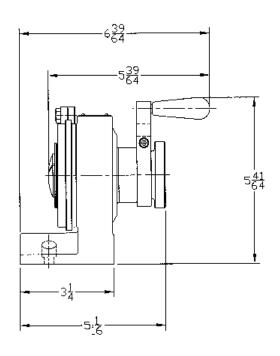
UNI-DEX (P/N 070-100)

Specs

Collet 5C up to 1"
Center height 3.000"
Graduation 360 degree
24 division indexing +/- 10 seconds

Spindle run-out 0.00005 Square and parallel to 0.0001 Weight 11 lbs







Accessories for the Uni-Dex

BASE-PLATE AND TAIL-STOCK P/N 015-100

- 4" x 11" with rail
- 6" capacity between centers
- 18" base-plate also available
- Hardened and ground tool steel

SINE-CHUCK P/N 105-100

- 6" x 6" with 2 rails
- Permanent magnet
- Single angle (5" sine)

SINE-PLATE P/N 055-100

- 4" x 6" with 2 rails
- Single angle (5" sine)
- 0.200 minute angle step
- · Hardened and ground tool steel

MOTO-GRIND P/N 70-70

- For light duty work
- Includes motor, base plate, drive belt, and case
- Variable speed from 50-550 rpm
- 1/15 horsepower 110v AC motor

3-JAW CHUCK P/N 120-60

- 1 3/8" maximum opening with straight jaws
- 3 3/8" maximum opening with step jaws
- 3/4" thru hole (Chuck only)
- With 5C adapter shank

FACE PLATE P/N 120-50

- 5" diameter
- Soft face











• With 5C adapter shank

STEADY-REST P/N 135-100

- Assists in grinding very small diameters
- Magnetic base
- Spring loaded plunger

MAGNETIC CHUCK P/N 120-70

- 4 3/4" diameter, 2 1/4" thick
- Standard pole permanent magnet
- With 5C adapter shank

HITE-ANGLE PLATE P/N 085-100

- 9 1/2" x 5" x 4" wide
- Allows for horizontal use of Harig fixtures
- Includes side rail and mounting holes
- Hardened and ground tool steel











TRU-DEX (P/N 030-100)

Specs

Dresses wheels up to 12" diameter

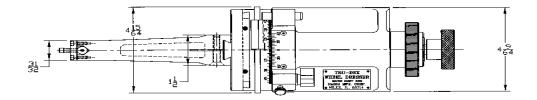
Dresses radius up to 2 14/" convex, 5" concave

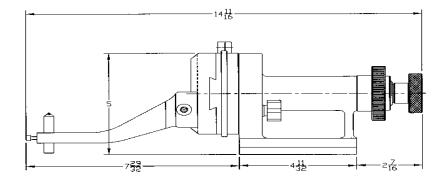
Center height 3.000"

Indexing every 15 degrees to $\,$ +/- 10 seconds

Tangent "throw" 1 7/16" from center

Weight 16 lbs







Accessories for the Tru-Dex

PLANNER-GAGE P/N 035-100

- 1" width and beveled ways for minimum deflection
- Range 1/2" to 10"
- Fastest way to set radii
- Includes case
- Hardened and ground tool steel

O.D. DIAMOND NIB P/N 91002

I.D. DIAMOND NiB P/N 91003





GRIND-ALL No. 2 (P/N 020-100)

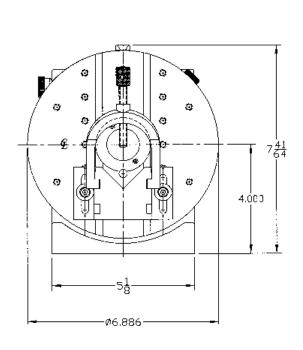
Specs

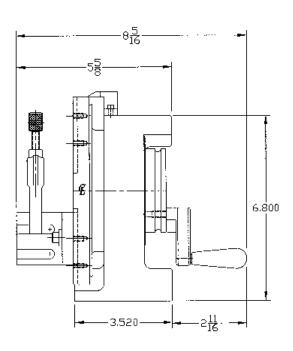
V-Block capacity 2"

Center height 4.000"
Through hole 1 3/16"
Face-plate diameter 6 7/8"
Graduation 360 degree

24 division indexing +/- 10 seconds

V-block within 0.0001 Square and parallel to 0.0001 Weight 30 lbs







Accessories for the Grind-All No. 2

SUPER WEE-BLOCKS P/N 065-100

- Accurately holds small parts from 0.030" to 9/32"
- Set consists of 2 wee-blocks and 2 bridges
- Retaining bars: (2) 5/32", (2) 1/8", (1) 1/16"
- Hardened and ground to "tenths" accuracy
- Includes case

ROTARY TABLE MECHANISM KIT P/N 20-50

- For rotating face plate in horizontal position
- Ideal for light milling and index table work
- Factory installation available

SINE-CHUCK P/N 105-100

- 6" x 6" with 2 rails
- Permanent magnet
- Single angle (5" sine)

BALL-SEAT PUNCH ADAPTER P/N 20-60

- Accurately locates and clamps ball-seat punch
- Nibs available in 1/4", 5/16", 3/8", 1/2", and 3/4" diameters

No. 2 MOTOR ATTACHMENT P/N 20-70

- For light duty work
- Includes motor, bracket, and drive belt
- Variable speed from 50 450 rpm
- 1/10 horsepower 110V AC motor

RECTANGLE-JAWS P/N 075-100

- For holding rectangular parts from 0.070 to capacity of v-block
- Hardened and ground to "tenths" accuracy
- Includes case











STEADY-REST P/N 135-100

- Assists in grinding very small diameters
- Magnetic base
- Spring loaded plunger

RADIUS DRESSER ARM P/N 10-52

- For dressing Wheels up to 10" diameter
- OD diamond nib (P/N 91002)
- ID diamond nib (P/N 91003)

CARRYING CASE P/N 20-65

- Fits Grind-All No. 2 with or without rotary table mechanism
- Provides protective, dust-free storage











SPIN-INDEXER (P/N 122-100 Manual) (P/N 120-100 Motorized)

Specs

Collet 5C up to 1"

Center height 4 1/8"

24 division indexing +/- 30 seconds

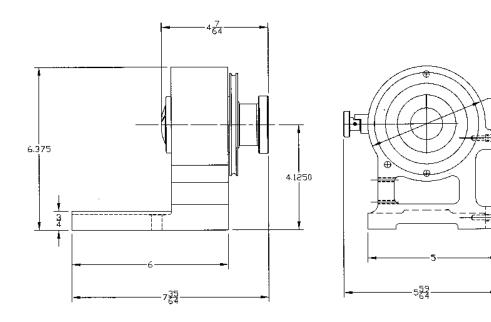
Spindle run-out 0.0001

Spindle parallel to base 0.0002 in 6"

Motor 1/15 horsepower 110v AC

Variable speed 50-450 rpm

Weight 17 lbs





Accessories for the Spin-Indexer

FACE PLATE P/N 120-50

- 5" diameter
- Soft face
- With 5C adapter shank

3-JAW CHUCK P/N 120-60

- 1 3/8" maximum opening with straight jaws
- 3 3/8" maximum opening with step jaws
- 3/4" thru hole
- With 5C adapter shank

MAGNETIC CHUCK P/N 120-70

- 4 3/4" diameter, 2 1/4"
 - thick
- Standard pole permanent magnet
- With adapter shank

SINE-CHUCK P/N 105-100

- 6" x 6" with 2 rails
- Permanent magnet
- Single angle (5" sine)

COLLET STOP P/N 150-100

- Adjustable and threaded
- Assists in production work

SINE-PLATE P/N 125-100

- 4" x 6" with rail
- Single angle (5" sine)
- 0.100 minute angle step
- Soft top plate













MOTOR ATTACHMENT P/N 120-80

- Motorizes manual Spin-Indexer (P/N 120-100)
- Includes motor, bracket, and drive belt
- Mounts in forward or rearward position
- Variable speed from 50-450 rpm
- 1/15 horsepower 110V AC motor

MANUAL COLLET CLOSER P/N 140-100

- Lever action
- For quick set ups of collets and accessories

COLLET STOP SET P/N 145-100

- Adjustable and threaded
- 4 piece set
- Assists in production work

ADAPTER PLATE P/N 130-100

- 3/4" x 4 1/2" x 12"
- 2" minimum between centers
- 7 1/2" maximum between centers
- 1/2" x 2" tail center is adjustable
- Includes 5C solid center with drive plate

STEADY-REST P/N 135-100

- Assists in grinding very small diameters
- Magnetic base
- Spring loaded plunger

AIR COLLET CLOSER P/N 165-100

- Only for use with motorized Spin-Indexer (P/N 120-100)
- Mounts directly to back of spindle pulley
- Spring set and air released by push button air valve
- Minimum air pressure of 50 psi required

DIAMOND NIB P/N 91005

- Inserts into top of fixture
- Easily dresses wheels















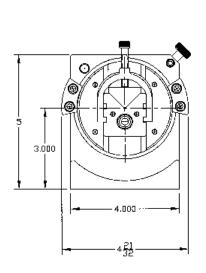


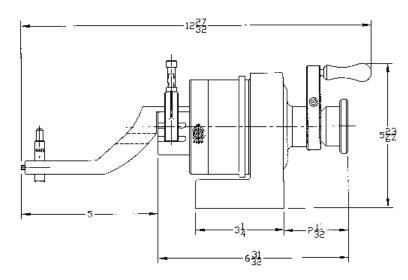
DUO-FORM (P/N 060-100)

Specs

V-Block capacity 1 1/4"
Center height 3.000"
Graduation 360 degree
24 division indexing +/- 15 seconds
Tangent "throwing" 9/16" from center

V-block within 0.0002 Square and parallel to 0.0002 Weight 17 lbs







Accessories for the Duo-Form

SUPER WEE-BLOCKS P/N 065-100

- Accurately holds small parts from 0.030" to 9/32"
- Set consists of 2 wee-blocks and 2 bridges
- Retaining bars: (2) 5/32", (2) 1/8", (1) 1/16"
- Hardened and ground to "tenths" accuracy
- Includes case

BASE-PLATE AND TAIL-STOCK P/N 015-100

- 4" x 11" with rail
- 5" capacity between centers
- 18" base-plate also available
- · Hardened and ground tool steel

SINE-CHUCK P/N 105-100

- 6" x 6" with 2 rails
- Permanent magnet
- Single angle (5" sine)

SINE-PLATE P/N 055-100

- 4" x 6" with 2 rails
- Single angle (5" sine)
- 0.200 minute angle step
- Hardened and ground tool steel

RECTANGLE-JAWS P/N 075-100

- For holding rectangular parts from 0.070 to capacity of v-block
- Hardened and ground to "tenths" accuracy
- Includes case

STEADY-REST P/N 135-100

- Assists in grinding very small diameters
- Magnetic base











Spring loaded plunger

RADIUS DRESSER ARM P/N 10-52

- For dressing wheels up to 10" diameter
- OD diamond nib (P/N 91002)
- ID diamond nib (P/N 91003)

HITE-ANGLE PLATE P/N 085-100

- 9 1/2" x 5" x 4" wide
- Allows for horizontal use of Harig fixtures
- Includes side rail and mounting holes
- Hardened and ground tool steel









ULTRA-GRIND No. 5C-V (P/N 215-100)

Specs

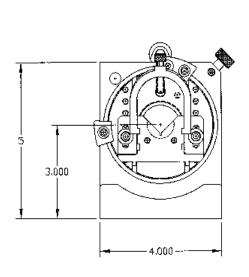
V-Block capacity 1 1/4"

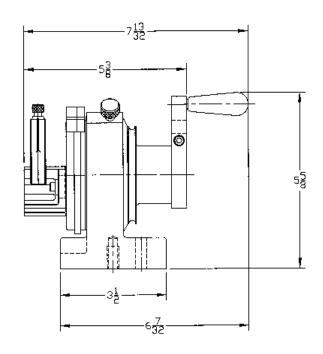
Collet 5C up to 1"
Center height 3.000"
Through hole 1 3/16"
Graduation 360 degree

24 division indexing +/- 10 seconds

Purge port 1/8 NPT tapped every port

Spindle run-out 0.00005 V-block within 0.0001 Square and parallel to 0.0001 Weight 14 lbs







Accessories for the Ultra-Grind No. 5C-V

SUPER WEE-BLOCKS P/N 065-100

- Accurately holds small parts from 0.030" to 9/32"
- Set consists of 2 wee-blocks and 2 bridges
- Retaining bars: (2) 5/32", (2) 1/8", (1) 1/16"
- Hardened and ground to "tenths" accuracy
- Includes case

BASE-PLATE AND TAIL-STOCK P/N 015-100

- 4" x 11" with rail
- 6" capacity between centers
- 18" base-plate also available
- · Hardened and ground tool steel

SINE-CHUCK P/N 105-100

- 6" x 6" with 2 rails
- Permanent magnet
- Single angle (5" sine)

SINE-PLATE P/N 055-100

- 4" x 6" with 2 rails
- Single angle (5" sine)
- 0.200 minute angle step
- Hardened and ground tool steel

ULTRA-GRIND MOTOR ATTACHMENT P/N 210-70

- Includes motor, bracket, and drive belt
- Mounts to side of unit
- Variable speed from 50-550 rpm
- 1/15 horsepower 110v AC motor

3-JAW CHUCK P/N 120-60

• 1 3/8" maximum opening with straight jaws











- 3 3/8" maximum opening with step jaws
- 3/4" thru hole
- With 5C adapter shank

RECTANGLE-JAWS P/N 075-100

- For holding rectangular parts from 0.070 to capacity of v-block
- Hardened and ground to "tenths" accuracy
- Includes case

FACE PLATE P/N 10-50

- 5" diameter
- Soft face
- With 5C adapter shank

STEADY-REST P/N 135-100

- Assists in grinding very small diameters
- Magnetic base
- Spring loaded plunger

RADIUS DRESSER ARM P/N 10-52

- For dressing wheels up to 10" diameter
- OD diamond nib (P/N 91002)
- ID diamond nib (P/N 91003)

MAGNETIC CHUCK P/N 120-70

- 4 3/4" diameter, 2 1/4" thick
- Standard pole permanent magnet
- With 5C adapter shank

HITE-ANGLE PLATE P/N 085-100

- 9 1/2" x 5" x 4" wide
- Allows for horizontal use of Harig fixtures
- Includes side rail and mounting holes
- Hardened and ground tool steel

















Lectric-Centers (P/N 025-100)

Specs

Obtainable run-out 0.00005 TIR

Grinding between centers up to 7" Center height 3.000"

Swing 6"

Motor 115V, 60C Speeds 180 & 360 rpm

Weight 20 lbs



Accessories for the Lectric-Centers

SINE-PLATE P/N 055-100

- 4" x 6" with 2 rails
- Single angle (5" sine)
- 0.200 minute angle step
- Hardened and ground tool steel

SINE-CHUCK P/N 105-100

- 6" x 6" with 2 rails
- Permanent magnet
- Single angle (5" sine)

18" BASE PLATE P/N 15-30

DIAMOND NIB P/N 91005

CARBIDE HEAD STOCK CENTER P/N 25-40

CARBIDE TAIL STOCK CENTER P/N 25-41









NEW! BUR-BEAVER (P/N 265-100)



Harig has acquired Simco's BUR-BEAVER tabletop deburring Model BB-920 and is reintroducing it to the marketplace. The industry standard, still made in the U.S.A., deburrs and cuts perfect 45 degree bevels on the outside edges of flat and square bar stock and rounds. Harig is committed to improving the Simco line of high performance deburring, chamfering, and beveling machines, and proud to have the Bur-Beaver as part of our line of "world class tools".

NEW! KOOL-GRIND SYSTEM



Harig's patented Kool-Grind System revolutionizes dry grinding by maintaining cool workpiece temperatures as you grind. An internally cooled Plate and/or Chuck paired with the self-contained Chiller enables the Kool-Grind System to keep your workpieces cool. Heat generated in the workpiece during the machining process is absorbed by the Plate or Chuck instantly, without messy external coolant or mist systems. The Kool-Grind System prevents parts from warping due to temperature fluctuations, and eliminates down time caused by waiting for pieces to cool. Without the fear of warping, you can leave less grinding stock on your workpiece, achieve closer tolerances, and reduce grinding wheel breakdown. When dry-grinding, Harig's Kool-Grind System improves your

accuracy, increases production rates, and adds repeatability by cooling workpieces without external coolants. Full repair service and replacement parts available. Reliability backed by Harig's trademark service.

System Components



ROTO-SPINDLE (P/N 170-100, model E-5) (P/N 175-100, model E-20)

Specs

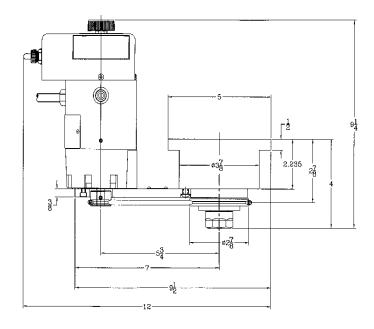
Spindle run-out 0.0001"

Motor 1/15 horsepower 110V AC

Variable speed 10-260 rpm

Weight 9 lbs

Flushport 1/8 -27 NPT





Accessories for the Roto-Spindle

COLLET SET OF 12 P/N 170-70

- For E-5 Roto-Spindle (PN 170-100)
- Range from 0/039 0.512
- Individual collets also available



E-20 COLLET CHUCK P/N 161-100

• Allows E-20 Roto-Spindle to accept collets



Model E-5 FLUSH-CHUCK (P/N 155-100)

Model E-20 FLUSH-CHUCK (P/N 160-100)





Accessories for the Bur-Beaver

OPTIONAL GUIDE P/N 265-50



permits deburring the O.D. of flat rounds

REPLACEMENT CUTTERS

p/n 92044 BB-35Q 27-Flute Cutter for fine finishes minimum depth chamfers on steel

p/n 92045 BB-35R Borazon Abrasive Wheel Deburrs stainless and hardened steel

p/n 92046 BB-35N 9-Flute Cutter deburrs and Chamfers aluminum, plastic, cast iron

p/n 92047 BB-35S Crosshatch Cutter for fine finish deburring of steel

p/n 92048 BB-35P 18-Flute Cutter for medium finish chamfers on steel to 1/8" (most popular)





Harig Manufacturing Corporation is a precision metalworking technology company.

Founded in 1937 as a state-of-the-art tool and die builder, today we are a leading fineblanking and stamping supplier with strong tool and die support.

Harig pioneered the use of carbide dies and EDM and was one of the first companies to embrace fineblanking in 1965.

Today, with a staff of dedicated and skilled employees operating in a well equipped 55,000 sq. ft. plant, we produce precision parts for the automotive, appliance, power tool, aerospace, and controls industries - plus many others.

The World of Fineblanking and Stamping Under One Roof

- Harig's "trademark service" means that we value our responsibility to the customer from die design to delivery of finished parts.
- Our commitment to "quality" is based on continuous improvement in every facet of our operations. Advanced planning and constant monitoring are integral parts of our quality standards. Let our Quality Control Department work with you in SPC and other disciplines.
- Quick quote turnaround time with competitive pricing allows you to make decisions in a timely manner.
- Fully supported CAD/CAM value engineering ensures optimum design and performance.
- We deliver finished parts "to print" by managing secondary and finishing operations including: forming, tapping, heat treating, deburring, plating, cleaning, assembly, etc.
- Just-in-time delivery is our specialty. We constantly monitor our customer's delivery schedules and are flexible enough to accommodate last minute changes in quantity or delivery date.
- In-house die making, EDM, and die maintenance eliminates down time and is integral to our high degree of reliability.
- Highly computerized operation for streamlined internal communication and reliable information exchange with customers.

Expertise

We are large enough to provide full stamping and fineblanking services, yet small enough to give your part the personal attention it deserves. Our experience with fineblanking and conventional stamping allows us to find the optimal solution to your production needs. We believe our business model achieves high efficiency - producing high quality components while controlling costs.

We serve customers in many industries including automotive, appliance, power tools, hand tools, controls, and more. Now with third generation leadership, our company is poised to meet the challenges of the new millennium. Let us know how we can meet your needs.

The Fineblanking Process

The fine blanking process call for unique triple action presses and special fineblanking tooling.

Conventional stamping produces parts with sheared surfaces that are only partially (1/3) cleanly sheared, while the remaining portion (2/3) shows a rough break. When functional demands are made on these sheared/break surfaces, often the piece parts must be re-worked by shaving, milling, reaming, broaching, or grinding to improve tolerances and surface finishes.

The fineblanking process produces precise finished components with cleanly sheared surfaces over the whole material thickness in a single operation. Therefore, great production cost savings are realized, and payback time for the initial fineblanking investment is short.

Before the material is actually fineblanked, it is firmly clamped so that it can flow only in the cutting direction. Outside of the component cutting line, the material is sandwiched by the die and the v-ring plate (stinger). Clearance between punch and die is normally calculated at 1% of the material thickness to be worked.

The specific accuracy that can be achieved by fineblanking is largely dependent on:

- accuracy of tool manufacturing and standard of maintenance
- material quality
- material thickness
- complexity of component shape

Tolerance range is usually within one thousandth of an inch.



FINEBLANKING

Fineblanking is a unique metal forming process founded on the technology of metal stamping. Special fineblanking presses and custom tooling produce parts that are too complex to make accurately by conventional stamping.

Fineblanking presses create precision parts with straight edges showing little or no diebreak, small holes relative to material thickness, thin web sections, and superior flatness. The fineblanking process eliminates costly secondary operations, incorporates coining, semipiercing, drawing, crimping, coutersinking, welding projections, extrusion, and bending, while utilizing the strength of rolled stock steel, aluminum, copper, brass, bronze, and other alloys.

Harig has been a leader in fineblanking since 1965. Our state-of-the-art-facility houses top-of-the-line presses with up to 250 ton capacity. Our experienced staff relies on their expert knowledge of the fineblanking process to keep your die operating efficiently throughout the run of the part.

A wide variety of industries are represented by our international customer base. We offer total service to our customers by accommodating their short-run fineblanking orders in addition to managing larger quantity fineblanking projects.

The quality of our products consistently outperforms the strict requirements of our customers. We understand that on-time delivery is essential, and we are flexible to our customer's changing quantity and delivery date needs. Our ability to produce 100% accurate fineblanked parts on time - every time - separates us from the competition.

The Harig Story

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