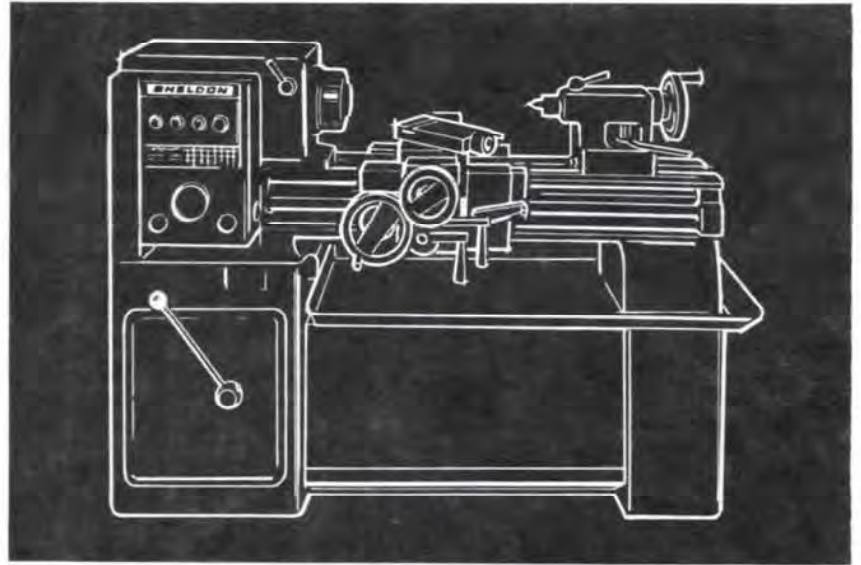


# SHELDON

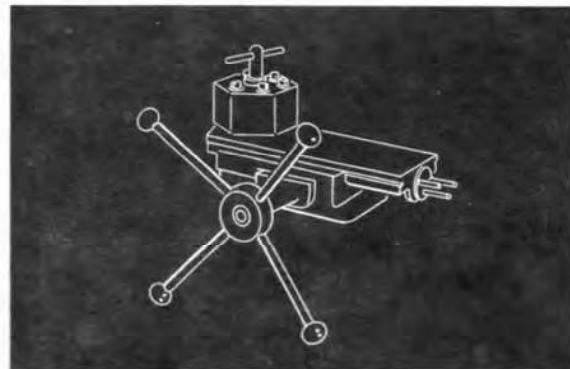
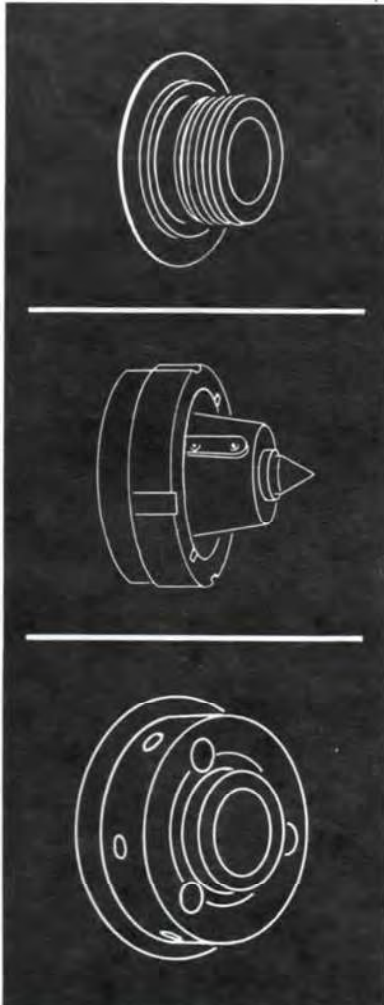


## LATHES

## OPTIONS

*and*

## ACCESSORIES



SHELDON MACHINE DIV.  
NATIONAL ACME CO.

P.O. BOX 949 • 2100 CEDAR STREET  
FREMONT, OHIO 43420  
TELEPHONE: (419) 334-8971  
FAX: (419) 334-7151

# SHELDON

An Acme - Cleveland Co.

## SHELDON MACHINE DIV. NATIONAL ACME CO.

P.O. BOX 949 • 2100 CEDAR STREET  
FREMONT, OHIO 43420 • PHONE: (419) 334-8971/Fax: (419) 334-7151

We at Sheldon Machine Company, value you as a customer and will do anything we can to offer you quick and competitive service and prices. We also wanted you to know that we can take care of your tooling needs for all lathes and mills other than Sheldon's. Listed below are just some of the many companies that we are distributors for. The next time you need tooling accessories for your machine, give us a call.

### ATTACHMENTS



**ROYAL**  
PRODUCTS

Royal  
Palmgren

### BAR & STOCK FEED

Powerhold

### CHUCKS (Manual & Power)

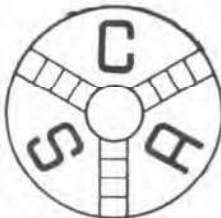
Buck  
Cushman  
Huron  
Hardinge  
Jacobs  
SCA  
Powerhold  
Rohm



**Jacobs**

### COLLET & COLLET ATTACHMENTS

Hardinge  
Royal  
Jacobs  
National Acme



### COOLANT PUMPS

Graymills



**HARDINGE**



**BUCK  
CHUCK  
COMPANY**

### INDEXERS & ROTARY TABLES

Mag Instruments  
Cushman



**Cushman  
Industries**

### LATHE CENTERS

Concentric  
Royal  
Palmgren  
Cleveland Twist Drill  
Collis

### TOOLS & TOOLING

Edward Andrews  
Aloris  
Cleveland Twist Drill  
Armstrong  
Williams  
Mag Instruments  
Concentric  
Rohm  
Collis



**CLEVELAND TWIST DRILL**

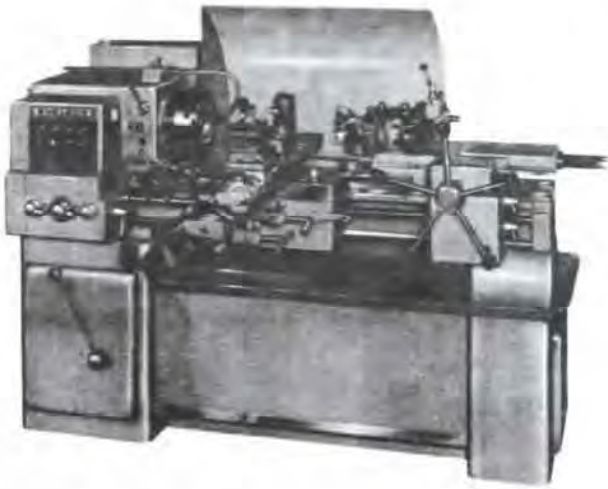
### TRACER ATTACHMENTS

True-Tracer



**CONCENTRIC**

# 3 R TURRET LATHE



### CONDENSED SPECIFICATIONS:

Rated Round Bar Capacity .....	1-1/2"
Hole through spindle .....	2"
Swing over Bedways .....	15-3/8"
Swing over cross slide .....	8"
Working travel of Turret .....	10"

### STANDARD EQUIPMENT

Standard equipment includes the following: 5 H.P. 2 speed motor, single voltage, either 208, or 230, or 460, or 550 volts, 50 - 60 cycle, with integral 4 speed geared transmission; magnetic plugging brake; Size 1 two speed magnetic reversing controls in Nema 12 enclosure with built-in door type fusible disconnect switch, external manual reset and control transformer providing 110 volts at oil tight push button stations; power on light; push light buttons for turret power feeds; electric tachometer; American Standard A1-6 spindle nose; 2" hole through spindle; flame hardened bed ways, hard chrome cross slide, dovetail ways, hardened cross feed screw, anti-backlash cross feed, compensating nut; six station self indexing bed turret with power feed box and automatic turret feed stops; T-slotted cross slide with rear tool block, dial gear box with built-in reverse lever to provide 80 power longitudinal feeds, 80 power cross feeds and 100 turret power feeds through feed rod, and 80 different thread pitches through precision lead screw; thread chasing dial; cross slide lock; carriage lock; large satin chrome cross feed dial with 6 station sequence clips; satin chrome micrometer dial on apron handwheel; automatic feed stops for power longitudinal and power cross feeds consisting of six position vertical turret stop for carriage feed and two dog-type stops for cross slide; one shot lubrication system for bed, carriage and cross slide ways, and cross feed nut; complete coolant system with 10 gallon tank mounted on casters, totally enclosed pump motor completely wired & fused through control transformer with on-off selector on headstock panel; chip & oil pan, front and rear splash guards, front kick pan, necessary wrenches, parts manual.

### ELECTRICAL SPECIFICATIONS AND OPTIONS

Sheldon 3 R turret lathes are built to National Machine Tool Builders Electrical standards, provide 110 volt oil tight pushbutton controls for operator protection, and oil tight Nema 12 enclosure with fusible disconnect for main line magnetic controls. Motor is single voltage, open drip proof type and is enclosed in the pedestal leg. Sheldon Machine Co. Inc. manufacturing standards apply to all electrical components.

VOLTAGE, specify motor voltage required

A-1629-3R, 3 phase, 60 cycle, 230 VOLTS

A-1630-3R, 3 phase, 60 cycle, 460 VOLTS

### SHELDON 3 R TURRET LATHE

3 R Turret Lathe, F.O.B. Factory, approximate shipping weight  
 Domestic Packed 4020 lbs. \$ \_\_\_\_\_

### EXTRA COST OPTIONS

#### TOTALLY ENCLOSED MOTORS

Totally enclosed fan cooled motors provide temperature rise to 55° Centigrade, and are for use in non explosive atmosphere where excessive moisture, or abnormal dirt or dust conditions are present.

A-1629TE-3R, 3 phase, 60 cycle, 236 VOLTS \$ \_\_\_\_\_

A-1630TE-3R, 3 phase, 60 cycle, 460 VOLTS \$ \_\_\_\_\_

#### COOLANT MOTOR

Coolant motor is 110 volt, 60 cycle, totally enclosed and is wired through the main control transformer with fused protection. A selector on the headstock panel controls "on-off" of the coolant system.

#### OPTIONAL VOLTAGES

There is no extra charge for 208, 240, 480, or 550 volt, 50 cycle motors although these must be wound as special motors, which must be considered as an additional factor in delivery.

### OTHER ELECTRICAL STANDARDS AND SPECIFICATIONS

Prices on electrical controls and components to meet other than our electrical standards and specifications will be quoted on request.

## TURRET LATHE TOOLING



### AIR COLLET CHUCK



For increased speed in both chucking and collet work, 8", 3 jaw chuck is equipped with two sets of jaws. One is a set of soft blank top jaws that can be machined for either internal or external chucking and the other is a set of special jaws machined to take #461 W & S collet pads. Air actuator allows the feeding of bar stock up to 1 1/2" capacity through spindle. Chucks jaws have direct closing action for extra accuracy, by eliminating errors caused by push or pull type collets.

Complete assembly includes 8", 3 jaw chuck, air actuator, draw tube, filter, regulator, air valve, machined #61 jaws, set of blank soft top jaws and chuck splash guard.

A-2265 8" 3 jaw Air Collet Chuck, weight 225 lbs. \$ \_\_\_\_\_

#### COLLET PADS

461-1003 Round, 1/8" to 1-1/2" by 64ths, each. . . . . \$ \_\_\_\_\_

461-1023 Square, 1/4" to 1-1/16" by 16ths, each. . . . . \$ \_\_\_\_\_

461-1024 Hex, 1/4" to 1-5/16" by 16ths, each. . . . . \$ \_\_\_\_\_

461S Serrated, Round, 7/16" to 1-1/2" by 16ths, each. . . . . \$ \_\_\_\_\_

461E Emergency, soft face for boring to size. . . . . \$ \_\_\_\_\_

#### CHUCK JAWS

#2155 - Soft Blank top jaws, set of 3, . . . . . \$ \_\_\_\_\_

#215R - Reversible Hard Stepped Top Jaws, minimum holding 1-1/2" . . . . . \$ \_\_\_\_\_



### LEVER OPERATED COLLET CHUCK (Sjogren)

Lever operated collet chuck is mounted on the spindle nose and can be operated without stopping the lathe spindle. Draw-in error limited to .010". Positive lock of the closing collar holds work firmly in position while in operation. Price of 3J Collet Chuck includes splash guard.

A-2246 3J Collet Chuck 1-3/4" capacity. . . . . \$ \_\_\_\_\_

3J round collets 1/8" to 1-3/4" by 16ths, each. . . . . \$ \_\_\_\_\_

3JS Square Collets 1/4" to 1-7/32" by 16ths, each. . . . . \$ \_\_\_\_\_

3JH Hex Collets 1/4" to 1-1/2" by 16ths each. . . . . \$ \_\_\_\_\_

3JE Emergency, soft face for boring to size. . . . . \$ \_\_\_\_\_



### AIR CHUCK ASSEMBLY

Aluminum body air chucks are a valuable time saver for repetitive, high production chucking operations. Complete assembly includes chuck, 6" air cylinder, draw bar, filter, regulator, air valve and chuck splash guard.

A-2244-A1-6 8" 3 jaw air chuck, weight 125 lbs. . . . . \$ \_\_\_\_\_

A-2268-A1-6 10" 3 jaw air chuck, weight 150 lbs. . . . . \$ \_\_\_\_\_

A-2232 Set of 3 soft blank top jaws for 8" chuck. . . . . \$ \_\_\_\_\_

A-2235J Set of 3 soft blank top jaws for 10" chuck. . . . . \$ \_\_\_\_\_



### 3 JAW AJUST-TRU CHUCKS

includes 3 Master and 3 Top Jaws

These are precision scroll operated chucks that can be adjusted to guarantee .0005" chucking of duplicate parts. The front section of the chuck holds the workpiece in the same manner as other conventional scroll operated chucks. Four adjusting screws in the rear section, however, permit moving of the complete chuck body to dead center. Parts can be extended through chuck center hole up to maximum spindle capacity.

83 A1-6 8" 3 jaw chuck, weight 57 lbs. . . . . \$ \_\_\_\_\_

103 A1-6 10" 3 jaw chuck, weight 83 lbs. . . . . \$ \_\_\_\_\_



### CHUCK GUARD

Chuck guard protects operator from coolant splash. It mounts to coolant overarm bracket and is hinged for ease in changing jaws or jaw settings. Inside diameter of guard is 1 1/2".

32129 Chuck Guard, weight 17 lbs. . . . . \$ \_\_\_\_\_



### 6 JAW AJUST-TRU CHUCKS

includes inside and outside jaws

Work can be centered easier and quicker with six opposing jaws.

Soft metals and tubes can be grip-

ped with less pressure, less distortion. Work is held firmer - permits precision machining farther from spindle. Lessens need for collets and handles work of odd or metric sizes. Parts can be extended through chuck center hole up to maximum spindle capacity.

86 A1-6 8" 6 jaw chuck, weight 61 lbs. . . . . \$ \_\_\_\_\_

106 A1-6 10" 6 jaw chuck, weight 86 lbs. . . . . \$ \_\_\_\_\_



### 4 JAW CHUCKS

The jaws are set independently for round or irregular work, either concentric or eccentric with lathe spindle. Parts can be extended through chuck center hole up to maximum spindle capacity.

84 A1-6 8" 4 jaw chuck, weight 46 lbs. . . . . \$ \_\_\_\_\_

104 A1-6 10" 4 jaw chuck, weight 65 lbs. . . . . \$ \_\_\_\_\_

## TURRET LATHE TOOLING



### FACE PLATES

Large face plates can be used for supporting and revolving flat stock or for mounting fixtures or locating blocks. Plates are drilled for direct mounting to A1-6 spindle and can be removed from spindle without disturbing fixtures or holding devices clamped to them.

50020-A1-6 Large face plate, 15" diam., weight 35 lbs. \$ \_\_\_\_\_



### FIXTURE PLATES

Fixture plates are drilled for direct mounting to the A1-6 lathe spindle and are used for mounting special fixtures and jig blocks. Plate has 12" O.D. and can be removed from spindle without disturbing workholding devices. Plates can also be used for adapt-

ing chucks. When used as a chuck adaptor plate, they should be ordered not drilled and tapped for spindle mounting, as these holes must be selected and drilled after the chuck bolt holes have been established.

80-04-A1-6; Fixture Plate, for Direct mounting to spindle \$ \_\_\_\_\_

80-04P Plain adaptor Plate . . . . . \$ \_\_\_\_\_



### SQUARE TURRET

The square turret mounts on the cross-slide and permits rapid, accurate indexing to any of four cutting positions. It is released indexed and clamped automatically with the movement of the binder handle. The turret is the flat seat type, ideal for use with carbide cutters where exact cutting angles on pre-ground cutters are easily maintained. Tool opening 5/8" x 1".

AA-2050 Square Turret, weight 30 lbs. . . . . \$ \_\_\_\_\_



### SQUARE TURRET, SCREW OPERATED

This 4-1/2" square turret mounts on the cross-slide and permits the use of four tools, each with three working positions. Turret is guaranteed to re-index within .0005" and features new o-ring seal to keep dust or fine chips out of indexing mechanism. Unscrewing lever at top releases turret for hand indexing in 30° increments. Maximum tool shank size 1".

AA-2051 Square Turret, weight 44 lbs. . . . . \$ \_\_\_\_\_

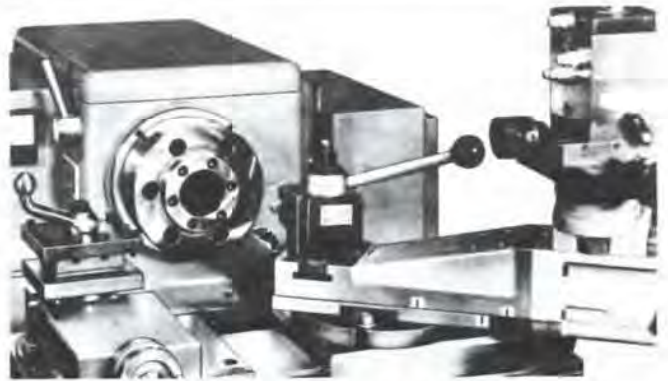


### THREADING ATTACHMENT

The angle threading attachment mounts on the cross-slide to adapt the turret lathe for single point threading. It mounts in a fixed 28° position, and has a slide travel of 3". Friction type feed dial is chrome plated and graduated in thousandths from 0 to 125. Tool post assembly is included.

No. 31600 Angle Threading attachment, wt. 27 lbs. . . . . \$ \_\_\_\_\_

No. 51 Threading tool, for above, wt. 1-1/2 lbs. . . . . \$ \_\_\_\_\_



### SINGLE AXIS TRACER

Heavy duty single axle tracer is mounted on rear of cross slide for increased versatility in contour turning and facing operations. Start and stop controls are front mounted for operator convenience. Tracer has a 4" tracing stroke and can trace up to a maximum 18" template in any one setting. Reservoir is 15 gallon capacity. Motor is 1/2 h.p. single phase for direct plug in to either 110 or 220 volt line.

AA-2082 Rear Mounted Tracer, weight 275 lbs. . . . . \$ \_\_\_\_\_

### TRACER ACCESSORIES

AAA-1956 Adjustable tool holder No. 1 with special machined base to fit tracer T slot compound, weight 15 lbs. . . . . \$ \_\_\_\_\_

AAA-1970 Turning and Facing Tool, weight 1 lbs. \$ \_\_\_\_\_

#3057-03 Round template holder, 3 lbs. . . . . \$ \_\_\_\_\_

AA-2080-3 Hydraulic oil, 3 five gallon containers . . \$ \_\_\_\_\_



### TELESCOPIC TAPER ATTACHMENT

A telescopic taper attachment with 12-1/4" maximum taper turning length capacity in any one setting. 5" maximum taper per foot, 12° maximum offset from the centerline.

No. 21655 Taper attachment, weight 120 lbs. . . . . \$ \_\_\_\_\_

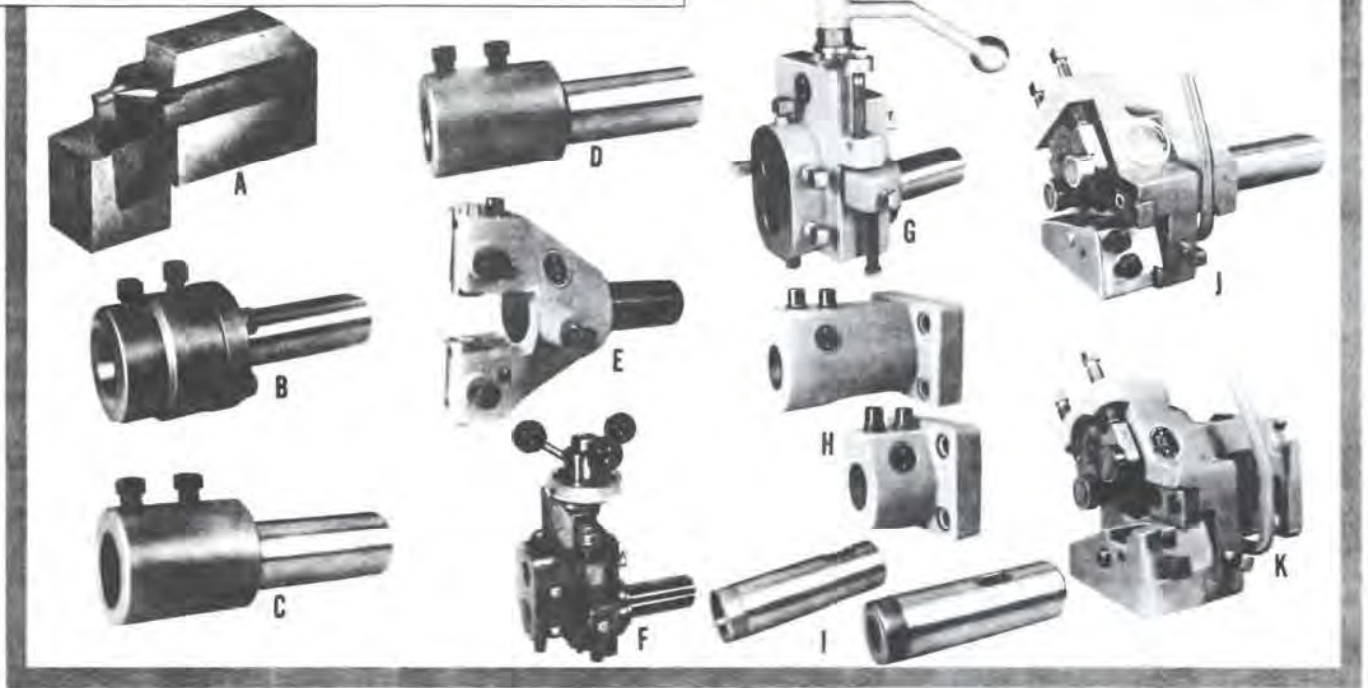


### AIR BAR FEED

Bar feed is designed to automatically feed by air pressure, round, square, or hex bar stock into lathe spindles to a fixed stop. It will handle all sizes and shapes of stock within its 1-3/4"x12" capacity without set-up change. Telescoping stands give height adjustment from 38-1/2" to 50" for easy spindle alignment. Attachment is supplied complete with regulator, gage, valve, piston and two adjustable stands.

AA-1955 Air Bar Feed, weight 250 lbs. . . . . \$ \_\_\_\_\_

# TURRET LATHE TOOLING



## A - CUT OFF & CHAMFER TOOL

Combination carbide cut off and chamfering tool increases production by permitting use of higher speeds and feeds. Tool can be used from the rear tool block or mounted in the square turret. The chamfering tool is adjustable so that the desired amount of chamfer can be obtained regardless of the diameter of the work piece. Tool is equipped with one cut off and one chamfer blade. Extra cutter bits are listed below.

No. 76-01 Cutoff and chamfer holder, weight 9 lbs. . . . . \$ \_\_\_\_\_  
 No. 76-01-1002 Cut off tool bit (extra supply, each) . . . . . \$ \_\_\_\_\_  
 No. 76-01-1003 Chamfering tool bit (extra supply, each) . . . . . \$ \_\_\_\_\_

## B - ADJUSTABLE TOOL HOLDER

The adjustable tool holder corrects for inaccuracies of counterbores, reamers and other tools that must be located exactly on center. The front section of the holder carries the cutting tool and can be moved up and down, or sideways for proper alignment with the center of the spindle. The holder is hardened and the 1-1/2" shank is ground to fit directly into the hex turret. The bushing hole also has a 1-1/2" diameter.

No. 24-03 Adjustable Tool Holder, weight 7 lbs. . . . . \$ \_\_\_\_\_

## C - PLAIN TOOL HOLDER

The plain tool holder acts as an extension holder for counter-bores, reamers, flat cutters and especially straight shank drills. It is used to bring these tools to the correct distance from the turret face in order to line up with other tools. In the case of drills, tool holder bushings can be placed as close to the point of the drill as rigidity requires since the tool holder shank is hollow allowing the drill to be moved in and out as required. Hollow shank has 1-1/2" diameter.

No. 26-03 Plain Tool Holder, weight 4 lbs. . . . . \$ \_\_\_\_\_

## D - FLOATING REAMER HOLDER

The body of the floating reamer holder fits loosely into the shank and is held together by a loose fitting pin. This loose fit allows the reamer to center itself, sizing the hole properly, and compensating for slight inaccuracies in either the tool or machine.

No. 28-04 Floating Reamer Holder, weight 5 lbs. . . . . \$ \_\_\_\_\_

## PLAIN STOCK STOP

No. 32124 Plain stock stop, weight 1 lb. . . . . \$ \_\_\_\_\_

## E - KNURLING TOOL

The knurling tool fits in the hex turret and permits knurling work from 1/4" to 1-1/2" in diameter up to a maximum length of 2-3/4". Knurl holders are quickly adjustable for diameter and can be set in three positions to produce three different patterns with one set of knurls. With the helix angle set at 0°, a straight knurl is produced; at 30° a diamond knurl, and at 45° a square knurl. Medium knurls are furnished unless fine or coarse knurls are specified.

No. 32-02 Knurling Tool, weight 10 lbs. . . . . \$ \_\_\_\_\_

## F - SCREW TYPE SLIDE TOOL

This slide tool eliminates set up time and provides a rigid, adjustable mounting for boring, recessing, grooving, facing, and back facing operations. The screw adjustment of the slide with its large easily read dial permits quick accurate tool positioning. The side dial is for setting the stop screws which limit the travel of the slide in such operations as back facing or recessing.

No. 36-02 Screw Type Slide Tool, weight 20 lbs. . . . . \$ \_\_\_\_\_

## G - QUICK ACTING SLIDE TOOL

This slide tool is similar to the screw type except that it features a quick acting handle for rapid movement of the slide. With one-quarter turn of the handle the slide moves 1/2" with a smooth, powerful action. Adjustable stops control the travel of the slide so that definite accurate depths can be maintained. This makes the tool ideal for fast recessing, grooving and facing cuts, as well as inside facing cuts where a smooth finish is required.

No. 38-01 Quick Acting Slide Tool, weight 20 lbs. . . . . \$ \_\_\_\_\_

## H - FLANGED TOOL HOLDERS

Flanged tool holders are bolted directly to the hexagon turret face and are centered by short pilots. They are used as extension tool holders for reamers, drills, boring bars and other shank type tools. Holders have a 1-1/2" bore which is ground to size. Two lengths are available to permit equal turret travel for all stations or necessary tool clearances.

No. 40-02 Long Flanged Holder, 6" lg, weight 12 lbs. . . . \$ \_\_\_\_\_  
 No. 41-03 Short Flanged Holder, 3-1/2" lg, weight 9 lbs. . . \$ \_\_\_\_\_

## I - TAPER DRILL SOCKETS

Taper drill sockets are used to adapt taper shank tools directly to tool holders or turret holes without sleeves or bushings. The outside diameter is 1-1/2" and is straight, while the inside taper bore can be furnished with either a #2, #3, or #4 M.T. Sockets are hardened and ground.

No. 66-042 Drill Socket, #2 M.T., weight 3 lbs. . . . . \$ \_\_\_\_\_  
 No. 66-043 Drill Socket, #3 M.T., weight 3 lbs. . . . . \$ \_\_\_\_\_  
 No. 66-044 Drill Socket, #4 M.T., weight 3 lbs. . . . . \$ \_\_\_\_\_

## J - K - BAR TURNERS

Bar turners mount on the hex turret and provide a rigid, accurate means for turning bar stock within their capacities. They are equipped with an adjustable cutter block for setting the cutter to size which reduces set-up time to a minimum. Adjustable anti-friction rolls support the work opposite the cut providing the rigidity needed on turning cuts which overhang the collet an unusual distance. The rolls can be moved ahead or behind the cutter. When set behind the cutter the rolls burnish the work to a high polish. When set ahead of the cutter and riding on a pre-finished diameter, the rolls help hold close concentricity between this diameter and the diameter being turned. The turners have a vertical lever which withdraws the cutter from the work to prevent marring on the return stroke.

The 52-02 has a 1" shank for use with turret bushings for mounting in turret holders or turret holes. It can handle bar stock from 1/8" to 3/4" in diameter for a maximum length of 2-3/4".

The 52-03 has the flange type mounting for bolting to the face of the turret. It handles bar stock from 1/2" to 1" in diameter. Much longer lengths can be turned since the stock can pass through both the Turner and the turret head.

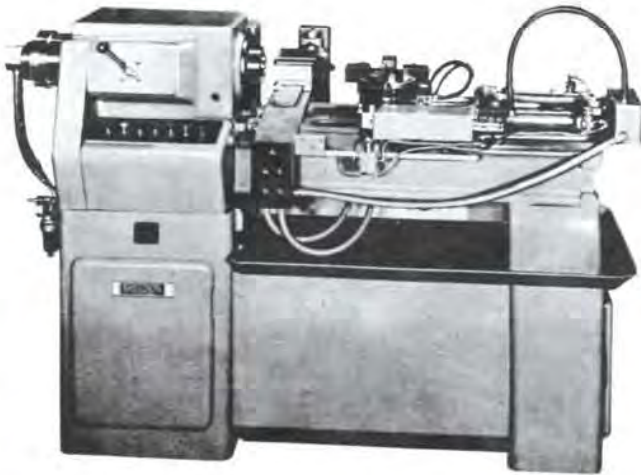
No. 52-02 Shank type Bar Turner, weight 20 lbs. . . . . \$ \_\_\_\_\_  
 No. 52-03 Flange type Bar Turner, weight 20 lbs. . . . . \$ \_\_\_\_\_

## OTHER USEFUL ACCESSORIES

Work light . . . . .	page 29
Drill Chucks . . . . .	page 23
3 Drawer Cabinet . . . . .	page 29
Tool Holders . . . . .	page 27

## CR CHUCKING MACHINE

## AR AUTOMATIC LATHE



CR Automatic Chucking Machine, weight 2750 lbs. . . . . \$ \_\_\_\_\_

### STANDARD EQUIPMENT

Chip pan.  
Micrometer depth stop.  
3 H.P. two-speed, 230 volt, 60 cycle, 3 phase motor, with necessary electrical switches, controls and wiring.  
Optional - 3 H.P. two-speed, 460 volt, 60 cycle, 3 phase motor. No extra charge.  
Rotating spindle air cylinder, slide air cylinder motors, air regulators, air lubricators, air filter and necessary air controls, air hoses, piping and fittings.  
Hydrocheck cylinder assemblies, slide lubricators and necessary controls and piping.  
Drum programmer with tube and buttons providing for tool entry, low-high speed change, activation of cross-slide, selective slide dwell holds and optional feeds.  
Slide cycle selector switch.  
Five standard tool blocks with 1" hole.  
Spindle air cylinder drawtube and spindle adaptor for 5C collets and 5C step collets.  
Three way valve for reversing chucking pressures.  
Necessary belts and wrenches.  
Five year guarantee certificate.



AR Automatic Lathe, weight 2650 lbs. . . . . \$ \_\_\_\_\_

### STANDARD EQUIPMENT

Chip pan.  
Micrometer depth stop.  
3 H.P. two-speed, 230 volt, 60 cycle, 3 phase motor, with necessary electrical switches, controls and wiring. Optional - 3 H.P. two-speed, 460 volt, 60 cycle, 3 phase motor. No extra charge.  
Rotating spindle air cylinder, slide air cylinder motors, air regulators, air lubricators, air filter, and necessary air controls, air hoses, piping and fittings.  
Hydrocheck cylinder assemblies, slide lubricators, controls and piping.  
Slide cycle selector switch.  
Slide dwell hold control.  
Spindle air cylinder draw tube and spindle adaptor for 5C collets and 5C step collets.  
Three way valve for reversing chucking pressure.  
Necessary wrenches.  
Operating instructions.  
Five year guarantee certificate.

### ELECTRICAL SPECIFICATIONS and OPTIONS for CR and AR

Sheldon CR automatic chucking machines and AR automatic lathes are built to National Machine Tool Builders Electrical standards and provide 110 volt oil tight pushbutton controls for operator protection, and oil tight Nema 12 enclosure with fusible disconnect for main line magnetic controls. Motor is single voltage, open drip proof type and is enclosed in the pedestal leg, Sheldon Machine Co. Inc. manufacturing standards apply to all electrical components.

VOLTAGE, specify motor voltage required

A-1633, 3 phase, 60 cycle, 230 VOLTS . . . . .

A-1640, 3 phase, 60 cycle, 460 VOLTS . . . . .

### EXTRA COST OPTIONS

#### TOTALLY ENCLOSED MOTORS

Totally enclosed fan cooled motors provide temperature rise to 55° Centigrade and are for use in nonexplosive atmosphere where excessive moisture, or abnormal dirt or dust conditions are present.

A-1633TE, 3 phase, 60 cycle, 230 VOLTS . . . . . \$ \_\_\_\_\_

A-1640TE, 3 phase, 60 cycle, 460 VOLTS . . . . . \$ \_\_\_\_\_

#### OPTIONAL VOLTAGES

There is no extra charge for 208, 240, 480 or 550 volt 50 cycle motors although these must be wound as special motors, which must be considered as an additional factor in delivery.

#### OTHER ELECTRICAL STANDARDS AND SPECIFICATIONS

Prices on electrical controls and components to meet other than our electrical standards and specifications will be quoted on request.

## ACCESSORIES FOR AR & CR



### AIR OPERATED CHUCKS

3 jaw universal air operated chucks with aluminum body. Chucks are complete with tongue and groove master jaws and completely fitted for D1-4" spindle, and includes draw bar.

- A-2229-D14 6" 3 jaw power chuck, weight 20 lbs. . . \$ \_\_\_\_\_
- A-2231-D14 8" 3 jaw power chuck, weight 35 lbs. . . \$ \_\_\_\_\_

### SOFT BLANK JAWS for POWER CHUCKS (Set of 3)

- A-2230 Set of 3 soft blank jaws for A-2229-D14 chuck \$ \_\_\_\_\_
- A-2232 Set of 3 soft blank jaws for A-2231-D14 chuck \$ \_\_\_\_\_

### EXPANDING ARBORS AND COLLETS

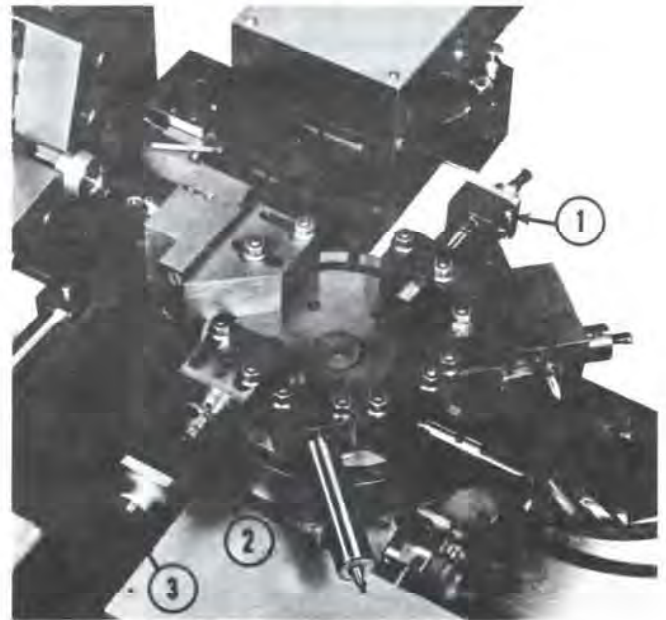
Air operated expanding arbors are complete with adaptor mounting plate for D1-4" spindles and are for use with expanding collets. Arbors and collets are priced separately to allow for correct choice of collet diameter.

#### ARBORS

- AC-2110 (.500-.592 range) . . . . . \$ \_\_\_\_\_
- AC-2210 (.593-.717 range) . . . . . \$ \_\_\_\_\_
- AC-2310 (.718-.874 range) . . . . . \$ \_\_\_\_\_
- AC-2410 (.875-1.124 range) . . . . . \$ \_\_\_\_\_
- AC-2510 (1.125-1.467 range) . . . . . \$ \_\_\_\_\_
- AC-2610 (1.468-1.936 range) . . . . . \$ \_\_\_\_\_
- AC-2710 (1.937-2.562 range) . . . . . \$ \_\_\_\_\_
- AC-2810 (2.563-3.311 range) . . . . . \$ \_\_\_\_\_
- AC-2910 (3.312-4.186 range) . . . . . \$ \_\_\_\_\_

#### COLLETS

- AC-101 to AC-106 (6 collets cover .500-.592 range) for AC-2110 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-201 to AC-208 (8 collets cover .593-.717 range) for AC-2210 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-301 to AC-310 (10 collets cover .718-.874 range) for AC-2310 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-401 to AC-408 (8 collets cover .875-1.124 range) for AC-2410 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-501 to AC-511 (11 collets cover 1.125-1.467 range) for AC-2510 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-601 to AC-615 (15 collets cover 1.468-1.936 range) for AC-2610 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-701 to AC-720 (20 collets cover 1.937-2.562 range) for AC-2710 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-801 to AC-824 (24 collets cover 2.563-3.311 range) for AC-2810 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_
- AC-901 to AC-928 (28 collets cover 3.312-4.186 range) for AC-2910 - (specify diameter required for proper collet) . . . . . \$ \_\_\_\_\_



### SLIDE TOOL (A)

Slide tool is used in conjunction with dwell hold controls of CR and AR for internal necking, grooving and facing operations. It can also be programmed for tool relief or for small tapers. Includes actuating block.

- 31610 Slide tool and actuating block, weight 35 lbs. . . \$ \_\_\_\_\_

### TOOLING FOR CR TURRET (ONLY)

Tool heads are 1-1/2" square and have micrometer adjustment. Equipped with 1" diameter shank, either plain type (Fig. 1) or micrometer type for length adjustment (Fig. 2).

- ① A2325 Plain shank type, for use with 1/2" dia. boring tools . . . . . \$ \_\_\_\_\_
- A2326 Plain shank type, for use with 3/8 sq. cutter bits . . . . . \$ \_\_\_\_\_
- ② 31501 Micrometer shank type, for use with 1/2" dia. boring tools . . . . . \$ \_\_\_\_\_
- 31502 Micrometer shank type, for use with 3/8" sq. cutter bits . . . . . \$ \_\_\_\_\_
- ③ A2329 1/2" dia. carbide boring cutter for 1/4 minimum hole, 15/32 maximum boring depth . . . . . \$ \_\_\_\_\_
- A2330 1/2" dia. carbide boring cutter for 1/2" minimum hole, 27/32 maximum boring depth . . \$ \_\_\_\_\_

See pg. 28 for 3/8" square carbide cutter bits.

### SPRAY MIST COOLANT SYSTEM

110 volt spray mist coolant system is wired through main control panel and turns on and off automatically with start and stop of spindle. Includes 2 jet sprays and magnetic holders.

- A2350 Spray Mist coolant, weight 30 lbs. . . . . \$ \_\_\_\_\_

### OTHER ACCESSORIES

- Collets (5C) . . . . . pg- 22
- Spindle nose accessories for D1-4 . . . . . pg- 19
- Cutter bits 3/8" sq. . . . . pg- 28
- Work lamp . . . . . pg- 29



## CM CHUCKING MACHINE

## HCM CHUCKING MACHINE



CM Chucking Machine, weight 1675 lbs., F.O.B. Factory \$ \_\_\_\_\_

**STANDARD EQUIPMENT INCLUDES:** 2 h.p., two speed open drip proof brake motor, 230 volts, 3 phase, 60 cycle; across the line drum control with high-low and forward, reverse, off control handles and brake on-off selector switch, ball bearing handle lever collet closer, D1-4" cam lock spindle nose, spindle splash guard, precision lead screw, quick change gear box providing 60 threads and feeds, .0002" TIR at spindle, 14 position stop rod with 1" travel dial indicator graduated in .001", four position micrometer longitudinal stop, four position cross feed stop, .0001" cross feed dial with .025" travel, one shot lubrication system for bed ways, and cross feed ways, six tool holders for turret, oiler, filter and regulator.

### EXTRA COST ELECTRICAL OPTIONS (CM)

#### MAGNETIC CONTROLS

Two speed magnetic controls are built to NMTBA standards and provide protection against overload, low voltage, stalled rotor or single phasing. Starter is size 1 and is housed in a Nema 12 oil tight enclosure with a built-in fusible disconnect switch. 50 VA control transformer gives safety of 110 volts to oil tight pushbutton stations. Pushbuttons provide forward high, forward low, reverse low and stop operation. Stop button is large palm type with mushroom head. Control panel also includes power on indicating light and brake on-off selector. Wiring is with flexible seal tight conduit with oil tight fittings. Price reflects allowance for reversing drum controllers. (Specify voltage required.)

CMA-1786-230, two speed magnetic control for 230  
voltage operation . . . . . \$ \_\_\_\_\_  
CMA-1786-460, two speed magnetic control for 460  
voltage operation . . . . . \$ \_\_\_\_\_



HCM Chucking Machine, weight 1725 lbs., F.O.B. Factory . . . . . \$ \_\_\_\_\_

**STANDARD EQUIPMENT INCLUDES:** 2 H.P. two-speed, 60 cycle, 3 phase brakemotor with two-speed magnetic reversing controls providing 110 volts at all pushbutton stations to NMTBA standards.  
Ball bearing hand lever operated, collet closer and draw tube for use with 5 C Collets.  
Infinitely variable power feeds to carriage through an independent DC motor drive providing from 0 to 8-3/4" per minute longitudinal carriage travel and from 0 to 8-1/4" per minute cross-slide travel.  
8 station air lock turret with 6 tool holders, consisting of 2 square machined single tool holders, 1 square machined double tool holder, 1 solid tool holder to be bored by user, 2 adjustable tool holders and 2 tool holder blocks.  
One shot lubrication system for cross-slide and bed ways.  
Rotating 4 position barrel type multiple cross-slide stop with dial indicator.  
4 position multiple longitudinal carriage stop with 1" travel dial indicator mounted on a carriage stop rod with 14 stations in 1/2" increments.  
Spindle nose splash guard.  
Electric tachometer.  
Front pedestal panel.  
Chip pan.  
Necessary belts and wrenches.  
Five year guarantee certificate.

### OPTIONAL VOLTAGES FOR CM AND HCM CHUCKING MACHINE

There is no extra charge for 208, 240, 480, or 550 volt 50 cycle motors although these must be wound as special motors, which must be considered as an additional factor in delivery. Magnetic controls No. CMA-1786-440 are required on the CM chucking machine for voltages greater than 230 volts.

### OTHER ELECTRICAL STANDARDS AND SPECIFICATIONS

Prices on electrical controls and components to meet other than our electrical standards and specifications will be quoted on request.

## CM & HCM ACCESSORIES



### AIR CYLINDER ASSEMBLY

For increased production in long runs when using expanding arbors and air collets, step collets, or short length work with 5C collets. Assembly includes 4" two-way air cylinder, drawtube, air valve and filter, lubricator and regulator. Price is for installation at factory in place of hand lever collet closer.

A 2266 Air Cylinder assembly, weight 60 lbs. \$ \_\_\_\_\_



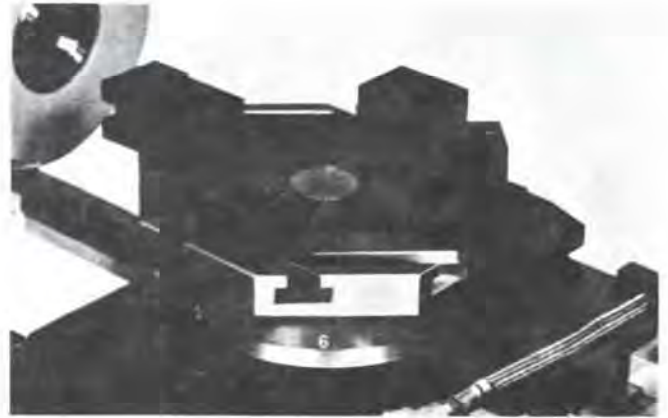
### AIR CHUCK

6" 3 jaw universal air operated chuck with aluminum body. Chuck is complete with tongue and groove master jaws and completely fitted for D1-4" spindle. Includes drawbar and is used with A-2266 air cylinder assembly.

A-2229-4"D1 Air Chuck, weight 20 lbs. \$ \_\_\_\_\_

### MISCELLANEOUS

Coolant .....	pg. 25
5C Collet .....	pg. 22
Collet Rack .....	pg. 22
Bar Feed .....	pg. 29
D1-4 Spindle .....	pg. 19
Internal Collets .....	pg. 22
Expanding Arbors and Collets .....	pg. 8



### TOOL BLOCKS



2702 A  
Tool Holder Block (holds 2702B  
or 2702C Tool Holders) ..... \$ \_\_\_\_\_



2702 B  
Adjustable Tool Holder (fits  
into 2702A) ..... \$ \_\_\_\_\_



2702 C  
Adjustable Tool Holder (fits  
into 2702A) ..... \$ \_\_\_\_\_



2704  
Square Machined Single  
Tool Holder ..... \$ \_\_\_\_\_

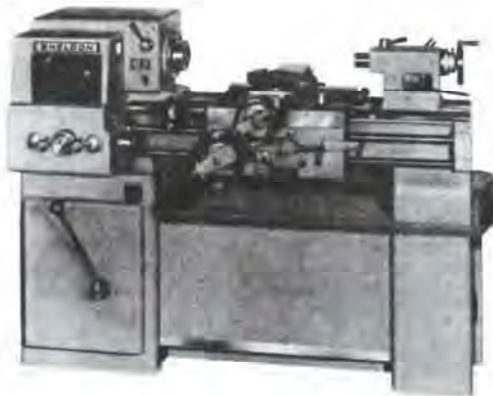


2705  
Solid Tool Holder (Must be  
bored by customer) ..... \$ \_\_\_\_\_



2706  
Square Machined Double Tool  
Holder ..... \$ \_\_\_\_\_

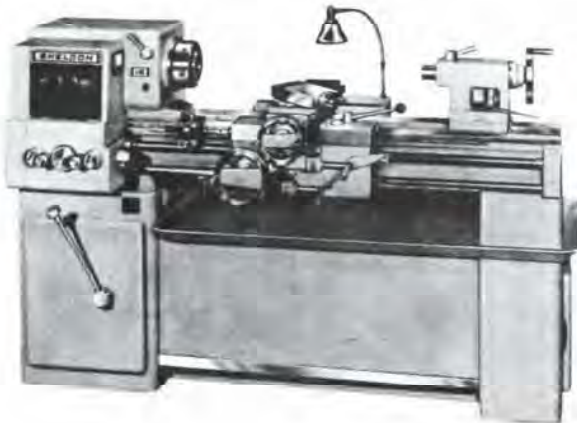
## R-13 LATHES



**STANDARD EQUIPMENT** included in the base price of the lathe. 3 h.p. single speed motor, 208/416, or 230/460, or 550 volts, 50-60 cycle with integral 4 speed geared transmission, size 1 combination magnetic reversing starter in Nema 12 enclosure with built-in door type fusible disconnect switch, external manual reset and control transformer providing 110 volts at oil tight push button stations; power on light; D1-4" camlock spindle nose with 1/2" through hole; electric tachometer; Sheldon Cross Slide with positionable compound; Sheldon Visual Group of satin-chrome micrometer dials for carriage stop, and tailstock, apron, compound and cross feed handwheels; Sheldon sustained accuracy group of flame hardened beds with all V-ways and flat ways hardened, hard chrome cross slide dovetails and ways, hardened cross feed and compound screws, anti-backlash compensating nut; cross slide lock; carriage lock; one-shot lubrication system for bed, carriage and cross slide ways, and cross feed nut; automatic feed stops for power longitudinal and power cross feeds; micrometer carriage stop; dial gear box with built-in reverse lever that provides 80 power longitudinal and power cross feeds from .0005" to .120" through feed rod and 80 different thread pitches through precision lead screw; chip pan; front kick pan; small dog plate; centers; center sleeve; tang drive in tailstock spindle; thread chasing dial; tool post assembly; leveling bolts; necessary wrenches; parts and operation manual.

<u>Lathe</u>	<u>CD</u>	<u>Weight</u>	
R-13x5'	30"	3320 lbs.	\$ _____
R-13x6'	42"	3470 lbs.	\$ _____
R-13x8'	66"	3700 lbs.	\$ _____

## R-15 LATHES



**STANDARD EQUIPMENT** included in the base price of the lathe: 5 h.p. single speed motor, 208/416, or 230/460, or 550 volts, 50-60 cycle with integral 4 speed geared transmission, size 1 combination magnetic reversing starter in Nema 12 enclosure with built-in door type fusible disconnect switch; external manual reset and control transformer providing 110 volts at oil tight push button stations; power on light; D1-6" camlock spindle nose with 2/4" through hole; electric tachometer; Sheldon Cross Slide with positionable compound; Sheldon Visual Group of satin-chrome micrometer dials for carriage stop and tailstock, apron, compound and cross feed handwheels; Sheldon sustained accuracy group of flame hardened beds with all V-ways and flat ways hardened, hard chrome cross slide dovetails and ways, hardened cross feed and compound screws, anti-backlash compensating nut; cross slide lock; carriage lock; one-shot lubrication system for bed, carriage and cross slide ways, and cross feed nut; automatic feed stops for power longitudinal and power cross feeds; micrometer carriage stop; dial gear box with built-in reverse lever that provides 80 power longitudinal and power cross feeds from .0005" to .120" through feed rod and 80 different thread pitches through precision lead screw; chip pan; front kick pan; two driving studs; centers; center sleeve; tang drive in tailstock spindle; thread chasing dial; tool post assembly; leveling bolts, necessary wrenches; parts and operation manual.

<u>Lathe</u>	<u>CD</u>	<u>Weight</u>	
R-15x5'	30"	3470 lbs.	\$ _____
R-15x6'	42"	3620 lbs.	\$ _____
R-15x8'	66"	3920 lbs.	\$ _____

## R-17 LATHES

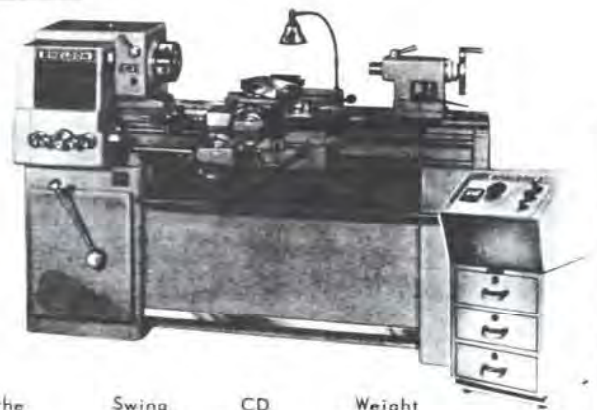
**STANDARD EQUIPMENT** included in the base price of the lathe: 5 h.p. single speed motor, 208/416, or 230/460, or 550 volts, 50-60 cycle with integral 4 speed geared transmission; Size 1 combination magnetic reversing starter in Nema 12 enclosure with built-in door type fusible disconnect switch, external manual reset and control transformer providing 110 volts at oil tight push button stations, power on light; D1-6" camlock spindle nose with 2 1/4" through hole; electric tachometer; Sheldon Cross Slide with positionable compound; Sheldon Visual Group of satin-chrome micrometer dials for carriage stop, and tailstock, apron, compound and cross feed handwheels. Sheldon sustained accuracy group of flame hardened beds with all V-ways and flat ways hardened, hard chrome cross slide dovetails and ways, hardened cross feed and compound screws, anti-backlash compensating nut; cross slide lock; carriage lock; one-shot lubrication system for bed, carriage and cross slide ways, and cross feed nut; automatic feed stops for power longitudinal and power cross feeds; micrometer carriage stop; dial gear box with built-in reverse lever that provides 80 power longitudinal and power cross feeds from .0005 to .120 through feed rod and 80 different thread pitches through precision lead screw; chip pan; front kick pan; two driving studs; centers; center sleeve; tang drive in tailstock spindle; thread chasing dial; tool post assembly; leveling bolts; necessary wrenches; parts and operation manual.



Lathe	CD	Weight	
R-17x5'	30"	3620 lbs.	\$ _____
R-17x6'	42"	3770 lbs.	\$ _____
R-17x8'	66"	4070 lbs.	\$ _____

## VR LATHES

These lathes have the same **STANDARD EQUIPMENT** as R13, R15 and R17 lathes with the exception of the spindle tolerance, motor drive and electrical controls. VR lathes are equipped with a 5 h.p., AC-DC motor with dynamic braking coupled to a 4 speed geared transmission. . . main line extra heavy duty solid state control with magnetic reversing for connecting to 220/440 volts 60 cycle current through main line fused disconnect . . . motor load indicator . . . headstock control panel with forward, reverse and stop push buttons and power on light . . . console unit with dual set of motor pushbuttons, electric tachometer, potentiometer dial and 3 drawers for tool storage . . . precision spindle with .0001" T.I.R.



Lathe	Swing	CD	Weight	
VR-13x5'	13"	30"	3950 lbs.	\$ _____
VR-13x6'	13"	42"	4100 lbs.	\$ _____
VR-15x5'	15"	30"	4100 lbs.	\$ _____
VR-15x6'	15"	42"	4250 lbs.	\$ _____
VR-17x5'	17"	30"	4250 lbs.	\$ _____
VR-17x6'	17"	42"	4400 lbs.	\$ _____

## ELECTRICAL SPECIFICATIONS AND OPTIONS 13", 15", 17" LATHES

Sheldon R-13, R-15 and R-17 lathes are built to National Machine Tool Builders Electrical Standards and provide 110 volts at all pushbuttons for operator protection, oil tight pushbuttons, and oil tight Nema 12 enclosure with fusible disconnect for main line magnetic controls. Motor is dual voltage, 220/440 volts, open drip proof type and is enclosed in the pedestal leg, Sheldon Machine Co. Inc. manufacturing standards apply to all electrical components.

Speed range, specify range desired

Standard range 45-1250 r.p.m.

Optional range 75-1800 r.p.m. (factory installed only)

Voltage, specify motor voltage required

220 volts, 3 phase, 60 cycle

440 volts, 3 phase, 60 cycle

### EXTRA COST OPTIONS

#### MAGNETIC BRAKES

Brakes are a valuable time saver for quick stopping of the spindle. They are magnetic plugging type for stopping frequency up to three times per minute and are totally enclosed.

AA-1820 R-13, 15, 17  \$ \_\_\_\_\_

#### TOTALLY ENCLOSED MOTORS

AA-1600 TE, 3 h.p. for R-13 lathes  \$ \_\_\_\_\_

AA-1601 TE, 5 h.p. for R-15 and R-17 lathes  \$ \_\_\_\_\_

#### TWO SPEED MOTORS and CONTROLS

Standard two speed motor and control (Select control and appropriate motor). Pushbuttons provide for Forward High, Forward Low, Reverse Low and Stop Operation.

#### SPINDLE SPEEDS—16—22 to 1250 R.P.M.

##### DIRECT DRIVE

High Range	1250	940	630	300
Low Range	625	470	320	150

##### BACK GEARS

High Range	200	160	120	45
Low Range	100	80	60	22

A-1783, Two speed magnetic control for R-13 lathe  \$ \_\_\_\_\_

A-1621, 3 h.p., two speed motor, 220 volts, R-13 lathes  \$ \_\_\_\_\_

A-1622, 3 h.p., two speed motor, 440 volts, R-13 lathes  \$ \_\_\_\_\_

A-1785, Two speed magnetic control R-15 and R-17 lathes  \$ \_\_\_\_\_

A-1629, 5 h.p., two speed motor, 220 volts, R-15, R-17 lathes  \$ \_\_\_\_\_

A-1630, 5 h.p., two speed motor, 440 volts, R-15, R-17 lathes  \$ \_\_\_\_\_

#### TWO SPEED TOTALLY ENCLOSED MOTORS AND CONTROLS

A-1783, Two speed magnetic control for R-13, R-15 and R-17 lathes  \$ \_\_\_\_\_

A-1621TE, 3 h.p., two speed TOTALLY ENCLOSED motor, 220 VOLTS, R-13  \$ \_\_\_\_\_

A-1622TE, 3 h.p., two speed TOTALLY ENCLOSED motor, 440 VOLTS, R-13  \$ \_\_\_\_\_

A-1785 Two speed magnetic control for R-15 and R-17 lathes  \$ \_\_\_\_\_

A-1629TE, 5 h.p., two speed TOTALLY ENCLOSED motor, 220 VOLTS, R-15 and R-17 lathes  \$ \_\_\_\_\_

A-1630TE, 5 h.p., two speed TOTALLY ENCLOSED motor, 440 VOLTS, R-15 and R-17 lathes  \$ \_\_\_\_\_

#### APRON CONTROL

An apron control replaces headstock pushbutton stations to provide a convenient means of controlling the motor from a traveling handle on the side of the apron. It has three positions for selecting forward, reverse and stop operation of the motor. The apron control for use with two speed motors utilizes a selector switch on the headstock for selecting the "high" or "low" motor speed range. Factory installed only.

51700 Apron control for single speed motors for R-13, R-15 and R-17 lathes  \$ \_\_\_\_\_

51701 Apron control for two speed motors for R-13, R-15 and R-17 lathes  \$ \_\_\_\_\_

#### OPTIONAL VOLTAGES

There is no extra charge for 208, 240, 480, or 550 volt, 50 cycle motors although these must be wound as special motors, which must be considered as an additional factor in delivery.

#### OTHER ELECTRICAL STANDARDS and SPECIFICATIONS

Prices on electrical controls and components to meet other than our electrical standards and specifications will be quoted on request.

## VR ELECTRICAL SPECIFICATIONS

VR-13, VR-15 and VR-17 lathes incorporate a 5 h.p. AC to DC motor generator to provide infinite speed selection from 0-2500 r.p.m. AC motor is dual voltage 220/440 volts, 3 phase, 60 cycle. Eight torque ranges are provided for maximum efficiency and power at all speeds. Motor has dynamic braking feature.

Motors and controls are to manufacture specifications, and where companies specify certain electrical standards for machine tools, waivers for this type of control are normally allowed.

## ACCESSORIES FOR R & VR 13", 15", 17" LATHES



### FOLLOWER RESTS

The follower rest is attached to and moves with the lathe carriage to support long, flexible, and slender shafts for increased accuracy. The telescopic type with bronze tipped jaws with 3/8" to 4" capacity.

Stock No.	Lathes	Weight	Price
41614	R13-VR13	13 lbs.	\$ _____
51614	R15-VR15	14 lbs.	\$ _____
61614	R17-VR17	18 lbs.	\$ _____



### STEADY REST

The steady rest is for supporting long bars or tubing and can be mounted any place on the bed ways. The telescopic type with bronze tipped jaws. Have hinged tops to facilitate quick insertion and removal of stock.

Stock No.	Capacity	Lathes	Weight	Price
11602	3/8" to 4"	R13-VR13	17 lbs.	\$ _____
11950	4" to 8"	R13-VR13	33 lbs.	\$ _____
AS-21600	3/8" to 4"	R15-VR15	17 lbs.	\$ _____
AS-21950	4" to 8"	R15-VR15	37 lbs.	\$ _____
61600	3/8" to 4"	R17-VR17	30 lbs.	\$ _____
61610	4" to 8"	R17-VR17	41 lbs.	\$ _____



### TELESCOPIC TAPER ATTACHMENT

Taper attachments are an important accessory for turning and boring long tapers or where repetitive taper operations are necessary. Accurate performance is obtained through simplicity of design and sturdy construction. The attachment has tapered gibs for easy adjustment and long life. The swivel bar is graduated in inches per foot on one end and in degrees on the other end. Maximum capacity is 5" per foot or 12 degrees in a total of 12 1/4" per setting.

21650 Taper attachment, R13 & R15, weight 110 lbs. \$ \_\_\_\_\_  
 61650 Taper attachment, R17, weight 115 lbs. . . . . \$ \_\_\_\_\_



### BED TURRETS

These are six station, handwheel operated bed turrets designed to increase the versatility of your lathe for short-run production operations. They are quickly mounted or easily removed from the lathe. The turret head automatically indexes one station with each complete back movement of the wheel. Length of tool operations is regulated by adjustable stops for each turret station. Turret has adjustable gibs for long life accuracy. When ordered with the lathe at the factory, turret is fitted to lathe bed and bored in line with lathe spindle for 1" shank tools. 1 1/4" available on request at no extra charge. Maximum turret stroke 6 1/2".

A-2152	Bed Turret	R-13 & VR13	175 lbs.	\$ _____
A-2153	Bed Turret	R-15 & VR15	180 lbs.	\$ _____

### TRAY-A-DIAL

The trav-a-dial provides an easy to read, and accurate measurement of the linear travel of the carriage. Dial is mounted to the carriage wings and records by contact to the bed surface. Each revolution of the gauge is 6" of travel. Indicator dial is graduated in thousandths and reads accurately within .001" in 6" of travel. Permits accurate turning of shoulders and grooves and assists in exact sizing against fixed stops.



31050 Trav-a-dial, weight 10 lbs., complete  
 with mounting bracket . . . . . \$ \_\_\_\_\_



### COOLANT SYSTEM

Coolant system is built to meet NMTBA standards, has a 10 gallon tank, mounted on casters, 1/8 h.p., totally enclosed, 110 volt motor one phase that is integrally wired and fused through main control transformer. Wiring is with flexible, seal tight, conduit with oil-tight fittings. On-off operation is through oil-tight selector on headstock control panel.

A-2351 Coolant system, weight 50 lbs. . . . . \$ \_\_\_\_\_

### OTHER ACCESSORIES

Tool Post Turrets . . . . .	pg. 26
D1-4" Spindle Accessories . . . . .	pg. 19
D1-6" Spindle Accessories . . . . .	pg. 20
Collets . . . . .	pg. 22
Centers . . . . .	pg. 23
Tool Holders . . . . .	pg. 27
Lathe Lamps . . . . .	pg. 29
Special Painting . . . . .	pg. 25
Bar Feeds . . . . .	pg. 29

## CROSS SLIDE ACCESSORIES FOR R & VR 13", 15", 17" LATHES



### COMPOUND ASSEMBLY

Permits adding of a rear tool station with angular feeds that can be swiveled as desired for threading or taper turning. Consists of swivel base and compound.

- 41013A Compound assembly for R-13 and VR-13 lathes \$ \_\_\_\_\_
- 31013A Compound assembly for R-15 and VR-15 lathes \$ \_\_\_\_\_
- 61013A Compound assembly for R-17 and VR-17 lathes \$ \_\_\_\_\_

### SWIVEL BASE



Swivel base clamps to cross slide and is for adaptation of your own special tooling. Swivel base is supplied as standard equipment with rear mounted tracers or when ordering the complete compound assembly.

- 41011A Swivel base for R and VR-13 lathes ..... \$ \_\_\_\_\_
- 31011A Swivel base for R and VR-15 lathes ..... \$ \_\_\_\_\_
- 61011A Swivel base for R-17 and VR-17 lathes ..... \$ \_\_\_\_\_

### REAR T-SLOT BASE WITH TOOL BLOCK



For rear mounted tooling T slot base has two T slots for easy positioning of tooling and is equipped with a two station tool block. Tool Block takes 1" shank tool and has tapered wedges for accurate centering of tools.

- 41030 Rear tool base with tool block for R-13 and VR-13 lathes ..... \$ \_\_\_\_\_
- 31030 Rear mounted tool station for R-15 and VR-15 lathes ..... \$ \_\_\_\_\_
- 61030 Rear mounted tool station for R-17 and VR-17 lathes ..... \$ \_\_\_\_\_



### FIXTURE BASE

Flat precision ground fixture base is for mounting special tools such as pre-set tool blocks, radius turning attachments, milling and grinding attachments, pre-set gauges and instruments. It is used for workholding when machining from the spindle particularly to take advantage of the ultra-fine feed rates available for precision boring operations.

- For R and VR 13 Lathes
- 41029 Base 8-5/8" x 6-5/8" with 3.307 center height \$ \_\_\_\_\_
- 41038 Base 12" x 7-1/16" with 3.248 center height \$ \_\_\_\_\_
- For R and VR 15 Lathes
- 31029 Base 9-3/4" x 7-3/4" with 3.767 center height \$ \_\_\_\_\_
- 31038 Base 12-1/4" x 8-1/8" with 3.251 center ht. \$ \_\_\_\_\_
- For R and VR 17 Lathes
- 31029 Base 9-3/4" x 7-3/4" with 4.767 center height \$ \_\_\_\_\_
- 31038 Base 12-1/4" x 8-1/8" with 4.251 center ht. \$ \_\_\_\_\_



### 8 STATION TURRET

Eight station turret permits multiple station chucking and turning operations. Since it can be positioned as desired on the cross slide, it can handle larger parts than conventional hand chucking machines as well as being used in conjunction with the lathe compound or other tooling stations. Turret is locked by air and has indexing accuracy of 50 millionths. Complete assembly includes turret, mounting base, tool holders as illustrated for 3/8" square cutter bits, and air filter, lubricator and regulator.

- 41031 8 station turret assembly for R-13 and VR-13 lathes ..... \$ \_\_\_\_\_
- 31031 8 station turret assembly for R and VR-15 lathes ..... \$ \_\_\_\_\_
- 61031 8 station turret assembly for R and VR-17 lathes ..... \$ \_\_\_\_\_

### GAUGES FOR USE WITH 8 STATION TURRET



Cross slide indicator assembly includes a 4 station rotating barrel stop and a .025" travel dial indicator graduated in "tenths."

- 41032 for R13... \$ \_\_\_\_\_
- 51032 for R15 & R17 \$ \_\_\_\_\_

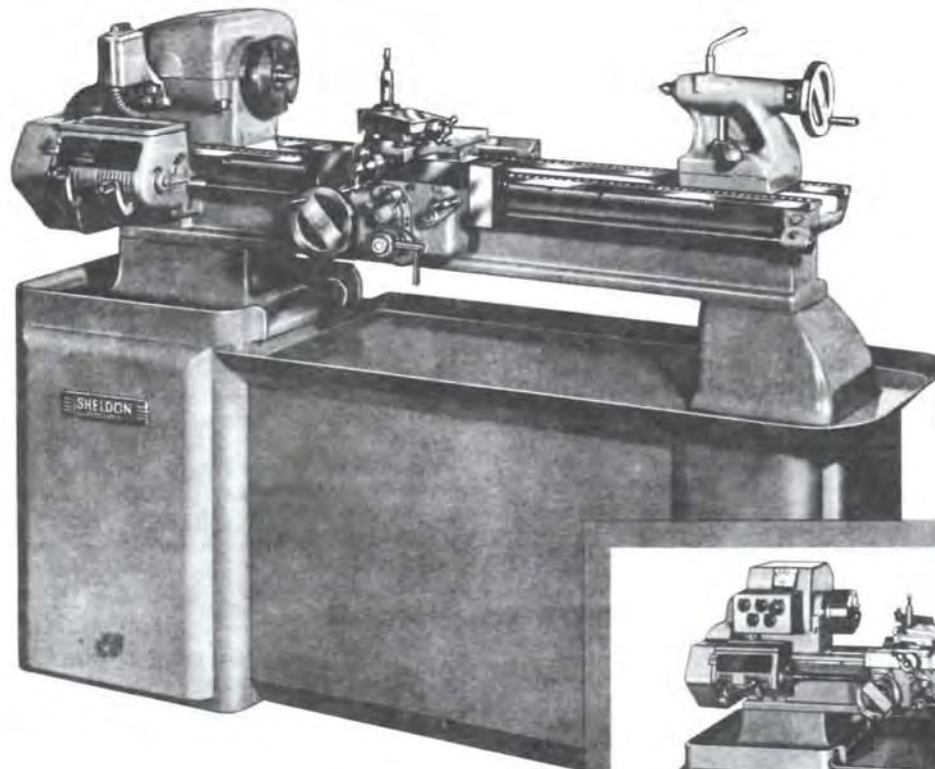
### TOOL HOLDER BLOCKS FOR 8 STATION TURRET

- 2702 A Adjustable tool holder block for holding 2702B and 2702C extension tool holders ..... \$ \_\_\_\_\_
- 2702 B 1" square extension tool holder for use with 2702A ..... \$ \_\_\_\_\_
- 2702 C 2" combination extension tool holder for use with 2702 A ..... \$ \_\_\_\_\_
- 2704 Square machined single tool holder ..... \$ \_\_\_\_\_
- 2706 Square machined double tool holder ..... \$ \_\_\_\_\_
- 2705 Solid tool holder block to be bored by user ... \$ \_\_\_\_\_

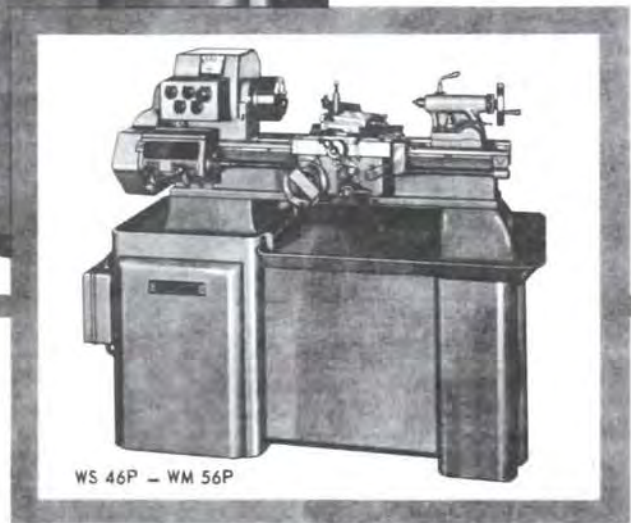
### HYDRAULIC TRACERS

See page 30 for complete information on tracers and tracer tool holders.

**SHELDON 10" S SERIES LATHES**

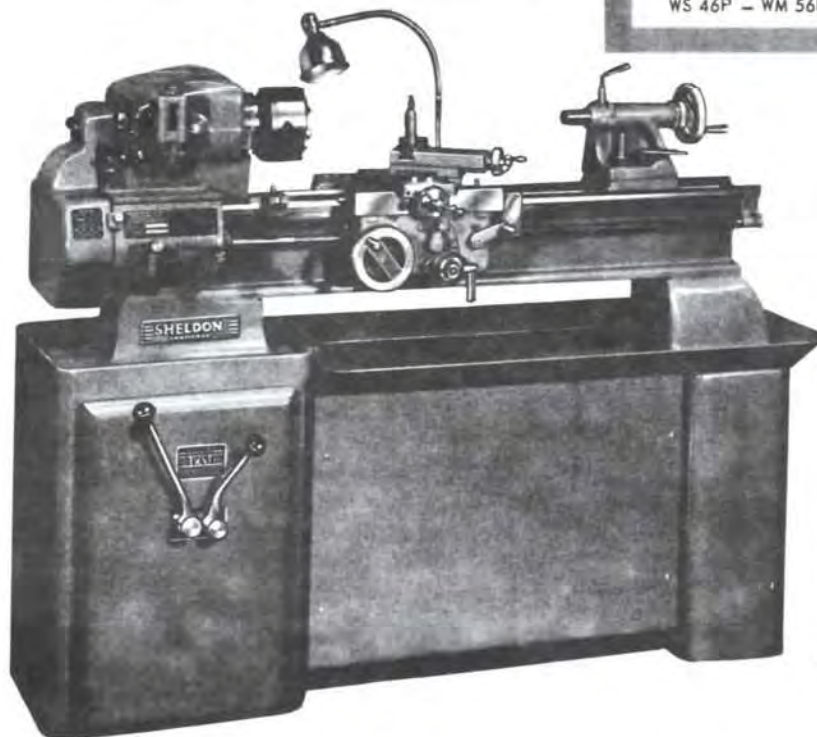


ES 56P - EM 56P



WS 46P - WM 56P

**SHELDON 13" M SERIES LATHES**



US 56P - UM 56P



## SHELDON 10" S Series Lathes

### Condensed Specifications:

Swing over Bed	11-1/4"
Hole through Spindle	1-3/8"
Collet Capacity 5 C	1-1/16"

### Speed range

E drive 8 speeds	50-1355 r.p.m.
U drive 8 speeds	50-1200 r.p.m.
W drive variable	40-2000 r.p.m.

Lathe No.	Center Distance	Weight	
ES 46 P	22"	1465 lbs.	\$ _____
US 46 P	22"	1565 lbs.	\$ _____
WS 46 P	22"	1570 lbs.	\$ _____
ES 56 P	33"	1490 lbs.	\$ _____
US 56 P	33"	1540 lbs.	\$ _____
WS 56 P	33"	1640 lbs.	\$ _____
ES 70 P	47"	1540 lbs.	\$ _____
US 70 P	47"	1590 lbs.	\$ _____
US 70 P	47"	1740 lbs.	\$ _____

Standard equipment includes; (with drive desired); 2 h.p., 220 volt, 3 phase, 60 cycle open, drip proof motor; across the line reversing drum controller; necessary wrenches; 5-3 M.T. center sleeve; two No. 3 M.T. centers; small dog plate; tool post assembly; thread chasing dial; chip pan; front kick pan; leveling bolts; precision lead screw; parts manual and manual "Care and Operation of a Lathe." Note: Optional at no extra charge when ordered from the factory is choice of spindle types: threaded 2-1/4" x 8 t.p.i.; tapered key drive LOO; or cam lock D1-4". Specify spindle nose type:

- M-1588-1 threaded spindle with LTKT-182 dog plate
- M-1835-1 Tapered Key Drive size LOO with L-1799 dog plate
- M-1830-1 Cam lock size D1-4" with M-1833 dog plate

## SHELDON 13" M Series Lathes

### Condensed Specifications:

Swing over Bed	13-1/8"
Hole through Spindle	1-3/8"
Collet Capacity 5C	1-1/16"

### Speed Range

E drive 8 speeds	50-1355 r.p.m.
U drive 8 speeds	50-1200 r.p.m.
W drive variable	40-2000 r.p.m.

Lathe No.	Center Distance	Weight	
EM 46 P	22"	1475 lbs.	\$ _____
UM 46 P	22"	1575 lbs.	\$ _____
WM 46 P	22"	1580 lbs.	\$ _____
EM 56 P	33"	1500 lbs.	\$ _____
UM 56 P	33"	1550 lbs.	\$ _____
WM 56 P	33"	1650 lbs.	\$ _____
EM 70 P	47"	1550 lbs.	\$ _____
UM 70 P	47"	1600 lbs.	\$ _____
WM 70 P	47"	1750 lbs.	\$ _____

Standard equipment includes; (with drive desired); 2 h.p., 220 volt, 3 phase, 60 cycle open, drip proof motor; across the line reversing drum controller; necessary wrenches; 5-3 M.T. center sleeve; two No. 3 M.T. centers; small dog plate; tool post assembly; thread chasing dial; chip pan; front kick pan; leveling bolts; precision lead screw; parts manual and manual "Care and Operation of a Lathe." Note: Optional at no extra charge when ordered from the factory is choice of spindle types: threaded 2-1/4" x 8 t.p.i.; tapered key drive LOO; or cam lock D1-4".

Specify spindle nose type:

- M-1588-1 threaded spindle with LTKT-182 dog plate
- M-1835-1 Tapered Key Drive, size LOO with L-1799 dog plate
- M-1830-1 Cam lock size D1-4" with M-1833 dog plate

## OPTIONAL MOTORS & CONTROLS

### OPTIONAL (EXTRA COST) MOTORS AND CONTROLS FOR XL, S, AND M LATHES

#### MAGNETIC CONTROLS

Magnetic controls protect against overload, low voltage, stalled rotor or single phasing. Specifications of this control include a size O magnetic reversing starter in a Nema 1 enclosure with a 50 VA control transformer to provide 110 volts to operator push-button stations. Pushbutton stations provide forward, reverse and stop operation.

A-1712 Magnetic Control for 220 or 440 volts weight 15 lbs. \$ \_\_\_\_\_

A-1721 Two speed magnetic control, same as above, but with two speed reversing starter providing forward high, forward low, reverse low and stop operation. For either 220 or 440 volt operation. (Specify voltage required) weight 25 lbs. \$ \_\_\_\_\_

#### National Machine Tool Builders Controls

NMTBA magnetic control specifications provide protection against overload, low voltage, stalled rotor or single phasing but have additional features for safety and long service life. Magnetic reversing starter is size 1 and is housed in a Nema 12 oil tight enclosure with a built in 30 amp. fusible disconnect switch, 50 VA control transformer gives safety of 110 volts to oil tight, forward, reverse and stop pushbutton stations, which include "power-on" light.

Stop button is large palm type with mushroom head. Wiring is with flexible, seal tight conduit with oil tight fittings.

A-1782 Control to NMTBA Standards for 220 or 440 volts weight 35 lbs. \$ \_\_\_\_\_

A-1783 Two speed magnetic control, same as above, but with two speed reversing starter providing forward high, forward low, reverse low, and stop operation. For either 220 or 440 volt operation. (Specify voltage required). weight 50 lbs. \$ \_\_\_\_\_

#### TWO SPEED MOTORS

General purpose two speed motors are open drip proof type, single winding, 3 phase 60 cycle, 1800/900 r.p.m., instant reversing, ball bearing type. For use with two speed magnetic controls listed above.

H-8322 2 h.p., 2 speed, 220 volt, weight 145 lbs. . . \$ \_\_\_\_\_

H-8332 2 h.p., 2 speed, 440 volt, weight 145 lbs. . . \$ \_\_\_\_\_

#### TOTALLY ENCLOSED MOTORS

Totally enclosed fan cooled motors provide temperature rise to 55° Centigrade, and are for use in non explosive atmosphere where excessive moisture, or abnormal dirt or dust conditions are present.

H-8312-TE 2 h.p., single speed, 220/440, 3 phase, 60 cycle motor, weight 90 lbs. \$ \_\_\_\_\_

H-8322-TE 2 h.p., two speed, 220 volt, 3 phase, 60 cycle motor, weight 160 lbs. \$ \_\_\_\_\_

H-8332-TE 2 h.p., two speed, 440 volt, 3 phase, 60 cycle motor, weight 160 lbs. \$ \_\_\_\_\_

#### OPTIONAL VOLTAGES

There is no extra charge for 208, 240, 480, or 550 volt 50 cycle motors although these must be wound as special motors, which must be considered as an additional factor in delivery.

#### OTHER ELECTRICAL STANDARDS AND SPECIFICATIONS

Prices on electrical controls and components to meet other than our electrical standards and specifications will be quoted on request.

#### SAFETY DISCONNECT SWITCH

Disconnect switches are designed to provide a means to shut off current between the main line and the machine. This is particularly important during non-working hours, vacation and shut down periods, or when electrical maintenance is performed on the machine.

Stock No.	Voltage	Phase	Weight	Price
A-1743	440/550	3	2 lbs.	\$ _____
A-1745	220/230	3	2 lbs.	\$ _____

# THREADED 2 1/4" x 8" SPINDLE ACCESSORIES



XL, S, M Lathes



3 JAW AJUST-TRU



COLLET CHUCKS (HAND LEVER)



6 JAW AJUST-TRU



LARGE FACE PLATE



4 JAW INDEPENDENT



CHUCK PLATE



DOG PLATE



COLLET CHUCKS (HAND WHEEL)



A COLLET CHUCKS B



COLLET ATTACHMENT (HAND LEVER)



COLLET CHUCK SJOGREN



COLLET SPLASH GUARD

## CHUCKS, 3 Jaw Adjust-Tru

includes 3 Master and 3 Top Jaws

These are precision scroll operated chucks that can be adjusted to guarantee .0005" chucking of duplicate parts. The front section of the chuck holds the workpiece in the same manner as other conventional scroll operated chucks. Four adjusting screws in the rear section, however, permit moving of the complete chuck body to dead center.

63M	6" 3 jaw	Weight 31 lbs.	\$ _____
83M	8" 3 jaw	Weight 55 lbs.	\$ _____
103M	10" 3 jaw	Weight 83 lbs.	\$ _____

## CHUCKS, 6 Jaw, Adjust-Tru

includes Inside and outside jaws

Work can be centered easier and quicker with six opposing jaws. Soft metals and tubes can be gripped with less pressure, less distortion. Work is held firmer - permits precision machining farther from spindle. Lessens need for collets and handles work of odd or metric sizes. Chucks are completely fitted for lathe.

66M	6" 6 jaw	Weight 31 lbs.	\$ _____
86M	8" 6 jaw	Weight 61 lbs.	\$ _____
106M	10" 6 jaw	Weight 86 lbs.	\$ _____

## CHUCKS, 4 Jaw

The jaws are set independently for round or irregular work, either concentric or eccentric with lathe spindle. All chucks are fitted for your lathe.

64M	6" 4 jaw	Weight 21 lbs.	\$ _____
84M	8" 4 jaw	Weight 45 lbs.	\$ _____
104M	10" 4 jaw	Weight 65 lbs.	\$ _____

## COLLET CHUCKS, Hand Lever, Sjogren

Lever operated collet chuck is mounted on the spindle nose and can be operated without stopping the lathe spindle. Draw in error limited to .010". Positive lock of the closing collar holds work firmly in position while in operation.

No.	Capacity	Type Collet	Lathes	Weight	
A-2233XL	1-1/16"	5C	XL	22 lbs.	\$ _____
A-2233SM	1-1/16"	5C	S, M	22 lbs.	\$ _____
A-2234XL	1-3/8"	2J	XL	22 lbs.	\$ _____
A-2234SM	1-3/8"	2J	S, M	22 lbs.	\$ _____

## PLATES, Face, Large

Large face plate can be used for supporting and revolving flat stock or jigs and fixtures for miscellaneous machining operations. Plates have ribbed, reinforced back. They have slots for clamping work and fixtures and are accurately fitted for lathe spindle nose.

XL1546	10" diameter	Weight 13 lbs.	\$ _____
LT183	11" diameter	Weight 13 1/2 lbs.	\$ _____
KT185	12" diameter	Weight 14 lbs.	\$ _____

## CHUCK PLATES

Chuck Plates are fitted for the spindle nose of your Sheldon lathe, and are used as a fixture plate or to convert other chucks for use on the lathe. Plates must be finish turned, drilled and tapped for mounting your particular chuck.

S-3085	8-1/4" diameter	Weight 9 lbs.	\$ _____
S-3065	6-3/16" diameter	Weight 7 lbs.	\$ _____

## DOG PLATES

Small face plate designed to drive lathe dog when supporting work between centers. Has two driving slots and two clamping slots. Accurately machined to fit lathe spindle nose. Standard equipment on new lathes.

LTKT-182	5-7/8" diameter	Weight 4 lbs.	\$ _____
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## COLLET CHUCKS, Jacobs A

This spindle nose collet chuck covers complete range from 1/16" to 1-3/8" with only 11 collets since each collet has a 1/8" range. Equalized pressure rigidly holds work. All around grip prevents marring or distortion. Chucks are completely fitted to lathe. Price does not include J900 collets. See page 22.

S-91A6T	Collet Chuck	Weight 32 lbs.	\$ _____
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## COLLET CHUCK, (Jacobs) B

The new JACOBS spindle nose collet chuck covers a range of 3/32" to 1-1/16" with only 10 collets. Each collet style J500 has a range of .100". Equalized pressure rigidly holds work while all grip prevents marring or distortion even of tubing and other fragile materials. Chucks are completely fitted to lathe. See page 22 for J500 collets.

A-2242M	Collet Chuck	Weight 9 lbs.	\$ _____
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## COLLET ATTACHMENT, Hand Wheel

Standard 1-1/16" capacity hand wheel collet attachment for precision draw-in collet work to be fed through hollow draw bar in spindle. Attachment includes hollow draw bar with hand wheel, hardened and ground collet adaptor sleeve, and spanner wrench. Uses 5C collets.

XL 462A, for XL Lathes, Weight 9 1/2 lbs.	\$ _____
SM 462A, for S, M Lathes, Weight 10 lbs.	\$ _____

## COLLET ATTACHMENT, Hand Lever

Precision 1-1/16" capacity ball bearing hand lever collet attachment, with rigid supporting bracket, effortless release and closing adjustable tension, with hardened parts of new and improved design. Attachment includes hollow draw bar with hand lever, hardened and ground collet adaptor sleeve, spindle nose cap and spanner wrench. Uses 5C collets.

2461, for XL Lathes, Weight 20 lbs.	\$ _____
2462, for S, M Lathes, Weight 20 lbs.	\$ _____

## COLLET SPLASH GUARD

XL-2145	XL	Weight 1 lb.	\$ _____
M-2128	S & M	Weight 1 lb.	\$ _____

## COLLET CHUCKS, Hand Wheel, Sjogren

Spindle nose collet chuck, hand wheel type, for use with 5C, or 2J Collets. Quick turn of hand wheel automatically opens or closes collet. Chucks are completely fitted for lathe, have plain nose.

No.	Capacity	Type Collet	Lathes	Weight	
A-2113	1-1/16"	5C	XL, S, M	27 lbs.	\$ _____
A-2115	1-3/8"	2J	XL, S, M	29 lbs.	\$ _____

XL, S, M Lathes  
R13 and VR13 Lathes



## DI-4 CAMLOCK ACCESSORIES



3 JAW AJUST-TRU



COLLET CHUCKS  
(HAND LEVER)



6 JAW AJUST-TRU



LARGE FACE PLATE



4 JAW INDEPENDENT



CHUCK PLATE



DOG PLATE



COLLET CHUCKS  
(HAND WHEEL)



COLLET CHUCKS



COLLET ATTACHMENT  
(HAND LEVER)



COLLET CHUCK SJOGREN



COLLET SPLASH GUARD

### CHUCKS, 3 Jaw Ajust-Tru

includes 3 Master and 3 Top Jaws  
These are precision scroll operated chucks that can be adjusted to guarantee .0005" chucking of duplicate parts. The front section of the chuck holds the workpiece in the same manner as other conventional scroll operated chucks. Four adjusting screws in the rear section, however, permit moving of the complete chuck body to dead center.  
63 D1-4 6" 3 jaw Weight 33 lbs. \$ \_\_\_\_\_  
83 D1-4 8" 3 jaw Weight 57 lbs. \$ \_\_\_\_\_

### CHUCKS, 6 Jaw, Ajust-Tru

includes inside and outside jaws  
Work can be centered easier and quicker with six opposing jaws. Soft metals and tubes can be gripped with less pressure, less distortion. Work is held firmer - permits precision machining farther from spindle. Lessens need for collets and handles work of odd or metric sizes. Chucks are completely fitted for lathes.  
66 D1-4 6" 6 jaw Weight 35 lbs. \$ \_\_\_\_\_  
86 D1-4 8" 6 jaw Weight 61 lbs. \$ \_\_\_\_\_

### CHUCKS, 4 Jaw

The jaws are set independently for round or irregular work, either concentric or eccentric with lathe spindle. All chucks are fitted for your lathe.  
64 D1-4 6" 4 jaw Weight 21 lbs. \$ \_\_\_\_\_  
84 D1-4 8" 4 jaw Weight 46 lbs. \$ \_\_\_\_\_  
104 D1-4 10" 4 jaw Weight 58 lbs. \$ \_\_\_\_\_

### COLLET CHUCKS, Hand Lever, Sjoegren

Lever operated collet chuck is mounted on the spindle nose and can be operated without stopping the lathe spindle. Draw in error limited to .010". Positive lock of the closing collar holds work firmly in position while in operation. Collet chuck includes splash guard.

No.	Capacity	Type Collet	Lathes	Weight	\$
A-2239-XL	1-1/16"	5C	XL	22 lbs.	\$ _____
A-2239-SM	1-1/16"	5C	S, M	22 lbs.	\$ _____
A-2239-R	1-1/16"	5C	R13, VR13	22 lbs.	\$ _____
A-2240-XL	1-3/8"	2J	XL	22 lbs.	\$ _____
A-2240-SM	1-3/8"	2J	S, M	22 lbs.	\$ _____
A-2240-R	1-3/8"	2J	R13, VR13	42 lbs.	\$ _____

### PLATES, Face, Large

Large face plate can be used for supporting and revolving flat stock or jigs and fixtures for miscellaneous machining operations. Plates have ribbed, reinforced back. They have slots for clamping work and fixtures and are accurately fitted for lathe spindle nose.

XL-2087	9" diameter	Weight 12 lbs.	\$ _____
K-1832	11" diameter	Weight 13½ lbs.	\$ _____
M-1831	12" diameter	Weight 14 lbs.	\$ _____

### CHUCK PLATES

Chuck Plates are fitted for the spindle nose of your Sheldon lathe, and are used to convert other chucks for use on the lathe. Plates must be finish turned, drilled and tapped for mounting your particular chuck.  
C-222 8-7/8" diameter Weight 12 lbs. \$ \_\_\_\_\_  
C-251 7-3/8" diameter Weight 10 lbs. \$ \_\_\_\_\_

### DOG PLATES

Small face plate designed to drive lathe dog when supporting work between centers. Has two driving slots and two clamping slots. Accurately machined to fit lathe spindle nose. Standard equipment on new lathes.  
M-1833 7" diameter Weight 7 lbs. \$ \_\_\_\_\_

### COLLETS CHUCKS, Jacobs A

This spindle nose collet chuck covers complete range from 1/16" to 1-3/8" with only 11 collets since each collet has a 1/8" range. Equalized pressure rigidly holds work. All around grip prevents marring or distortion. Chucks are completely fitted to lathe. Price does not include J900 collets. See page 22 for collets.

A-2146 Collet Chuck Weight 17 lbs. \$ \_\_\_\_\_

### COLLET CHUCK, (Jacobs) B

The new JACOBS spindle nose collet chuck covers a range of 3/32" to 1-1/16" with only 10 collets. Each collet style J500 has a range of .100". Equalized pressure rigidly holds work while all grip prevents marring or distortion even of tubing and other fragile materials. Chucks are completely fitted to lathe. See page 22 for J500 collets.

A-2242 D1-4 Collet Chuck Weight 10 lbs. \$ \_\_\_\_\_

### COLLET ATTACHMENT, Hand Wheel

Standard 1-1/16" capacity hand wheel collet attachment for precision draw-in collet work to be fed through hollow draw bar in spindle. Attachment includes hollow draw bar with hand wheel, hardened and ground collet adaptor sleeve, and spanner wrench. Uses 5C collets.

AA-2029 for XL lathes, Weight 10 lbs. \$ \_\_\_\_\_

AA-2009 for S, M lathes, Weight 10 lbs. \$ \_\_\_\_\_

AA-2027 for R13 & VR13 lathes, Weight 15 lbs. \$ \_\_\_\_\_

### COLLET ATTACHMENT, Hand Lever

Precision 1-1/16" capacity ball bearing hand lever collet attachment, with rigid supporting bracket, effortless release and closing adjustable tension, with hardened parts of new and improved design. Attachment includes hollow draw bar with hand lever, hardened and ground collet adaptor sleeve, spindle nose cap and spanner wrench. Uses 5C collets.

2461 D1-4 for XL lathes, Weight 20 lbs. \$ \_\_\_\_\_

2462 D1-4 for S, M lathes, Weight 20 lbs. \$ \_\_\_\_\_

31743 D1-4 for R13 & VR13 lathes, Weight 25 lbs. \$ \_\_\_\_\_

### COLLET SPLASH GUARD

M-2128 S & M Lathes Weight 1 lb. \$ \_\_\_\_\_

### COLLET CHUCKS, Hand Wheel, Sjoegren

Spindle nose collet chuck, hand wheel type, for use with 5C, or 2J Collets. Quick turn of hand wheel automatically opens or closes collet. Chucks are completely fitted for lathe, have plain nose.

A-2118 5C Collet Chuck Weight 28 lbs. \$ \_\_\_\_\_

A-2119 2J Collet Chuck Weight 28 lbs. \$ \_\_\_\_\_

## DI-6 CAMLOCK ACCESSORIES

R-15 -R -17 Lathe  
VR-15 -VR-17 Lat



3 JAW AJUST-TRU



COLLET CHUCKS  
(HAND LEVER)



LARGE FACE PLATE



CHUCK PLATE



6 JAW AJUST-TRU



4 JAW INDEPENDENT



COLLET CHUCKS, RUBBERFEX



COLLET CHUCK SJOGREN

### CHUCKS, 3 Jaw Adjust-Tru

includes 3 Master and 3 Top Jaws

These are precision scroll operated chucks that can be adjusted to guarantee .0005" chucking of duplicate parts. The front section of the chuck holds the workpiece in the same manner as other conventional scroll operated chucks. Four adjusting screws in the rear section, however, permit moving of the complete chuck body to dead center.

83 D1-6	8" 3 jaw	Weight 57 lbs.	\$ _____
103 D1-6	10" 3 jaw	Weight 83 lb.	\$ _____
123 D1-6	12" 3 jaw	Weight 128 lbs.	\$ _____

### CHUCKS, 6 Jaw, Adjust-Tru

includes inside and outside jaws

Work can be centered easier and quicker with six opposing jaws. Soft metals and tubes can be gripped with less pressure, less distortion. Work is held firmer - permits precision machining farther from spindle. Lessens need for collets and handles work of odd or metric sizes. Chucks are completely fitted for lathe.

86 D1-6	8" 6 jaw	Weight 61 lbs.	\$ _____
106 D1-6	10" 6 jaw	Weight 86 lbs.	\$ _____
126 D1-6	12" 6 jaw	Weight 143 lbs.	\$ _____

### CHUCKS, 4 Jaw

The jaws are set independently for round or irregular work, either concentric or eccentric with lathe spindle. All chucks are fitted for your lathe.

84 D1-6	8" 4 jaw	Weight 46 lbs.	\$ _____
104 D1-6	10" 4 jaw	Weight 65 lbs.	\$ _____
124 D1-6	12" 4 jaw	Weight 120 lbs.	\$ _____

### COLLET CHUCKS, Hand Lever, Sjogren

Lever operated collet chuck is mounted on the spindle nose and can be operated without stopping the lathe spindle. Draw in error limited to .010". Positive lock of the closing collar holds work firmly in position while in operation. Collet chuck includes splash guard.

No.	Capacity	Type Collet	Lathes	Weight	
A-2278	1-1/16"	5C	R-15, VR-15	42 lbs.	\$ _____
A-2278-17	1-1/16"	5C	R-17, VR-17	42 lbs.	\$ _____
A-2276	1-3/4"	3J	R-15, VR-15	42 lbs.	\$ _____
A-2275-17	1-3/4"	3J	R-17, VR-17	42 lbs.	\$ _____

### PLATES, Face, Large

Large face plate can be used for supporting and revolving flat stock or jigs and fixtures for miscellaneous machining operations. Plates have ribbed, reinforced back. They have slots for clamping work and fixtures and are accurately fitted for lathe spindle nose.

50020	15" Diameter face plate	Weight 35 lbs.	\$ _____
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### CHUCK PLATES

Chuck Plates are fitted for the spindle nose of your Sheldon lathe, and are used as a fixture plate or to convert other chucks for use on the lathe. Plates must be finish turned, drilled and tapped for mounting your particular chuck.

C-263	8-7/8" diameter	Weight	\$ _____
C-253	7-3/8" diameter	Weight	\$ _____

### COLLET CHUCKS, Jacobs

This spindle nose collet chuck covers complete range from 1/16" to 1-3/8" with only 11 collets since each collet has a 1/8" range. Equalized pressure rigidly holds work. All around grip prevents marring or distortion. Chucks are completely fitted to lathe. Price does not include J900 collets. See Page 22 for collets.

A-2270	Collet Chuck	Weight 17 lbs.	\$ _____
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### COLLET CHUCKS, Hand Wheel, Sjogren

Spindle nose collet chuck, hand wheel type, for use with 5C, or 3J, or 22J Collets. Quick turn of hand wheel automatically opens or closes collet. Chucks are completely fitted for lathe, have plain nose.

No.	Capacity	Type Collet	Weight	
A-2271	1-1/16"	5C	17 lbs.	\$ _____
A-2273	1-3/4"	3J	24 lbs.	\$ _____
A-2274	2-1/4"	22J	29 lbs.	\$ _____

**LOO TAPERED SPINDLE ACCESSORIES**



3 JAW AJUST-TRU



COLLET CHUCKS (HAND LEVER)



6 JAW AJUST-TRU



LARGE FACE PLATE



4 JAW INDEPENDENT



CHUCK PLATE



DOG PLATE



COLLET CHUCKS (HAND WHEEL)



COLLET CHUCK A



COLLET ATTACHMENT (HAND LEVER)



COLLET CHUCK B



COLLET CHUCK SJOGREN

**CHUCKS, 3 Jaw Ajust-Tru, Completely Fitted, includes 3 Master and 3 Top Jaws**

These are precision scroll operated chucks that can be adjusted to guarantee .0005" chucking of duplicate parts. The front section of the chuck holds the workpiece in the same manner as other conventional scroll operated chucks. Four adjusting screws in the rear section, however, permit moving of the complete chuck body to dead center.

63 LOO	6" 3 jaw	Weight 33 lbs.	\$ _____
83 LOO	8" 3 jaw	Weight 57 lbs.	\$ _____
103 LOO	10" 3 jaw	Weight 83 lbs.	\$ _____

**CHUCKS, 6 Jaw, Ajust-Tru, Completely Fitted, includes inside and outside jaws**

Work can be centered easier and quicker with six opposing jaws. Soft metals and tubes can be gripped with less pressure, less distortion. Work is held firmer - permits precision machining farther from spindle. Lessens need for collets and handles work of odd or metric sizes.

66 LOO	6" 6 jaw	Weight 34 lbs.	\$ _____
86 LOO	8" 6 jaw	Weight 63 lbs.	\$ _____
106 LOO	10" 6 jaw	Weight 86 lbs.	\$ _____

**CHUCKS, 4 Jaw, Completely Fitted,**

The jaws are set independently for round or irregular work, either concentric or eccentric with lathe spindle. Solid reversible jaws.

64 LOO	6" 4 jaw	Weight 22 lbs.	\$ _____
84 LOO	8" 4 jaw	Weight 46 lbs.	\$ _____
104 LOO	10" 4 jaw	Weight 65 lbs.	\$ _____

**COLLET CHUCKS, Hand Lever, Sjogren**

Lever operated collet chuck is mounted on the spindle nose and can be operated without stopping the lathe spindle. Positive lock of the closing collar holds work firmly in position while in operation. Collet chuck includes splash guard.

No.	Capacity	Type Collet	Lathes	Weight	\$ _____
A-2236XL	1-1/16"	5C	XL	22 lbs.	\$ _____
A-2236SM	1-1/16"	5C	S, M	22 lbs.	\$ _____
A-2237XL	1-3/8"	2J	XL	22 lbs.	\$ _____
A-2237SM	1-3/8"	2J	S, M	22 lbs.	\$ _____

**PLATES, Face, Large**

Large face plate can be used for supporting and revolving flat stock or jigs and fixtures for miscellaneous machining operations. Plates have ribbed, reinforced back. They have slots for clamping work and fixtures and are accurately fitted for lathe spindle nose.

L-1798	9" diameter	XL Lathes	Weight 13 lbs.	\$ _____
K-1837	11" diameter	S Lathes	Weight 14 lbs.	\$ _____
M-1837	12" diameter	M Lathes	Weight 15 lbs.	\$ _____

**CHUCK PLATES - Chuck Plates are fitted for the spindle nose of your Sheldon lathe, and are used as a fixture plate to convert other chucks for use on the lathe. Plates must be finish turned, drilled and tapped for mounting your particular chuck.**

11806S	6-3/16" diameter	Weight 8 lbs.	\$ _____
11808S	8-1/4" diameter	Weight 10 lbs.	\$ _____

**DOG PLATES** Small face plate designed to drive lathe dog when supporting work between centers. Has two driving slots and two clamping slots. Accurately machined to fit lathe spindle nose. Standard equipment on new lathes.

L-1799	6" diameter dog plate	Weight 5 lbs.	\$ _____
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**COLLET CHUCKS, Jacobs A**

This spindle nose collet chuck covers complete range from 1/16" to 1-3/8" with only 11 collets since each collet has a 1/8" range. Equalized pressure rigidly holds work. All around grip prevents marring or distortion. Chucks are completely fitted to lathe. Price does not include J900 collets. See page 22 for collets.

H-8196	Collet Chuck	Weight 15 lbs.	\$ _____
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**COLLET CHUCKS, Jacobs B**

The new JACOBS spindle nose collet chuck covers a range of 3/32" to 1-1/16" with only 10 collets. Each collet style J500 has a range of .100". Equalized pressure rigidly holds work while all grip prevents marring or distortion even of tubing and other fragile materials. Chucks are completely fitted to lathe. See page 22 for J500 collets.

A-2242-LOO	Collet Chuck	Weight 10 lbs.	\$ _____
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**COLLET ATTACHMENT, Hand Wheel**

Standard hand wheel collet attachment for precision draw-in collet work to be fed through hollow draw bar in spindle. Attachment includes hollow draw bar with hand wheel, hardened and ground collet adaptor sleeve, and spanner wrench.

No.	Capacity	Type Collets	Lathes	Weight	\$ _____
A-2098	1-1/16"	5C	XL	10 lbs.	\$ _____
A-2101	1-1/16"	5C	S, M	10 lbs.	\$ _____

**COLLET ATTACHMENT, Hand Lever**

Precision ball bearing hand lever collet attachment, with rigid supporting bracket, effortless release and closing adjustable tension, with hardened parts of new and improved design. Attachment includes hollow draw bar with hand lever, hardened and ground collet adaptor sleeve, spindle nose cap and spanner wrench.

No.	Capacity	Type Collets	Lathes	Weight	\$ _____
2461 LOO	1-1/16"	5C	XL	20 lbs.	\$ _____
2462 LOO	1-1/16"	5C	S, M	20 lbs.	\$ _____

**COLLET CHUCKS, Hand Wheel, Sjogren**

Spindle nose collet chuck, hand wheel type, for use with 5C, or 2J, Collets. Quick turn of hand wheel automatically opens or closes collet. Chucks are completely fitted for lathe, have plain nose.

No.	Capacity	Type Collets	Lathes	Weight	\$ _____
H-8161	1-1/16"	5C	XL, S, M	26 lbs.	\$ _____
H-8167	1-3/8"	2J	XL, S, M	28 lbs.	\$ _____

# C O L L E T S



## HARDINGE COLLETS

A complete range of collets is available individually or in sets. Both the outside and inside of all collets are hardened and ground for long life accuracy. The most common used sizes are listed below. Special fractional or decimal equivalent sizes are available on request.

### 5C COLLETS HARDINGE

5CR	Round	1/8 to 1-1/16 by 64ths	1/2 lbs.	\$ _____
5CRX	Round	1/16, 5/64, 3/32, 7/64	1/2 lbs.	\$ _____
5CRXX	Round	1/64 - 1/32 - 3/64	1/2 lbs.	\$ _____
5CH	Hexagon	1/4 to 7/8 by 16ths	1/2 lbs.	\$ _____
5CHX	Hexagon	1/8, 3/16	1/2 lbs.	\$ _____
5CS	Square	1/4 to 3/4 by 16ths	1/2 lbs.	\$ _____
5CSX	Square	1/8", 3/16"	1/2 lbs.	\$ _____

### 5C COLLETS IN SETS HARDINGE

5CR8	Round Set of 8-1/8 to 1" by 8ths	5 lbs.	\$ _____
5CR16	Round Set of 16-1/16 to 1" by 16ths	10 lbs.	\$ _____
5CR31	Round Set of 31-1/16 to 1" by 32nds	20 lbs.	\$ _____
5CR61	Round Set of 61-1/16 to 1" by 64ths	35 lbs.	\$ _____

### 2J COLLETS HARDINGE

2JR	Round	1/8 to 1-3/8 by 64ths	1 lb.	\$ _____
2JH	Hexagon	1/4 to 1-3/16 by 16ths	1 lb.	\$ _____
2JHX	Hexagon	1/4 to 1-3/16 in 32nds & 64th size	1 lb.	\$ _____
2JS	Square	1/4 to 1" by 16ths	1 lb.	\$ _____
2JSX	Square	1/4 to 1" in 32nds & 64th sizes	1 lb.	\$ _____

### 2J COLLETS IN SETS HARDINGE

2JR11	Round Set of 11-1/8 to 1-3/8 by 8ths	10 lbs.	\$ _____
2JR21	Round Set of 21-1/8 to 1-3/8 by 16ths	20 lbs.	\$ _____

### 3J COLLETS

3JR	Round	1/8 to 1-3/4" by 16ths	2 lbs.	\$ _____
3JH	Hexagon	1/4 to 1-1/2 by 16ths	2 lbs.	\$ _____
3JS	Square	1/4 to 1-7/32 by 16ths	2 lbs.	\$ _____

### 22J COLLETS

22JR	Round	1/8 to 2-1/4" by 16ths	1 lb.	\$ _____
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## EMERGENCY COLLETS



Collets have soft face and pilot hole to permit rapid boring and stepping out when odd sized or special shaped collets are required rapidly. Body is heat-treated and finished ground, and is spring tempered for quick work release.

Stock No.	Type Collet	Pilot Hole	Weight	Price
5C-E	5C	1/4"	1/2 lbs.	\$ _____
5CE-1	5C	1/16th	1/2 lbs.	\$ _____
5CE-2	5C	1/8"	1/2 lbs.	\$ _____
2JE	2J	1/4"	1 lb.	\$ _____
3JE	3J	1/4"	2 lbs.	\$ _____



## JACOBS RUBBERFLEX COLLETS

J900	Round Set of 11- 1/16 to 1-3/8	4-1/4 lbs.	\$ _____
	Round Any one of the 11 sizes	6 ozs.	\$ _____
J500	Round Set of 10- 3/32 to 1-1/16	3-3/4 lbs.	\$ _____



2J Rack



5C Rack

## COLLET RACKS

Collet rack provides a convenient holder for collets, lathe center, and spindle sleeve. The rack is easily mounted on the back way of any lathe bed. Space is provided for sixteen 5C collets, headstock and tailstock centers, and one spindle sleeve.

Stock No.	Type Collet	Lathes	Weight	Price
AS-1527	5C	XL, S, M	7-1/2 lbs.	\$ _____
11740A	5C	R	9-1/2 lbs.	\$ _____
11742A	2J	R	9-1/2 lbs.	\$ _____

## STEP TYPE COLLETS



Step type collets are used for accurately holding work above normal 5C collet range. They are individually machined to size for perfect concentricity. The step collet has a ground taper that is drawn back into the

internal taper of the 5C collet adaptor by a draw bar collet attachment. As a result, the three jaws of the step collet are closed on the workpiece. Because of the ground taper on the step collet, no step closers are required.

Stock No.	Capacity	Type Spindle Nose	Weight	Price
RC 20-25-2	2"	All	1 lb.	\$ _____
RC 20-25-3	3"	All	1 1/2 lbs.	\$ _____
RC 20-25-4	4"	All	2 lbs.	\$ _____
RC 20-25-5	5"	All	3 lbs.	\$ _____

## INTERNAL COLLETS



An internal collet is used for holding the inside diameter of a workpiece to permit machining the outside diameter without the use of arbors or lathe dogs. As the internal collet is drawn against the taper of the 5C collet adaptor by a draw bar collet attachment, the collet pad expands to firmly grip the inside diameter of the workpiece. The collet pad has a 1-3/4" O.D. and can be machined to any desired size down to 3/8". Collet unit consists of 5C collet body, internal collet pad, wrench and retaining ring. EIC 500 Internal Collet unit, as described above . . . \$ \_\_\_\_\_ EIC 503 Additional Collet Pads, each . . . . . \$ \_\_\_\_\_



### CENTERS, CROTCH

Used in tailstock as "V" block support for drilling round stock. Width of "V" on face 1" x 90° angle; diameter of face, 1-3/4"; overall length 3-7/8".

Stock No.	Morse Taper	Lathes	Weight	Price
K-223	#2 M.T.	XL	1 lb. 6 oz.	\$ _____
S-1446	#3 M.T.	S, M, R-13	1 lb. 12 oz.	\$ _____



### CENTERS, CUP, SET

For turning armatures on shafts that have no centers. Set provides one live cup center for tailstock and one solid cup center for headstock.

Stock No.	Morse Taper	Lathes	Weight	Price
A-2024	#2 M.T.	XL	2 lbs. 6 oz.	\$ _____
A-2025	#3 M.T.	S, M, R-13	3 lbs. 10 oz.	\$ _____



### DRILL PAD CENTERS

Used in tailstock as a supporting face for drilling miscellaneous flat stock. Face diameter 4", width 1/2", overall length 3-3/4".

Stock No.	Morse Taper	Lathes	Weight	Price
K-221A	#2 M.T.	XL	2 lbs.	\$ _____
S-1447-A	#3 M.T.	S, M, R-13	2-1/2 lbs.	\$ _____



### HOLLOW CENTERS

Used to support conical or pointed work, or stock with integral male centers. Drilled and countersunk with standard center drill.

Stock No.	Morse Taper	Lathes	Weight	Price
K-274	#2 M.T.	XL	1/2 lb.	\$ _____
S-1450	#3 M.T.	S, M, R-13	1/2 lb.	\$ _____



### HALF CENTERS

Standard 60° center partially cut away as illustrated for use in tailstock spindle for facing and squaring ends of shafts supported between centers.

Stock No.	Morse Taper	Lathes	Weight	Price
S-82	#2 M.T.	XL	1 lb.	\$ _____
S-1449	#3 M.T.	S, M, R-13	1 lb.	\$ _____



### 60° CENTERS

Standard 60° center for supporting stock between the headstock and tailstock. Centers are steel, hardened and ground. Standard equipment on new lathes.

Stock No.	Morse Taper	Lathes	Weight	Price
K-42	#2 M.T.	XL	1/2 lb.	\$ _____
S-1448	#3 M.T.	S, M, R-13	14 ozs.	\$ _____
50034	#4 M.T.	R-15 - 17	1 lb.	\$ _____



### HEADSTOCK CENTER SLEEVE

This adaptor fits the taper bore of the headstock spindle to reduce the Morse Taper to fit standard spindle accessories. Sleeve is precision ground. Standard equipment on new lathes.

Stock No.	Reduction	Lathes	Weight	Price
KB-465	#5-#2 M.T.	XL	1 lb. 10 oz.	\$ _____
1529	#5-#3 M.T.	S, M, R-13	1 lb.	\$ _____
50033	#6-#4 M.T.	R-15 - 17	2-1/2 lb.	\$ _____

## CENTERS



### LIVE CENTERS

Spring loaded live centers that maintain constant tailstock thrust, reduce overhang for greater rigidity and increase working range. Saves operating time and cost of replacing and reconditioning worn out solid centers. Although small in size, extensive testing has proved this live center superior in ease of handling, trouble free operation and work-load capacity.

Stock No.	Morse Taper	Lathes	Weight	Price
A-1908	#2 M.T.	XL	12 oz.	\$ _____
A-2007	#3 M.T.	S, M, R-13	1 lb. 6 oz.	\$ _____
AA-2066	#4 M.T.	R-15 - 17	2 lbs.	\$ _____



### LIGHT DUTY LIVE CENTER

A less expensive center using ball bearing construction. Ideal for general purpose work.

Stock No.	Morse Taper	Lathes	Weight	Price
A-2071	#2 M.T.	XL	1 lb. 8 oz.	\$ _____



### PIPE CENTERS

Pipe center has 1/2" to 3" capacity, 6-3/4" overall length. Used in tailstock spindle for supporting pipe and tubing in general turning operations.

Stock No.	Morse Taper	Lathes	Weight	Price
K-280-2	#2 M.T.	L, XL	3 lbs.	\$ _____
K-280-3	#3 M.T.	S, M, R-13	3 lbs.	\$ _____



### DRILL CHUCKS, 3-JAW

Used in tailstock spindle for general drilling. Furnished complete with key and arbor.

Stock No.	Morse Taper	Capacity	Lathes	Weight	Price
34	#2 M.T.	0-1/2"	XL	2-1/2 lbs.	\$ _____
34-C	#3 M.T.	0-1/2"	S, M, R-13	3 lbs.	\$ _____
36	#2 M.T.	3/16-3/4"	XL	4 lbs.	\$ _____
36-C	#3 M.T.	3/16-3/4"	S, M, R-13	4 lbs.	\$ _____
20-N	#3 M.T.	3/8-1"	R-13	9 lbs. 2oz.	\$ _____
34-D	#4 M.T.	0-1/2"	R-15-17	4 lbs.	\$ _____
36-D	#4 M.T.	3/16-3/4"	R-15-17	5 lbs.	\$ _____
20-D	#4 M.T.	3/8-1"	R-15-17	10 lbs.	\$ _____



### CENTER REST CHUCK

Mounted in the tailstock spindle to permit turning round work without the use of a center support. Has adjustable bronze jaws that can be locked in position to provide a steady bearing support. Complete with arbor. Capacity 1/4" - 3/4".

Stock No.	Morse Taper	Lathes	Weight	Price
100	#2 M.T.	XL	2-1/2 lbs.	\$ _____
100-C	#3 M.T.	S, M, R-13	3-1/2 lbs.	\$ _____
100-D	#4 M.T.	R-15 - 17	4 lbs.	\$ _____



### LIVE CENTERS, TOOLMAKER'S SET

Set includes an anti-friction ball bearing live center with six interchangeable points to support a wide variety of work. Packed in a wooden case for protective storage.

Stock No.	Morse Taper	Lathes	Weight	Price
A-2085-2	#2 M.T.	XL	6-1/2 lbs.	\$ _____
A-2085-3	#3 M.T.	S, M, R-13	8-3/4 lbs.	\$ _____
A-2085-4	#4 M.T.	R-15 - 17	14 lbs.	\$ _____

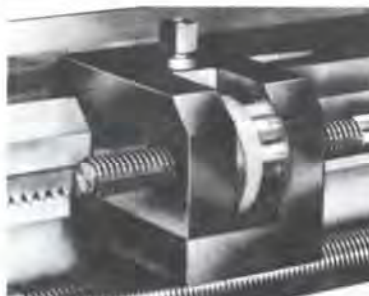
## STOPS & RESTS



### THREAD CUTTING STOPS

The thread cutting stop is mounted on the carriage to regulate depth of cut for turning or cutting screw threads. Lathes have pre-drilled hole in cross-slide and carriage to accommodate stop. Thread cutting stops for R lathes (not illustrated) require factory installation at time lathe is built and assembled.

Stock No.	Lathes	Weight	Price
LKM-5	XL, S, M	1 lb.	\$ _____
41600	R13 VR13	1 lb.	\$ _____
31615	R15 VR15	1 lb.	\$ _____
61620	R17 VR17	1 lb.	\$ _____



### MICROMETER CARRIAGE STOP

Stop is positionable along the bed and is positively locked in place by the bed rack. Its satin chrome micrometer dial is graduated in thousandths and there is a 4" travel to the stop rod. For R lathes only.

Standard equipment on new lathes.

41690 Weight 8 lbs. . . . . \$ \_\_\_\_\_



### PLAIN CARRIAGE STOP

An efficient carriage stop that clamps to the lathe bed at any point on the front "V" way to indicate the stopping point on such operations as facing and boring.

Stock No.	Lathes	Weight	Price
AS-L-1851	XL, S, M	3 lbs.	\$ _____



### VERTICAL TURRET STOP

This stop is positionable along bed and is positively locked in place into bed rack. It has 6 stations each with a 1" travel that provides an overall range from 0 to 6". For R lathes only.

Standard equipment on 3R Turret Lathes.

41650 Weight 10 lbs. . . . . \$ \_\_\_\_\_



### PLAIN MULTIPLE CARRIAGE STOPS

This is a four position carriage stop that can be mounted anywhere on the lathe bed. Each of the finger type stops can be set for a different tool position and snapped into place to locate the carriage on four successive cuts.

Stock No.	Lathes	Weight	Price
A2333	S, M	6½ lbs.	\$ _____



### MICROMETER CARRIAGE STOP

A precision stop with micrometer screw adjustment that clamps at any point on the front V way of the bed. Has 3/4" screw travel either to the right or the left.

Stock No.	Lathes	Weight	Price
ASL-1825-1	XL, S, M	2 lbs.	\$ _____



### FOLLOWER RESTS

The follower rest is attached to and moves with the lathe carriage to support long, flexible, and slender shafts for increased accuracy. The plain type follower rest with machined adjustable jaws that can be set and locked in place for any diameter bar stock from 3/16" to 3-1/2".

Stock No.	Lathes	Weight	Price
AS-L-1684	XL	6 lbs.	\$ _____
AS-K-1685	S	6 lbs.	\$ _____
AS-M-1686	M	6 lbs.	\$ _____

### NEW MICROMETER MULTIPLE CARRIAGE STOPS



This is also a four position carriage stop with finger-type stops for locating the carriage on four successive cuts. It has the additional feature of having micrometer dials on each stop for accurate settings. Dials are graduated in thousandths of an inch.

Stock No.	Lathes	Weight	Price
A2334	S, M	6½ lbs.	\$ _____



### STEADY REST

The steady rest is for supporting long bars or tubing and can be mounted any place on the bed ways. The plain type steady rest has three quickly adjustable machined jaws that can be set and locked in place for any diameter bar stock within its capacity. Have hinged tops to facilitate quick insertion and removal of stock.

Stock No.	Capacity	Lathes	Wt.	Price
AS-L-575-1	3/16" to 3-1/2"	XL	11	\$ _____
AS-XK-575-1	3/16" to 3-1/2"	S	12	\$ _____
AS-M-575-1	3/16" to 3-1/2"	M	13	\$ _____



## FACTORY INSTALLED ACCESSORIES

### HARDENED BED WAYS AND ACCURACY GROUP

This important accessory group is designed not only to increase the accuracy of your lathe, but to give it sustained accuracy for a longer period of time. The group consists of (1) precision flame hardened and ground bed ways, (2) hardened compound and cross feed screws, (3) a compensating cross feed nut to minimize backlash and permit more accurate depth settings, and (4) hard chrome carriage cross slide dovetails and ways. Beds are made of special high strength nickel alloy designed to meet a guaranteed minimum hardness of 500 Brinell. Cross slide travel dimensions are changed to the following: XL Series, 4-11/16"; S and M series, 5-1/2". Prices below apply only when the lathe is built and ordered from the factory. Compensating nut not available for lathes ordered with plain taper attachment.

Stock No.	Lathe Series	Price
AA-2060	XL	\$ _____
AA-2061	S & M	\$ _____



**BED TURRETS**

These are six station, handwheel operated bed turrets designed to increase the versatility of your lathe for short-run production operations. They are quickly mounted or easily removed from the lathe. The turret head automatically indexes one station with each complete back movement of the wheel. Length of tool operations is regulated by adjustable stops for each turret station. Turret has adjustable gibs for long life accuracy. When ordered with the lathe at the factory, turret is fitted to lathe bed and bored in line with lathe spindle.

Stock No.	Capacity	Stroke	Lathes	Weight	Price
A-2010	1"	6 1/2"	XL	110 lbs.	\$ _____
A-2011	1"	6 1/2"	S	115 lbs.	\$ _____
A-2012	1"	6 1/2"	M	115 lbs.	\$ _____

\*1/4" available on request at no extra charge.



**COOLANT SYSTEMS**

Basic coolant system consists of a 10 gallon tank and pump mounted on casters. Pump motor is 1/8 h.p., totally enclosed for operation on 110 volts. Equipped with on-off switch and 6' oil resistant cord and two-prong plug.

A-2079-1 Coolant system, weight 45 lbs. .... \$ \_\_\_\_\_

Coolant system to meet NMTBA standards and for use only with NMTBA magnetic controls also has a 10 gallon tank, 1/8 h.p., totally enclosed, 110 volt motor, but is integrally wired through main control transformer. Wiring is with flexible, seal tight, conduit with oil tight fittings and on-off operation is through oil-tight selector on headstock control panel.

A-2351 Coolant system, weight 50 lbs. .... \$ \_\_\_\_\_



**TELESCOPIC TAPER ATTACHMENT**

Taper attachments are an important accessory for turning and boring long tapers or where repetitive taper operations are necessary. Accurate performance is obtained through simplicity of design and sturdy construction. With the telescopic taper attachment a telescopic cross-feed screw is supplied so that a simple lock of the bed clamp instantly makes the lathe ready for taper turning. The attachment has tapered gibs for easy adjustment and long life. The swivel bar is graduated in inches per foot on one end and in degrees on the other end.

Stock No.	Inches per ft. Taper	Degrees	Lathes	Wt.	Price
AS-TT-2040-L	3 1/2"	8 1/2	XL	45 lbs.	\$ _____
AS-TT-2040-SM	3 1/2"	8 1/2	S, M	45 lbs.	\$ _____

### PAINTING SPECIAL COLORS

All Sheldon machine tools are painted in light machine tool grey. This is a special formulated machine tool paint with an alkylated rubber base to withstand chipping as well as discoloration or peeling from a wide variety of coolant fluids. Other colors of paints that are compatible can be painted on request at an additional charge. Customer to supply his own paint in quantity required except for Vista Green and Ivory.

1st Color, extra cost ..... \$ \_\_\_\_\_  
 2nd Color, extra cost ..... \$ \_\_\_\_\_



**HANDLEVER TAILSTOCK**

The handlever tailstock is used for production operations such as drilling and reaming or in conjunction with the six station tailstock turret.

Tailstock spindle is controlled by either the lever or the tailstock handwheel. Maximum spindle travel of tailstock is 2 3/4".

Lathes	Weight	In Place of		In addition to	
		Regular Tailstock	Price	Regular Tailstock	Price
XL	35 lbs.	L926A	\$ _____	AS-L-926	\$ _____
S	35 lbs.	S926A	\$ _____	AS-S-926	\$ _____
M	35 lbs.	M926A	\$ _____	AS-M-926	\$ _____



**PLAIN TAPER ATTACHMENT**

A plain taper attachment is also available. It mounts on the carriage and is connected to the cross feed by a cross-feed slide, rather than through a telescopic cross-feed screw. This requires disconnecting the crossfeed nut and locking both the saddle clamp nut and bed clamp in order to cut tapers. Attachment has straight gibs. Swivel bar is graduated in inches per foot on one end and in degrees on the other. Capacity is 9-1/2" or 4" per foot in 7-1/4". When order with hardened accessory group standard cross feed nut is supplied instead of compensating nut.

Stock No.	Lathes	Weight	Price
AS-K-119-TL	XL	25 lbs.	\$ _____
AS-K-119-TSM	S, M	25 lbs.	\$ _____

# TOOLPOST TURRETS AND CROSS SLIDES



## HANDLEVER CROSS-SLIDES

Handlever operated cross-slide mounts on carriage in place of standard compound and cross-slide. It provides a two-way, front and back, operation that cuts job time in half. Both front and rear tool blocks take standard lathe rocker arm tool posts. Attachment is equipped with both front and back adjustable stops.

Stock No.	Slide Travel	Lathes	Weight	Price
AS-L-1545-HL	3/4"	XL	35 lbs.	\$ _____
AS-S-1545-HL	3/4"	S	40 lbs.	\$ _____
AS-M-1545-HL	3/4"	M	40 lbs.	\$ _____



This is a heavy duty cross-slide that mounts on the lathe bed. It is a handlever operated slide, and has adjustable stops for repetitive operations. There are T-slots in the base for adjusting the position of both front and rear tool blocks. Screw operated tapered wedges quickly set the height of cutting tools.

Stock No.	Slide Travel	Lathes	Weight	Price
AS-M-1921	3/4"	M	125 lbs.	\$ _____



## HANDWHEEL CROSS-SLIDES

Handwheel operated cross-slide mounts on carriage in place of standard compound and cross-slide. Large micrometer dial on carriage handwheel permits accurate adjustment for tool settings. Both front and rear tool blocks take standard lathe rocker arm tool posts. Attachment is equipped with both front and back adjustable stops. In addition to hand feed operation, power cross feed is available through apron clutch.

Stock No.	Slide Travel	Lathes	Weight	Price
AS-L-1545-HW	4 1/2"	XL	35 lbs.	\$ _____
AS-S-1545-HW	5"	S	40 lbs.	\$ _____
AS-M-1545-HW	5"	M	40 lbs.	\$ _____



This is a heavy duty cross-slide that mounts on the carriage. It has T-slots in the base for adjusting the position of both front and rear tool blocks. Screw operated tapered wedges quickly set the heights of cutting tools. Unit may be operated in power feed by apron clutch or by hand, using cross-feed handwheel. Equipped with adjustable stops for repetitive operations.

Stock No.	Slide Travel	Lathes	Weight	Price
AS-M-2050	4"	M	80 lbs.	\$ _____



This handwheel cross-slide mounts on the carriage in place of the standard cross-slide. It incorporates a rear tool block and uses the lathe compound furnished with the lathe in front. This increases the versatility of the front tool position for such operations as boring and threading. Unit may be operated by either hand feed or power feed through the apron clutch.

Stock No.	Slide Travel	Angle Feed	Lathes	Weight	Price
AS-L-1352X	5 1/2"	2 1/4"	XL	55 lbs.	\$ _____
AS-K-1353	5 1/2"	2 3/4"	S	65 lbs.	\$ _____
AS-M-1352	5 1/2"	3 1/2"	M	65 lbs.	\$ _____

## TOOL POST TURRET, SCREW OPERATED



This production accessory fits on the compound of the lathe and permits use of four tools, each with three working positions. Loosening the lever at the top releases the turret for indexing in 30° increments.

Stock No.	Lathes	Cutter Bits	Weight	Price
A-2087	XL	1/2" sq. #2393	9 lbs.	\$ _____
A-2088	S	1/2" sq. #2393	9 lbs.	\$ _____
A-2089	M	1/2" sq. #2393	9 lbs.	\$ _____
A2186-R13	R-13	5/8" sq. #2394	15 lbs.	\$ _____
A2187	R-15&R-17	5/8" sq. #2394	15 lbs.	\$ _____

## TOOL POST TURRET, CAM OPERATED



This is also a four way, twelve position tool post turret that fits on the compound. Releasing the cam locking handle automatically indexes the turret to the next station. This means that the complete operation of the turret can be handled with one hand.

Stock No.	Lathes	Cutter Bits	Weight	Price
A-1967	XL	1/2" sq. #2393	9 lbs.	\$ _____
A-1968	S	1/2" sq. #2393	9 lbs.	\$ _____
A-1969	M	1/2" sq. #2393	9 lbs.	\$ _____
AAA-1963	R13	5/8" sq. #2394	18 lbs.	\$ _____
AA A-1964	R15&R17	5/8" sq. #2394	18 lbs.	\$ _____

Cutter Bits for Tool Post Turrets are priced as follows:

Stock No.	Weight	Size	Price
2393	3 oz.	1/2" square x 4"	\$ _____
2394	4 oz.	5/8" square x 4-1/2"	\$ _____

## "SUPER PRECISION" QUICK CHANGE TOOL POST



This quick change tool post fits on the compound and uses the four tool holders illustrated. It is sturdily constructed and simple to operate. All working surfaces are hardened and precision ground. Tool holder is completely sealed and can be locked at any angle by a lock nut. Instant changing from one operation to another is quickly done by rotating handle, sliding out tool holder and sliding in next in exact pre-set position. Repetitive accuracy guaranteed to .0001".

See page 30 for turrets for tracer compounds.

Stock No.	Figure	Lathes	Weight	Price
AA-1963-L	1	XL	12 lbs.	\$ _____
AA-1963-S	1	S	12 lbs.	\$ _____
AA-1963-M	1	M	12 lbs.	\$ _____
AAA-1965	1	R13	17 lbs.	\$ _____
AAA-1966	1	R15 & R17	22 lbs.	\$ _____

Tools for AA-1963-L and AA-1963-S:

AA-1991	2	Turning and Facing	3/16 to 1/2"	\$ _____
AA-1992	3	Boring, Turning and Facing	3/16 to 1/2"	\$ _____
AA-1995	4	Morse Taper for Drilling (#3 M.T.)		\$ _____
AA-1994	5	For "T" Cut Parting Blade	1/2"	\$ _____

Tools for AA-1963-M:

AA-1964	2	Turning and Facing	1/4" to 5/8"	\$ _____
AA-1965	3	Boring, Turning and Facing	1/4 to 5/8"	\$ _____
AA-1966	4	Morse Taper for Drilling (#3 M.T.)		\$ _____
AA-1967	5	For "T" Cut Parting Blade	5/8 to 1 1/16"	\$ _____

Tools For AAA-1965

AAA-1970	2	Turning and Facing	1/2 to 3/4"	\$ _____
AAA-1971	3	Boring, Turning & Facing	1/2 to 3/4"	\$ _____
AAA-1972	4	Morse Taper for Drilling (#3 M.T.)		\$ _____
AAA-1973	5	For "T" Cut Parting Blade	5/8 to 3/4"	\$ _____

Tools for AAA-1966

AA-1968	2	Turning and Facing	1/2 to 3/4"	\$ _____
AA-1969	3	Boring, Turning & Facing	1/2 to 3/4"	\$ _____
AA-1970	4	Morse Taper for Drilling (#3 M.T.)		\$ _____
AA-1971	5	For "T" Cut Parting Blade	5/8" to 3/4"	\$ _____

## TOOL HOLDERS

### TOOL HOLDER SET



A complete assortment of tool holders for almost every turning operation. Set consists of following eight tools, packaged in a steel case to hold individual tools in place: three turning tools, two cutting-off tools, knurling tool, threading tool and boring tool with plain bar.

Stock No.	Lathes	Weight	Price
BAF	XL	7 lbs.	\$ _____

### BORING TOOL



Style D boring tool for boring and internal threading. Uses solid bars from 1/4" to 1/2" diameter. Has reversible bar clamp. Tool is boxed

with 1/4" x 5" high speed boring bar and wrench. Uses No. 8142 boring bars when additional bars required.

Stock No.	Lathes	Weight	Price
2080	XL	1 lb.	\$ _____

### BORING TOOL



Boring tool consists of a holder which fits in tool post of lathe and boring bar with three end caps - 90°, 45°, and 30°. The end caps lock cutters rigidly under screw which cannot loosen when tool is cutting, yet instantly releases the cutter when not in use. Each tool includes holder and bar, end caps, three high speed cutters, and double head wrench.

Stock No.	Lathes	Cutter Bits	Weight	Price
8	XL,S	2388	2 lbs.	\$ _____
9	M	2389	4 lbs.	\$ _____
10	R	2390	7 lbs.	\$ _____

### BORING TOOL, 3-BAR



This boring tool holder takes the place of the tool post in boring operations. Tool comes complete with one solid type bar, two bars with 90°, 45°, and 30° end caps, six high

speed cutters, and three wrenches. A slight turn of one nut releases bar for instant change.

Stock No.	Lathes	Cutter Bits	Diam. Bars	Weight	Price
OOB-10	XL	2388	*3/8, 1/2, 3/4	8 lbs.	\$ _____
OOB-11	S	2389	*3/8, 1/2, 3/4	9 lbs.	\$ _____
OB-13	M	2390	1/2, 9/16, 3/4	10 lbs.	\$ _____
1B-R-13	R-13	2391	1/2, 3/4, 1-1/8	18 lbs.	\$ _____
1B-R-15	R-15	2391	1/2, 3/4, 1-1/8	18 lbs.	\$ _____
1B-R-17	R-17	2391	1/2, 3/4, 1-1/8	18 lbs.	\$ _____

\* 3/8 bar is solid.

### CUTTING OFF TOOLS



The cutter is adjustable to any desired clearance and is given greatest possible support under all conditions. Cutter blades of high speed steel

are beveled on both sides and are held at an angle to give side clearance and top rake necessary to obtain clean, smooth cut. Each tool is boxed separately and includes wrench and one high speed cutter blade.

Stock No.	Description	Lathes	Blade No. and Price	Weight	Price
2020R	Right Hand	XL	2411 \$ _____	1/2 lb.	\$ _____
2020S	Straight Shank	XL	2411 \$ _____	1/2 lb.	\$ _____
20	Straight Shank	XL,S	2411 \$ _____	3/4 lb.	\$ _____
21	Straight Shank	M	2412 \$ _____	1-1/4 lb.	\$ _____
22	Straight Shank	R	2413 \$ _____	2-1/4 lb.	\$ _____
30L	Left Hand	XL,S	2421 \$ _____	3/4 lb.	\$ _____
31L	Left Hand	M	2422 \$ _____	1-1/4 lb.	\$ _____

### CUTTING OFF TOOLS (Con't)

Stock No.	Description	Lathes	Blade No. and Price	Weight	Price
32L	Left Hand	R	2423 \$ _____	2-1/4 lb.	\$ _____
30R	Right Hand	XL,S	2411 \$ _____	3/4 lb.	\$ _____
31R	Right Hand	M	2412 \$ _____	1-1/4 lb.	\$ _____
32R	Right Hand	R	2413 \$ _____	2-1/4 lb.	\$ _____

### KNURLING TOOLS



This knurling tool is self-centering. The knuckle or joint has ample bearing to resist the severe strains of both end and side thrust. The

tool is furnished with one set of diamond pattern medium knurls. Other style knurls available.

Stock No.	Lathes	Knurls	Knurling Capacity	Weight	Price
2040	XL	8224	1/8 up	1/2 lb.	\$ _____
OK	XL,S	8224	1/8 up	1 lb.	\$ _____
1K	M	8225	3/16 up	1-1/2 lb.	\$ _____
2K	R	8225	3/16 up	2 lbs.	\$ _____

### KNURLING TOOLS, Revolving Head



Self-centering head takes three pairs of knurls at one time to save time in changing from one grade or style of knurls to another. Tool is furnished

with standard face diamond knurls. Other style knurls available.

Stock No.	Lathes	Knurls	Knurling Capacity	Weight	Price
3K0	XL,S	8224	3/16 up	1-1/4 lb.	\$ _____
3K1	M	8225	1/4 up	2 lbs.	\$ _____
3K2	R	8225	1/4 up	2-1/2 lb.	\$ _____

**KNURLS** - Knurls are individually hob-cut to produce precision work in close limits of accuracy. They are cut from extra high carbon tool steel, heat treated, tempered and treated. Knurls are furnished in pairs with diamond pattern face as standard.

Stock No.	Pitch	Diam.	Width	Weight	Price
8224	21	5/8"	3/16	1 oz.	\$ _____
8225	21	3/4"	1/4	1 oz.	\$ _____

### THREADING TOOLS



Each tool is drop forged from special steel. Tool is boxed separately and includes wrench and one high speed sharp V-thread cutter. To sharpen,

the cutter requires grinding on the top edge only and always remains true to form with correct angle.

Stock No.	Lathes	Cutter Bits	Weight	Price
2050	XL	8160	1/2 lb.	\$ _____
50	XL,S	8151	1 lb.	\$ _____
51	M	8153	1-1/2 lb.	\$ _____
52	R	8155	2-1/4 lb.	\$ _____

### THREADING CUTTERS



These formed threading cutters are made from selected high speed steel. Cutting edge is in a horizontal position or parallel to edge of holder. Cutters can be supplied

for cutting Sharp V, American Standard coarse, American Standard fine, and Whitworth Standard threads. If pitch is not specified, Sharp V type will be supplied.

Stock No.	Style	Weight	Price
8151	Sharp V, 60°	1 oz.	\$ _____
8153	Sharp V, 60°	1 oz.	\$ _____
8155	Sharp V, 60°	1 oz.	\$ _____
8160	Sharp V, 60°	1 oz.	\$ _____

## TOOL HOLDERS AND DOGS



Left Hand



Straight



Right Hand

### TURNING TOOLS

Each turning tool is boxed separately and includes wrench and one high speed cutter bit.

Stock No.	Description	Cutter Bits	Lathes	Weight	Price
2010S	Straight Shank	2389	XL	1/3 lbs.	\$ _____
2010R	Right Hand	2389	XL	1/3 lbs.	\$ _____
2010L	Left Hand	2389	XL	1/3 lbs.	\$ _____
0S	Straight Shank	2389	XL,S	3/4 lbs.	\$ _____
1S	Straight Shank	2390	M	1-1/2 lbs.	\$ _____
2S	Straight Shank	2391	R	2-1/4 lbs.	\$ _____
0R	Right Hand	2389	XL,S	3/4 lbs.	\$ _____
1R	Right Hand	2390	M	1-1/2 lbs.	\$ _____
2R	Right Hand	2391	R	2-1/4 lbs.	\$ _____
0L	Left Hand	2389	XL,S	3/4 lbs.	\$ _____
1L	Left Hand	2390	M	1-1/2 lbs.	\$ _____
2L	Left Hand	2391	R	2-1/4 lbs.	\$ _____

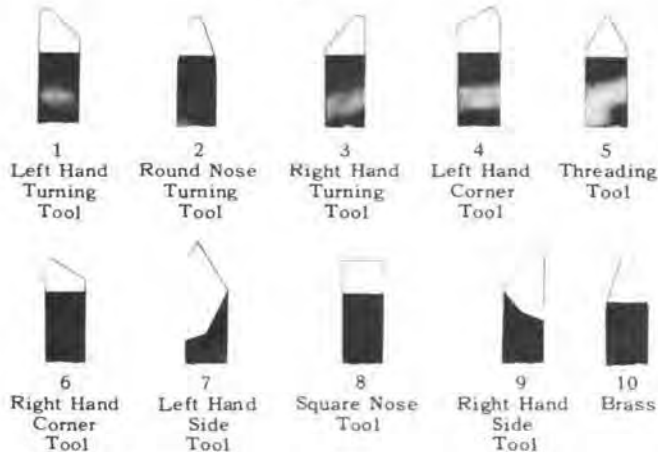


### CUTTER BITS

These are high speed cobalt cutter bits ground on all four sides. Ends are beveled 10°. For use on boring and turning tools as listed.

Stock No.	Size	Weight	Price
2388	3/16 sq. x 2	1 oz.	\$ _____
2389	1/4 sq. x 2-1/2	1 oz.	\$ _____
2390	5/16 sq. x 2-1/2	1 oz.	\$ _____
2391	3/8 sq. x 3	1 oz.	\$ _____

### FINISHED FORM CUTTERS, Ground to Shape, Set



No.	Description	Size	Weight	Price
0415	Set of 10	1/4** sq. x 2-1/2	10 oz.	\$ _____
0405	Set of 10	5/16** sq. x 2-1/2	12 oz.	\$ _____
0406	Set of 10	3/8** sq. x 3**	14 oz.	\$ _____
0136	Set of 6 (1,2,3,5,6,10)	1/4** sq. x 2-1/2	6 oz.	\$ _____



### CARBIDE TOOL HOLDERS

Each tool is drop forged from special steel, accurately machined, heat treated and hardened. Set screws are of heat treated alloy steel with hardened points. Each tool is boxed separately without tool bit, but with wrench.

Stock No.	Description	Cutter Bits	Lathes	Weight	Price
T0S	Straight Shank	A-2180 to 84	S	2 lbs.	\$ _____
T1S	Straight Shank	A-2160 to 64	M	2 lbs.	\$ _____
T2S	Straight Shank	A-2165 to 69	R	3-1/4 lbs.	\$ _____
T0L	Left Hand	A-2180 to 84	S	2 lbs.	\$ _____
T1L	Left Hand	A-2160 to 64	M	2 lbs.	\$ _____
T2L	Left Hand	A-2165 to 69	R	3-1/4 lbs.	\$ _____
T0R	Right Hand	A-2180 to 84	S	2 lbs.	\$ _____
T1R	Right Hand	A-2160 to 64	M	2 lbs.	\$ _____
T2R	Right Hand	A-2165 to 69	R	3-1/4 lbs.	\$ _____

### Form 7



### Form 4



### Form 1



### Form 12



### CARBIDE TIPPED CUTTERS

These are sintered-carbide for machining steel, castings, hard rubber, plastics and even glass. They are grade 78B square cutters for use with tool holders as specified above.

### Form 15



Stock No.	Style	Size	Weight	Price
A-2180	Left Hand (Form 7)	3/16** sq.	1 oz.	\$ _____
A-2160	Left Hand (Form 7)	5/16** sq.	1 oz.	\$ _____
A-2181	Right Hand (Form 4)	3/16** sq.	1 oz.	\$ _____
A-2161	Right Hand (Form 4)	5/16** sq.	1 oz.	\$ _____
A-2182	Square Nose (Form 1)	3/16** sq.	1 oz.	\$ _____
A-2162	Square Nose (Form 1)	5/16** sq.	1 oz.	\$ _____
A-2183	80° (Form 12)	3/16** sq.	1 oz.	\$ _____
A-2163	80° (Form 12)	5/16** sq.	1 oz.	\$ _____
A-2184	60° (Form 15)	3/16** sq.	1 oz.	\$ _____
A-2164	60° (Form 15)	5/16** sq.	1 oz.	\$ _____
A-2165	Left Hand (Form 7)	3/8** sq.	2 oz.	\$ _____
A-2166	Right Hand (Form 4)	3/8** sq.	2 oz.	\$ _____
A-2167	Square Nose (Form 1)	3/8** sq.	2 oz.	\$ _____
A-2168	80° (Form 12)	3/8** sq.	2 oz.	\$ _____
A-2169	60° (Form 15)	3/8** sq.	2 oz.	\$ _____



### BENT TAIL DOGS, Safety Type

These bent tail safety dogs are an improved design, drop forged from open hearth steel. They are heat treated to extreme toughness and have alloy steel set screws. Dogs with 3/8" to 1-1/2" capacity can be used with dog plate. Larger dogs require large face plate. Wrenches are extra.

Stock No.	Capacity	Lathes	Weight	Price
101-H	3/8**	XL,S,M	1/4 lbs.	\$ _____
1-H	3/8**	R	1/4 lbs.	\$ _____
201-H	1/2**	XL,S,M	1/4 lbs.	\$ _____
2-H	1/2**	R	3/8 lbs.	\$ _____
301-H	3/4**	XL,S,M	3/8 lbs.	\$ _____
3-H	3/4**	R	1/2 lbs.	\$ _____
401-H	1**	XL,S,M	1/2 lbs.	\$ _____
4-H	1**	R	3/4 lbs.	\$ _____
501-H	1-1/4**	XL,S,M	3/4 lbs.	\$ _____
5-H	1-1/4**	R	1-1/2 lbs.	\$ _____
601-H	1-1/2**	XL,S,M	3/4 lbs.	\$ _____
6-H	1-1/2**	R	2 lbs.	\$ _____
7-H	1-3/4**	XL,S,M,R	2-3/4 lbs.	\$ _____
8-H	2**	XL,S,M,R	3-1/2 lbs.	\$ _____
9-H	2-1/2**	R	5-1/4 lbs.	\$ _____
10-H	3**	R	6-3/4 lbs.	\$ _____
11-H	3-1/2**	R	9 lbs.	\$ _____
12-H	4**	R	12 lbs.	\$ _____



### CLAMP LATHE DOGS

This drop forged steel clamp lathe dog securely grips a variety of shapes of stock. Construction of upper bar allows for considerable tilting without bending screws.

Stock No.	Capacity Between Screws	Lathes	Weight	Price
11	1-3/4**	XL,S,M,R	3/4 lbs.	\$ _____
12	2-1/4**	XL,S,M,R	1 lb.	\$ _____
13	2-3/4**	R	1-3/4 lbs.	\$ _____
14	3-1/2**	R	2-3/4 lbs.	\$ _____



### "Care and Operation of a Lathe" Manual

106 pages containing information on history of lathes, basic parts, theory of metal cutting, lathe care and basic lathe operation. Shipping weight - 10 ozs. . . . . \$ \_\_\_\_\_

OTHER PUBLICATIONS - plastic bound.  
 "Lathe Work", 165 pgs. . . . . \$ \_\_\_\_\_  
 "Milling Machine Work", 298 pgs. \$ \_\_\_\_\_

## MISCELLANEOUS

### D-E-T-A-C-H-A-B-L-E 3-Drawer Cabinet

Ideal as an auxiliary unit for pedestal lathes for storage of tools, gages, accessories and work in progress. Fits snugly under chip pan of 56" and 70" S and M Series Lathes. Can be used on all lathes as an independent tool cabinet and stand. Rigidly fabricated of 16 gauge steel with three easy sliding drawers with individual locks.



Stock No.	Dimensions	Weight	Price
A-1926	18-1/2" x 18-1/2" x 24-1/2"	90 lbs.	\$ _____



Fig. 1



Fig. 2

### LATHE LAMPS

A-1909 (See Fig. 1) Adjustable, bulb type lamp, attractively chrome finished. Furnished with 6 ft. oil-resistant cord and two-prong plug for 110 volt operation. Maximum bulb size 60 watts. Has new cool type shade.

A-1909 Lathe Lamp, less bulb, weight 2 lbs. . . . \$ \_\_\_\_\_

A-1841 (See Fig. 2) Fluorescent light with twin 8 watt lamps. Light is completely universal and has 3-way clamp and screw down base for convenient mounting on lathe carriage or bed. Furnished complete with 6 ft. cord and two prong plug for 110 volt operation.

A-1841 Lathe Lamp, including bulbs, weight 7-1/2 lbs. \$ \_\_\_\_\_

### METRIC TRANSPOSING ATTACHMENT



Metric threads and feeds are obtainable through the use of a metric transposing attachment. This accessory unit consists of a special set of gears to replace the standard end gears or feed gear.

Stock No.	M/M Pitch Range	Lathes	Weight	Price
L1671-XL	6.00 M/M to .20 M/M	XL	10 lbs.	\$ _____
L1671-S	6.00 M/M to .20 M/M	S	10 lbs.	\$ _____
L1671-M	6.00 M/M to .20 M/M	M	11 lbs.	\$ _____
50310	7.00 M/M to .20 M/M	R	18 lbs.	\$ _____

### MILLING AND KEYWAY CUTTING ATTACHMENT



An economical attachment for milling operations on a lathe. Mounts quickly on the lathe compound. AA-2039 has 2-1/2" jaws that open 2-1/2" and have jaw depth of 1-1/2". Maximum vertical travel is 3-1/2". AA-2040 has 4" wide jaws that open 4" and has jaw depth of 1-3/4". Maximum vertical travel is 6". Both have grooved jaw plate for holding round work.

Stock No.	Lathes	Weight	Price
AA-2039	XL	12 lbs.	\$ _____
AA-2040	S,M	34 lbs.	\$ _____

### MILLING ARBOR (For Milling Attachment)



One inch arbor, accurately machined, is hardened and ground. Has two 1/2" spacers and two 1/4" spacers.

Capacity between shoulder and tightening nut, 1-3/4".  
 Stock No. Morse Taper of Arbor Lathes Weight Price  
 SM-352 #5 M.T. XL,S,M 3-1/2 lbs. \$ \_\_\_\_\_



Tailstock turrets are useful for eliminating the need for second-operation set-ups and for short run jobs which demand accuracy and speed. The turret has six stations which are easily selected by a convenient trip lever. A hardened tapered indexing pin, seats in tapered sockets to assure accuracy of alignment.

Tool holes are drilled, bored and reamed in relation to the center of the arbor which fits into the tailstock spindle.

Stock No.	Size of Tool Holes	Morse Taper	Lathes	Weight	Price
AA-1961	1"	#2	XL	12 lbs.	\$ _____
AA-1962	1"	#3	S,M,R-13	12 lbs.	\$ _____
AAA-1967	1"	#4	R-15,R-17	14 lbs.	\$ _____

### COVER FOR LATHE

Non-inflammable plastic lathe cover fits over headstock and bed to keep out dust and dirt when lathe is not in use. For lathes with 56" bed lengths and under.

Stock No.	Max. Bed Length	Lathes	Weight	Price
AA-1939	56"	XL,S,M	1 lb.	\$ _____



### AIR BAR FEED

Bar feed is designed to automatically feed by air pressure, round, square, or hex bar stock into lathe spindles to a fixed stop. It will handle all sizes and shapes of stock within its capacity without set-up change. Telescoping stands give height adjustment from 38-1/2" to 50" for easy spindle alignment. Attachment is supplied complete with regulator, gage, valve, piston and two adjustable stands.

Stock No.	Bar Feed Capacity	Lathes	Weight	Price
AA-1940	1-3/8" x 12"	L, XL, S, M, R	230 lbs.	\$ _____
AA-1955	1-3/4" x 12"	R	250 lbs.	\$ _____

### PAINT

Enamel Paint is available as follows for those shops who would like to refinish old machines or standardize on Sheldon colors.

Stock No.	Quantity	Color	Weight	Price
A-2105-P	Pint	Light Grey	1-1/2 lbs.	\$ _____
A-2105-Q	Quart	Light Grey	3 lbs.	\$ _____
A-2105-G	Gallon	Light Grey	10 lbs.	\$ _____
A-2106-P	Pint	Vista Green	1-1/2 lbs.	\$ _____
A-2106-Q	Quart	Vista Green	3 lbs.	\$ _____
A-2106-G	Gallon	Vista Green	10 lbs.	\$ _____
A-2107-P	Pint	Dynamic Cream	1-1/2 lbs.	\$ _____
A-2107-Q	Quart	Dynamic Cream	3 lbs.	\$ _____
A-2107-G	Gallon	Dynamic Cream	10 lbs.	\$ _____

# LATHE TRACER ATTACHMENTS



**SINGLE AXIS TRACERS FOR FRONT OR REAR MOUNTING**

FIG. 1



FIG. 2



FIG. 3



FIG. 4

Single axis tracers mount quickly on all Sheldon lathes for rapid accurate machining of duplicate parts. They are simple to operate and their extremely compact and versatile design makes setting up so easy that one lathe can be used for both tracing and standard operations.

Tracers are available in two sizes for either front or rear mounting for R lathes. XL, S, and M lathes are supplied with the front mounted OA type only, as illustrated in Fig. 1.

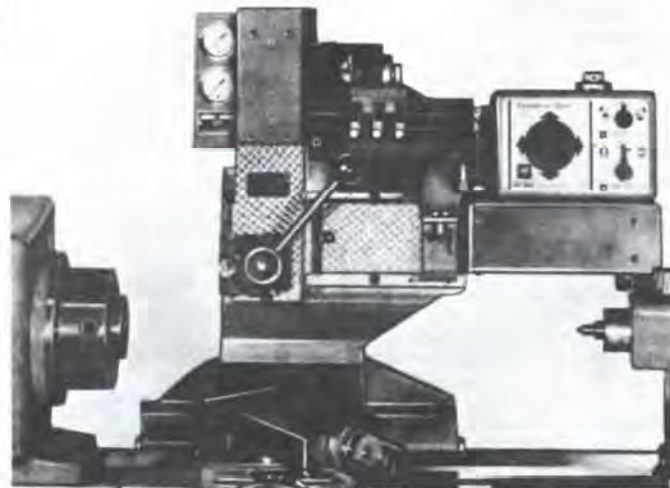
Front mounted tracers replace the compound. Metering valves, trace-retract controls and cross feed adjustment knob are all centrally grouped for operator ease. The OA type, Fig. 1, has a 3" tracing stroke and a 14" template rail, that is suitable for both turning and facing operations. The 2A series (Fig. 2, illustrated in the rear position) has a 4" tracing stroke and a 48" template rail, as illustrated in Fig. 3. An accessory facing rail, Fig. 4, is available for facing operations.

Rear mounted tracers (Fig. 2, 2A type illustrated) for R series lathes are supplied with a separate swivel base for mounting to the cross slide. This arrangement adds greatly to the versatility of the lathe, because it leaves the front tool station free for standard turning operations. Trace-retract and metering controls are front mounted for operator convenience. The template rail (not illustrated) for both the OA and 2A series, is mounted to the headstock and runs the full length of the lathe to a tail-stock support bracket.

All tracers require adjustable tool holders so that tools can be brought exactly on center.

Hydraulic pump units are 1/2 h.p., 110/220 volt, single phase, totally enclosed. They are wired for 110 volt operation and are equipped with a separate cord and plug with an integrally wired on-off switch. Tank has a 15 gallon capacity and is mounted on casters for ease in handling. Tracers use special Mobil Velocite S type oil which can be procured locally or supplied from the factory at time of shipment.

Tracer No.	Type	Lathe	Weight	
AA-2075	OA Front	XL	185 lbs.	\$ _____
AA-2076	OA Front	S	185 lbs.	\$ _____
AA-2077	OA Front	M	185 lbs.	\$ _____
AA-2086 F	OA Front	R-13	185 lbs.	\$ _____
AA-2086 R	OA Rear	R-13	250 lbs.	\$ _____
AA-2087 F	OA Front	R-15	185 lbs.	\$ _____
AA-2087 R	OA Rear	R-15	250 lbs.	\$ _____
AA-2088 F	2A Front	R-15-17	275 lbs.	\$ _____
AA-2088 R	2A Rear	R-15-17	325 lbs.	\$ _____



## TWO AXIS 90° TRACING SYSTEM

For additional versatility in accurate repetitive duplicating of both internal and external contours, the Sheldon R 13, 15 and 17" lathes can be equipped with a two axis 90° tracing system. This tracing system is capable of duplicating opposed 90° shoulders as well as any combination of grooves, radii, forms, tapers and diameters — all in one continuous cut. Mounted to the lathe carriage, the all hydraulic tracer has its own separate carriage and cross slide. These are simultaneously controlled for precision tracing of opposed 90° square shoulders, in addition to any other forms or contours desired. The need to reverse the work piece to finish trace the back side of a contour as is often required in a single axis system is eliminated. Tracer has a longitudinal stroke of 6-1/2" and a cross stroke of 3-1/2".

Pump unit has 1 h.p., 3 phase 220/440 volt totally enclosed motor to be wired by the user to his own power source. Tank has a 15 gallon capacity and is mounted on casters for ease of handling. Tracers use special Mobil Velocite S type oil which can be procured locally or supplied from the factory at time of shipment.

Tracer No.	Type	Lathe	Weight	
AA-2091	Mark 50	R-13	425 lbs.	\$ _____
AA-2092	Mark 50	R-15	425 lbs.	\$ _____
AA-2093	Mark 50	R-17	425 lbs.	\$ _____

## Adjustable Tool Posts and

### Accessories for Tracers

(Illustrated Fig. 2 and 5)



FIG. 5

Quick change tool posts (Illustrated Fig. 2) have special Round Template Holder slot dimensions. They permit instant changing of tools by simple handle rotation, sliding out tool holder and sliding in next in exact preset position. Repetitive accuracy to .0001."

Tool Post No.	Tracer No.	Weight	
AA-1963 L	AA-2075	12 lbs.	\$ _____
AA-1963 S	AA-2076	12 lbs.	\$ _____
AAA-1955	AA-2077 through AA-2087R	14 lbs.	\$ _____
AAA-1956	AA-2088 F & R	14 lbs.	\$ _____
AAA-1957	AA-2091 through AA-2093	14 lbs.	\$ _____

Turning and facing tools for above:

AA-1991	3/16 to 1/2"	AA-1963L, AA-1963S
AA-1964	1/4 to 5/8"	AAA-1955, AAA-1957
AAA-1970	1/2 to 3/4"	AAA-1956

3057-02	Round Template Holder (2-3/4" capacity for OA series . . . . .	\$ _____
3057-03	Round Template Holder (2-3/4" capacity for 2A series . . . . .	\$ _____
41112	Round Template Holder (5/16" to 3/4" capacity for Mark 50 series . . . . .	\$ _____
40733	Micrometer slide adjustment for rear mounted tracer template rail assemblies . . . . .	\$ _____
AA-2080	Hydraulic oil, three, five gallon cans (15 gal.) . . .	\$ _____



3000PQ Milling Machine, 5-1/2 x 22-1/8 table size, with back gears and quick change gear box, weight 1300 lbs.  
..... \$.....

**Standard Equipment** includes: belts, wrenches, variable speed drive, tachometer, 2 h.p., 220 volt open drip proof 3 phase motor, across the line reversing drum controller and parts and instruction manual

## EXTRA COST OPTIONS

### MAGNETIC CONTROLS

Magnetic controls protect against overload, low voltage, stalled rotor or single phasing. Specifications of this control include a size 0 magnetic reversing starter in a Nema 1 enclosure with a 50 VA control transformer to provide 110 volts to operator pushbutton stations. Pushbutton stations provide forward, reverse and stop operations.

A-1712 Magnetic Control for 220/440 volts, weight 15 lbs. \$.....

### National Machine Tool Builders Controls

NMTBA magnetic control specifications provide protection against overload, low voltage, stalled rotor or single phasing but have additional features for safety and long service life. Magnetic reversing starter is size 1 and is housed in a Nema 12 oil tight enclosure with a built in 30 amp. fusible disconnect switch. 50 VA control transformer gives safety of 110 volts to oil tight, forward, reverse and stop pushbutton stations. Stop button is large palm type with mushroom head. Wiring is with flexible, seal tight conduit with oil tight fittings.

A-1782 Control to NMTBA Standards for 220/440 volts, weight 35 lbs. \$.....

### TOTALLY ENCLOSED MOTORS

Totally enclosed fan cooled motors provide temperature rise to 55° Centigrade, and are for use in non-explosive atmosphere where excessive moisture, or abnormal dirt or dust conditions are present.

A-8312-TE 2 h.p. totally enclosed motor, 220/440 volt, 60 cycle, 3 phase, weight 90 lbs. \$.....

### OPTIONAL VOLTAGES

There is no extra charge for 208, 240, 480, or 550 volt, 50 cycle motors although these must be wound as special motors, which must be considered as an additional factor in delivery. For operation at voltages greater than 220 volts magnetic controls only are recommended.

### OTHER ELECTRICAL STANDARDS AND SPECIFICATIONS

Prices on electrical controls and components to meet other than our electrical standards and specifications will be quoted on request.



### Easily Converts to Vertical Mill with this Attachment

For increased versatility this attachment mounts directly on the overarm for vertical milling, drilling and boring operations. Powered by a 1/4 h.p. independent motor drive, the unit can be swiveled or tilted to any desired angle. Quill travel is 1-1/2" and is equipped with a micrometer depth stop graduated in thousandths for accuracy in depth settings. End mill capacity is 3/8" and collet capacity 1/2". Speeds available are 380, 700, 1200, 2500 and 5200 r.p.m. Standard equipment includes a 3/8" A-9041-Y2 collet.

7041 Vertical Milling Attachment, weight 60 lbs. . . . \$.....  
7041-Y1 Collet, 1/16 and 1/8" each, weight 1 lb. . . . . \$.....  
7041-Y2 Collet, 3/16 to 1/2" by 16ths, each, weight 1 lb. \$.....

## MILLING MACHINES AND ACCESSORIES

### ARBORS

Arbors are heat-treated, accurately ground, and have a No. 9 B&S tapered shank. They include collars, nut, drawbar, and wrench. One drawbar is used for tightening any collet within the spindle.

9001	3/4" capacity	weight 1 lb.	\$.....
9002	7/8" capacity	weight 1 lb.	\$.....
9003	1" capacity	weight 1 lb.	\$.....



**COLLETS** — These collets are used in the horizontal spindle of the mill, and the dividing head. They are spring type and have a No. 9 B&S taper. Collets are drawn into place and tightened by standard draw bar, furnished with the horizontal arbors.

9025 A-1 Collet, 1/16 only, weight 1 lb.	\$.....
9025 A Collets, 1/8 to 3/4" by 32nds, 1 lb. each	\$.....
9025 A-11, Set of 11 Collets, 1/8 to 3/4" by 16ths, weight 11 lbs.	\$.....

### DRILL CHUCK

Arbor of drill chuck has No. 9 B&S taper for use in milling machine spindle. This accessory is particularly valuable for drilling accurately spaced holes and is handy for roughing out cavities to be finished by straight type end mills.

34M	0-1/2" capacity	weight 4 lbs.	\$.....
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### UNIVERSAL DIVIDING HEAD

This is a sturdy, extremely accurate, universal dividing head, complete with tailstock and three index plates for dividing all numbers to 50 and even numbers to 100 with exception of 95. Swing is 6-1/2", and there is a 7/8" hole through spindle. Spindle has a No. 9 B&S taper, to use same style collets as in main milling spindle. The headstock body swivels 110 degrees, from 10 degrees below the horizontal axis to 10 degrees above the vertical. 40 to 1 ratio permits rapid indexing. Spindle nose is threaded 1-3/4" x 8 t.p.i. for mounting chucks.

9039 6" Dividing Head, weight 28 lbs.	\$.....
9039-28 Draw Bar for 9039 Dividing Head	\$.....

### UNIVERSAL CHUCK

Self-centering chuck fitted to the 1-3/4" by 8 t.p.i. spindle nose of the universal dividing head. The chuck is furnished with two sets of jaws for inside and outside chucking and a wrench. The thin body assures maximum capacity between dividing head and footstock.

No. 503-L, 5" 3-jaw Universal, weight 17 lbs.	\$.....
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### ROTARY TABLE

An accurate, precision ground, heavily ribbed 7" diameter rotary table, complete with keys in base, conveniently located crank handle, lock, and eccentric throw-out device for worm. Provision is made for take-up due to wear. Table is graduated 0° to 90° in each quadrant by degrees. Crank handle is graduated in 240 minutes by minutes, with a 90:1 worm and wheel ratio. The table has two 5/8" T-slots at right angles to each other for 3/8" T-bolts. Overall height of table is 2-3/4".

No. 9023, 7" diameter, weight 25 lbs.	\$.....
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### VICE, SWIVEL BASE

This sturdy vise is especially designed to give maximum vise capacity to Sheldon machines. Vise is graduated 180° and can be swiveled and locked at any angle. Other dimensions: width of jaws, 5"; depth of jaws, 1-1/2"; maximum opening with steel jaws, 3"; without steel jaws, 3-1/2"; overall length, 11"; overall height, 3-1/2".

No. A9042, Swivel vise, weight 29 lbs.	\$.....
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### COOLANT SYSTEMS

Basic coolant system consists of a 10 gallon coolant tank on casters and pump. Pump motor is 1/8 h.p., totally enclosed for operation on 110 volts. Equipped with on-off switch and 6' oil resistant cord and two-prong plug.

A-2079-1 Coolant system, weight 45 lbs.	\$.....
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Coolant system to meet NMTBA standards and for use with NMTBA magnetic controls also has 10 gallon tank, 1/8 h.p., totally enclosed, 110 volt motor, but is integrally wired through main control transformer. Wiring is with flexible, seal tight conduit with oil tight fittings and on-off operation is through oil tight pushbutton station.

A-2351 Coolant system, weight 50 lbs.	\$.....
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**LAMP** — Adjustable lamp is attractively finished in chrome and is bolted to the machine. It is furnished complete with 6 ft. oil-resistant cord and two-prong plug for operation on 110 volts. Maximum size of bulb 60 watts. Bulb not included.

A-1909 Lamp, weight 2 lbs.	\$.....
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### DRIP POT OILER

Oiler consists of an ample coolant container, petcock, flexible hose, and bracket which mounts on the column of the machine for use in short run work. Container unit is detachable from bracket for easy filling and cleaning.

A-9014 Oiler, weight 6 lbs.	\$.....
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## SHAPER AND ACCESSORIES



8000S Shaper, 13½" ram stroke, 12" swivel table with 3 working sides, weight 1800 lbs. \$ \_\_\_\_\_

Standard equipment includes: shaper vise, tool post, crank handle, wrenches, belts, table support, 2 h.p., 220 volt, 3 phase, 60 cycle, open drip proof motor, and across the line, manual, start stop pushbutton station with overload protection, parts and instruction manual.

## EXTRA COST OPTIONS

### MAGNETIC CONTROLS

Magnetic controls protect against overload, low voltage, stalled rotor or single phasing. Specifications of this control include a size O magnetic non-reversing starter, in a Nema 1 enclosure with a 50 VA control transformer to provide 110 volts to start, stop pushbutton stations.

A-1719 T Magnetic Control for 220 or 440 volts, weight 15 lbs. \$ \_\_\_\_\_

### NATIONAL MACHINE TOOL BUILDERS CONTROL

NMTBA magnetic control specifications provide protection against overload, low voltage, stalled rotor and single phasing, but have additional features for safety and long life service. Magnetic starter is size 1, non-reversing, and is housed in a Nema 12 oil tight enclosure with a 30 amp, built-in fusible disconnect switch, 50 VA control transformer provides safety of 110 volts to oil tight, start-stop, pushbutton station. Wiring is with flexible, seal tight conduit with oil tight fittings. A-1719NMTBA Control to NMTBA Standards for 220 or 440 volts, weight 30 lbs. \$ \_\_\_\_\_

### TOTALLY ENCLOSED MOTORS

Totally enclosed fan cooled motors provide temperature rise to 55° Centigrade, and are for use in non-explosive atmosphere where excessive moisture, or abnormal dirt or dust conditions are present.

H-8312-TE 2 h.p. totally enclosed motor, 220/440 volt, 60 cycle, 3 phase, weight 90 lbs. \$ \_\_\_\_\_

### AUTOMATIC OILING SYSTEM

This system provides automatic oiling of ram ways, bull gear and pinion, and rocker arm assembly. Must be ordered with shaper and installed at factory.

A-2056 Automatic Shaper Oiling System \$ \_\_\_\_\_

### SHAPER TOOL

This is a general purpose shaper tool which permits shifting the tool bit to several different angles. Each tool is individually boxed and includes wrench and one high speed tool bit.

No. 40 Shaper Tool \$ \_\_\_\_\_

2351 High Speed bits for #40 tool, 1/4 x 3/8 x 2-1/2" \$ \_\_\_\_\_

### SHAPER EXTENSION TOOL

This is a rigid and convenient tool for die work, cutting internal keyways or for other work in which extra clearance is important. Furnished complete with holder, extension bar, wrench and one high speed tool bit.

No. 47 Shaper Extension Tool \$ \_\_\_\_\_

2390 High Speed bits for No. 47 tool, 5/16" sq. x 2-1/2" \$ \_\_\_\_\_

### LAMP

Adjustable lamp is attractively finished in chrome and is bolted to the machine. It is furnished complete with 6 ft. oil-resistant cord and two-prong plug for operation on 110 volts. Maximum size of bulb 60 watts. Bulb not included.

A-1909 Lamp, weight 2 lbs. \$ \_\_\_\_\_



**SHELDON MACHINE DIV.  
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