

Operates  
from  
Lamp  
Socket

## 9-in. Junior New Model Silent Chain Motor Driven Lathe Back-Geared, Screw-Cutting Precision Lathe (Floor Leg Type)

The 9-inch Junior New Model South Bend Silent Chain Motor Driven Back Geared Screw Cutting Precision Lathe is practical for fine precision work in the manufacturing plant, tool room, laboratory, experimental shop and engineering shop. It has power, accuracy, and precision and will take care of the machining of all kinds of metals, such as steel, cast iron, wrought iron, forgings, brass, bronze, copper, aluminum, babbitt, etc., also for working of wood and compositions, such as hard rubber, fibre, etc.

The Reversing Switch (Drum Type) is conveniently located so that the operator can start, stop or reverse the motor from an easy working position in front of the lathe. The switch has three positions: Left for forward motion of the lathe spindle; center for stop, and right for reverse.

When Ordering the Lathe be sure to give specifications of electric current.

Operates from Lamp Socket. A ¼ H.P. reversing motor driven from an electric lamp

socket gives sufficient power to operate the 9" Junior Motor Driven Lathe at maximum capacity. Operating cost averages two cents per hour.

Electrical Equipment included in the price of each 9" Junior Silent Chain Motor Driven Lathe consists of a ¼ H.P. Reversing Motor 1200 R.P.M. (Westinghouse, General Electric or equal make), Reversing Switch (Drum Type), wiring between motor and switch, Flexible Metal Conduit, Wiring Diagram, and a Leather Belt.

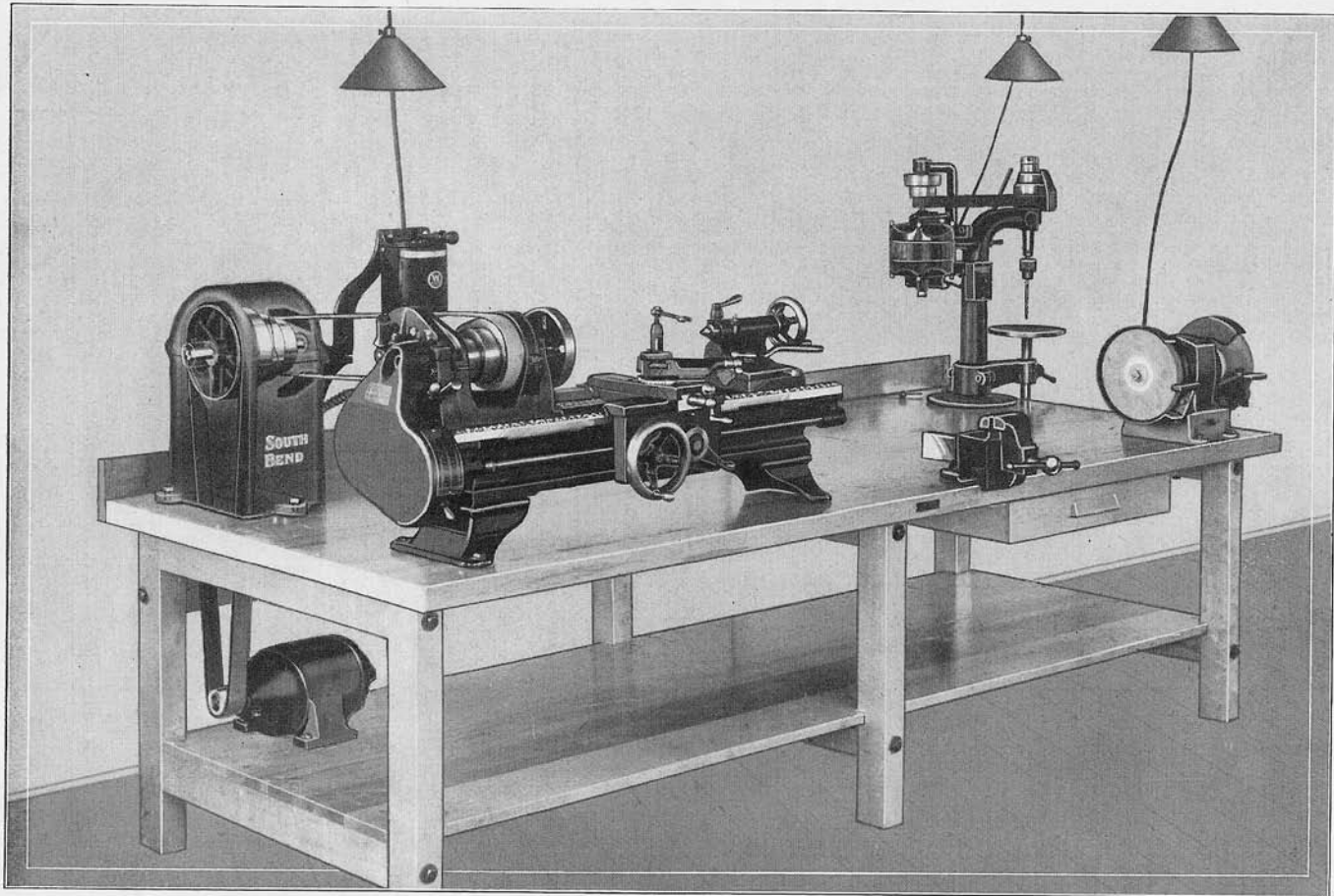
Lathe Equipment included in the price of each 9" Junior Silent Chain Motor Driven Lathe consists of: Face Plate, Tool Post Complete, Two Lathe Centers and Spindle Sleeve, Change Gears for thread cutting, Lag Screws, Washers and Wrenches, also installation Plans and instruction book, "How to Run a Lathe."

For More Complete Description of the lathe send for bulletin No. 22, which illustrates, describes and prices the 9" Junior New Model South Bend Lathe with various types of drives, also a complete line of attachments, accessories, chucks and tools.

### Net Factory Prices of 9" Junior Silent Chain Motor Driven Lathe with Floor Legs Prices Include Lathe Equipment, ¼ H.P. Reversing Motor, Reversing Switch and Leather Belt

No. of Lathe	Swing Over Bed	Length of Bed	Between Centers	Size of Motor	Weight Crated	Code Word	3 Phase 60 Cycle A.C. Motor	Single Phase 60 Cycle A.C. Motor	Direct Current Motor
322-Y	9¼ in.	3 ft.	18 in.	¼ H.P.	650 lbs.	Beuty	\$283.00	\$298.00	\$291.00
322-Z	9¼ in.	3½ ft.	23 in.	¼ H.P.	670 lbs.	Bower	289.00	304.00	297.00
322-A	9¼ in.	4 ft.	29 in.	¼ H.P.	690 lbs.	Biolo	296.00	311.00	304.00
322-R	9¼ in.	4½ ft.	36 in.	¼ H.P.	710 lbs.	Buton	304.00	319.00	312.00

If Bench Legs are wanted instead of Floor Legs deduct \$7.50



**BENCH MOTOR DRIVEN MACHINE UNIT**

A complete self-contained machine shop equipment unit consisting of individual motor driven machines mounted on one bench. Price as illustrated with bench, \$437.00; without bench, \$357.00

# Bench Motor Driven Machine Unit

The bench motor driven machine unit, illustrated on the opposite page, is a complete self-contained machine shop equipment consisting of an individual motor driven lathe, drill and grinder mounted on a substantial wood bench. A three inch machinists' vise is also included in the equipment.

## 9-in. x 4-ft. Junior Bench Lathe

The 9"x4' Junior New Model South Bend Back-Geared Screw-Cutting Bench Lathe is the same as the lathe illustrated and described on page 1, except that it is equipped with a horizontal motor drive instead of the silent chain motor drive and bench legs instead of floor legs. It will operate from an ordinary electric lamp socket at an average cost of about 2 cents per hour. The horizontal motor drive is an improved and efficient safety drive that is noiseless and powerful in operation. The cabinet top opens to permit shifting the belt on the cone pulleys.

A  $\frac{1}{4}$  H.P. Reversing Motor mounted on a shelf beneath the bench drives the countershaft in the cabinet on which the countershaft cone pulley is mounted. A  $1\frac{3}{4}$ " leather belt connects the motor with the drive pulley. A 1" leather belt from the countershaft cone drives the lathe spindle cone. Distance between the center of the countershaft and the lathe spindle is 21".

A Reversing Switch (Drum Type) conveniently located within easy reach of the operator, controls the motor and provides instantaneous starting, stopping and reversing of the lathe spindle. The switch has three positions: Left for forward motion of the lathe spindle; Center for stop; and Right for reverse.

The Electrical Equipment included with the drive unit for this lathe consists of:  $\frac{1}{4}$  H.P. Constant Speed Reversing Motor, 1200 R.P.M.; Reversing Switch (Drum Type); Wiring Between Motor and Switch; Flexible Metal Conduit; Wiring Diagram; two Leather Belts; Cast Iron Cabinet with Drive Mechanism.

The Lathe Equipment included in the price consists of: Face Plate, Tool Post Complete, two Lathe Centers and Spindle Sleeve, Wrenches, Independent Change Gears, Bolts, Nuts and Washers. Also Installation Plans and Book, "How to Run a Lathe."

Price No. 422-A 9"x4' Junior Horizontal Motor Driven South Bend Bench Lathe with 110-Volt, 60-Cycle Single Phase A.C.  $\frac{1}{4}$  H.P. Motor and Lathe Equipment Listed above \$267.00 f.o.b. South Bend.

Note: This lathe is furnished in various bed lengths and for any electrical current specifications as shown on page 4. Write for our Catalog No. 91-A giving complete description and prices.

## 10-in. Motor Drive Bench Drill

The Bench Drill Press is very popular for use with the machine unit as it is used for drilling, tapping, and reaming.

This drill press is equipped with a  $\frac{1}{4}$  H.P. motor, extension cord, toggle type switch and drill chuck. Drills 0 to  $\frac{3}{8}$ " holes to center of 10" circle. See page 4.

## 8-in. Motor Drive Bench Grinder

The bench grinder is used chiefly for sharpening tools.

The grinder illustrated is equipped with a  $\frac{1}{3}$  H.P. motor, extension cord, plug and switch. It has two grinding wheels, 8" in diameter by  $\frac{3}{4}$ " face, one fine and one coarse. Adjustable tool rests and guards are included. See page 4.

## 3-in. Machinists' Vise

This is a standard 3" machinist's vise which is strong and durable. Jaws are lined with hardened steel plates. The vise is provided with three holes for bolting to the work bench. Base is plain. The jaws are 3" wide, maximum opening is  $4\frac{1}{2}$ ". Price f.o.b. Cleveland, Ohio \$8.00.

## Wood Bench

The bench is made of fine quality hardwood 40 inches wide and 96 inches long. It is substantially constructed and has natural wood shellac finish.

The bench is shipped knocked down to save freight charges. Bolts are furnished for assembling. If you wish to make your own bench, we will supply blue prints of detailed drawings free of charge. Price of wood bench 40" wide by 96" long \$80.00 f.o.b. South Bend.

## Total Price

The total price of the South Bend Bench Machine Unit including the 9"x4' Junior New Model South Bend Lathe with the unit motor drive, the 10" bench drill press with individual motor drive, the 8" bench emery grinder with individual motor drive and two grinding wheels, 3" machinist's vise and the wood bench is \$437.00 f.o.b. South Bend.

# Motor Driven Bench Equipment

## 9-inch Junior Horizontal Motor Driven Precision Lathe

The Horizontal Motor Driven Junior Bench Lathe is the regular Junior Bench Lathe equipped with a horizontal motor drive mechanism, which is driven by a motor mounted on shelf beneath bench.

Electrical Equipment consists of motor drive mechanism and same equipment as listed for the 9" Junior Silent Chain Motor Driven Lathe on page 1.

Lathe Equipment is the same as listed for the 9" Junior Silent Chain Motor Driven Lathe on page 1.

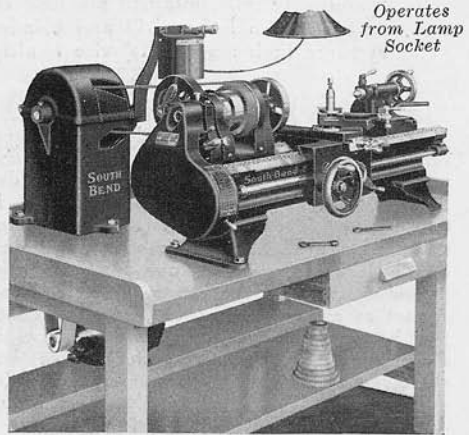


View of Drive Unit

### 9-in. Jr. Horizontal Motor Driven Lathe\*

Cat. No. of Lathe	Swing Over Bed	Length of Bed	3 Phase	1 Phase	Direct Current Motor
			60 Cycle A. C. Motor	60 Cycle A. C. Motor	
422-X	9 1/4 in.	2 1/2 ft.	\$233.00	\$248.00	\$241.00
422-Y	9 1/4 in.	3 ft.	239.00	254.00	247.00
422-Z	9 1/4 in.	3 1/2 ft.	245.00	260.00	253.00
422-A	9 1/4 in.	4 ft.	252.00	267.00	260.00
422-R	9 1/4 in.	4 1/2 ft.	260.00	275.00	268.00

\*Prices Include Lathe, Drive Cabinet, Lathe Equipment, Reversing Motor, Reversing Switch, Two Belts, But Not Bench.

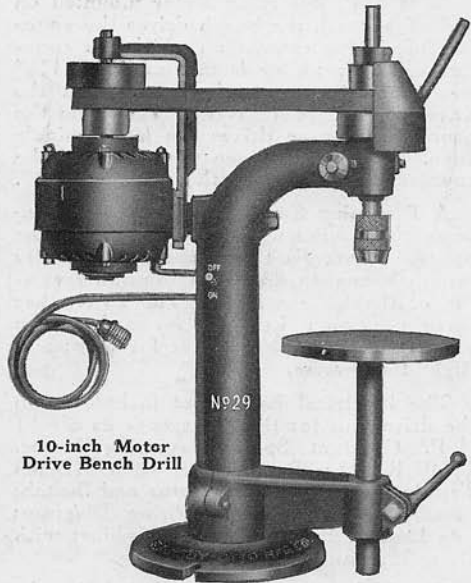


Operates from Lamp Socket

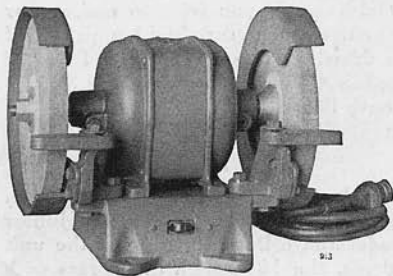
## 10-in. Motor Drive Bench Drill

The 10" bench drill illustrated at the right is the same as is shown in the bench motor driven machine unit on page 2. It drills up to 3/8" diameter hole to the center of a 10" circle. The spindle speeds are 720, 1,430 and 3,000 R.P.M. Up and down run of spindle, 2 1/2". Up and down run of table, 7". Greatest distance between spindle and table, 9". Diameter of table, 8".

This drill comes fully equipped with 1/4 H.P. 110-volt, 60-cycle, single phase vertical type motor, toggle type switch, extension cord and socket, 1" endless leather belt and chuck. All parts are accurately machined and pulleys are balanced for high speed. The spindle is equipped with ball bearing thrust, and an adjustment is provided for the correct belt tension. Net weight, 93 pounds. Complete description on request. Price f.o.b. Chicago, Ill. \$47.00.



10-inch Motor Drive Bench Drill



8-inch Motor Drive Bench Emery Grinder

## 8-in. Motor Drive Bench Emery Grinder

This is the same grinder as is shown in the equipment on page 2. It comes fully equipped with two 3/4"x8" grinding wheels—one fine and one coarse, extension cord, plug and switch. Wheel guards and adjustable tool rests are also furnished. The 1/3 H.P. 110-volt, 60-cycle, single phase motor has a speed of 1,800 R.P.M. and is equipped with dust proof bearings. Over all dimensions, 11" high by 13" wide. Shipping weight, 68 pounds. Complete description on request. Price f.o.b. Chicago, Ill., \$35.00.

# SOUTH BEND LATHE WORKS

428 East Madison Street

South Bend, Indiana, U. S. A.