

used

MONARCH TURNING MACHINES

THE MONARCH MACHINE TOOL COMPANY

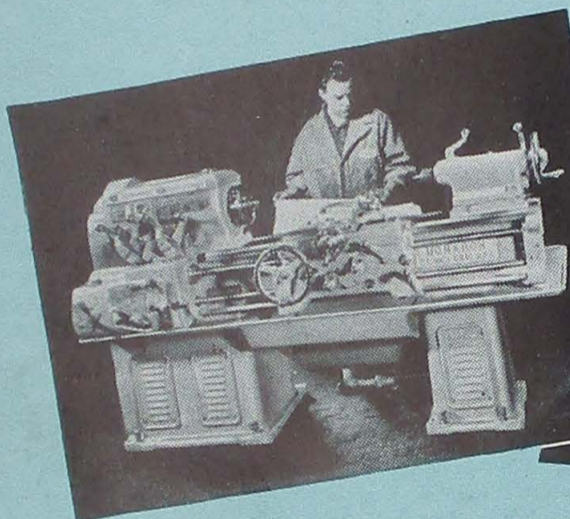
SIDNEY, OHIO

Important Message

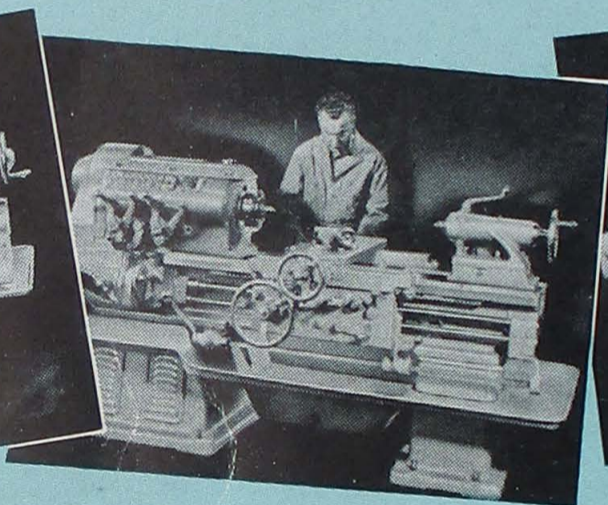
As these catalog pages are being prepared, in September, 1944, wartime restrictions on the manufacture of machine tools for postwar use are still in force. Therefore, neither new machines nor substantial improvements in the present Monarch line can be shown.

In the postwar period, we urge prospective lathe buyers to check with our nearest sales office (listed on back cover) for full information on the latest Monarch improvements over the prewar or wartime machines.

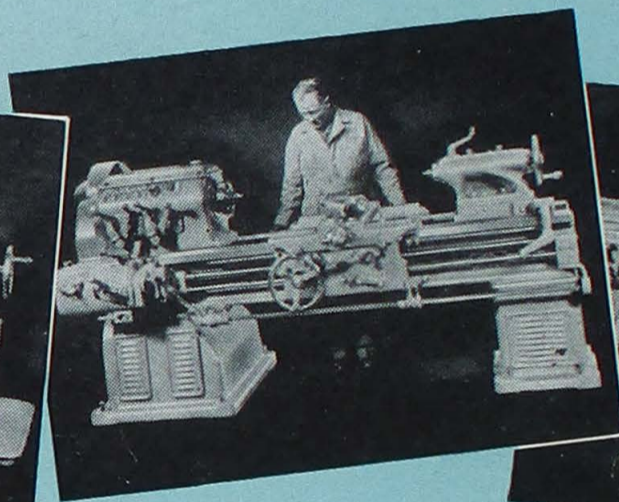
By so doing, you can be sure of postwar turning machines that will place you in a better competitive position, and help you produce more goods for more people at lower cost.



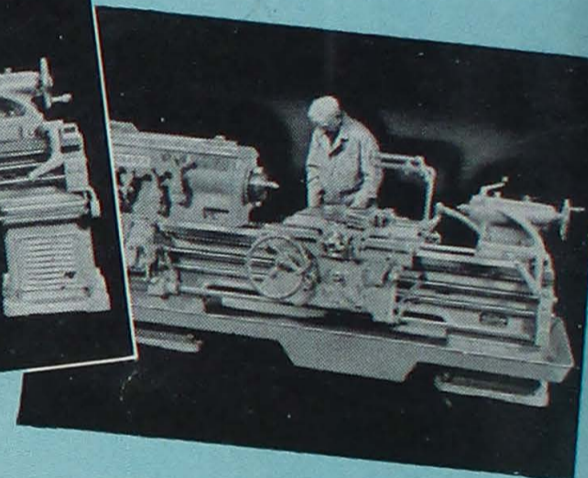
12" x 30" Monarch Lathe



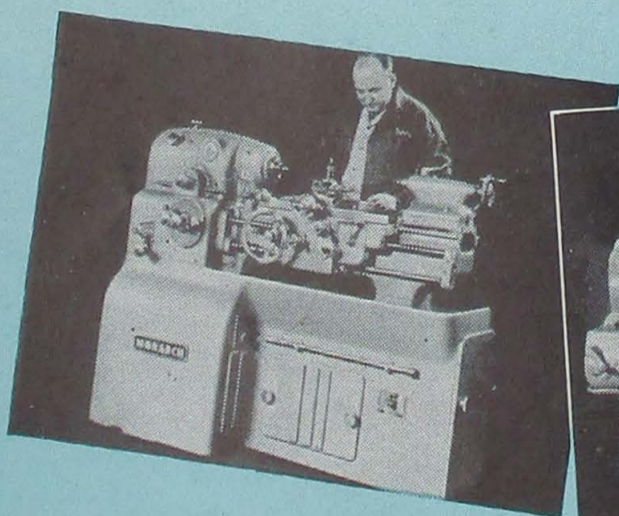
14" x 30" Monarch Lathe;
also made in size 16" x 30"



18" x 48" Monarch Lathe



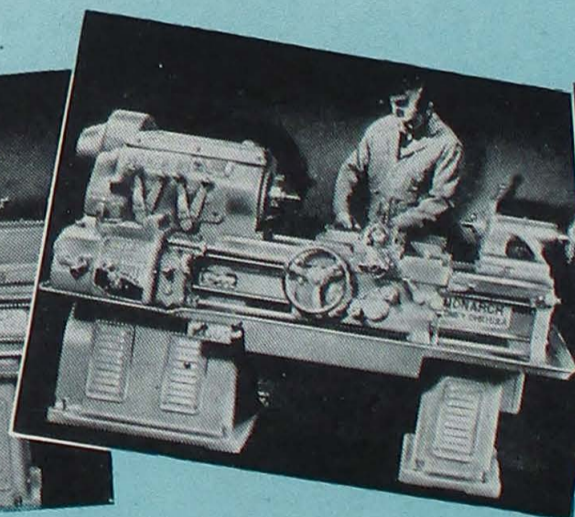
20" x 48" Monarch Lathe;
also made in size 22" x 48"



10" x 20" Monarch Sensitive
Precision Toolmaker's Lathe



12" x 30" Monarch
Toolmaker's Lathe



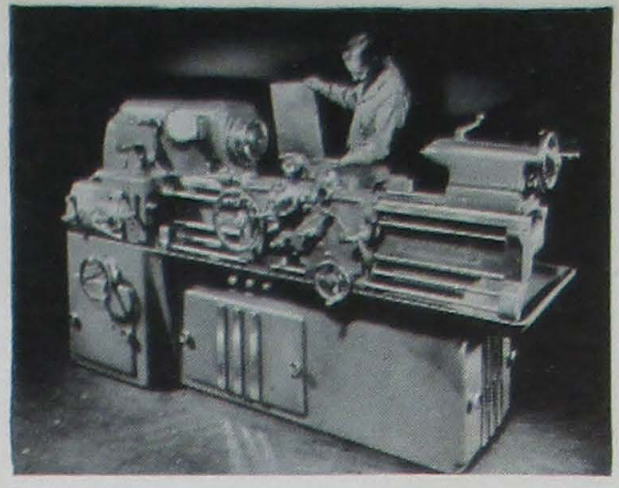
14" x 30" Monarch
Toolmaker's Lathe



16" x 30" Monarch
Toolmaker's Lathe

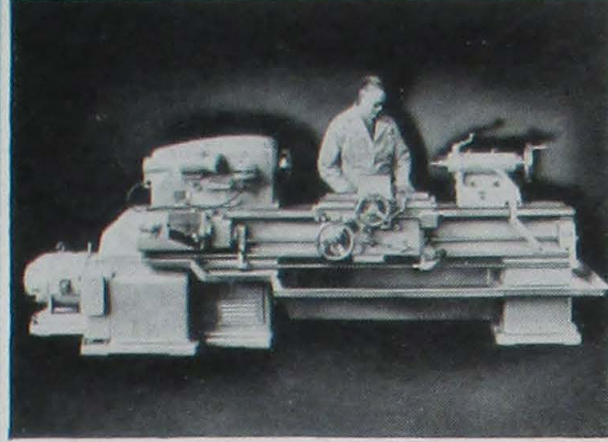
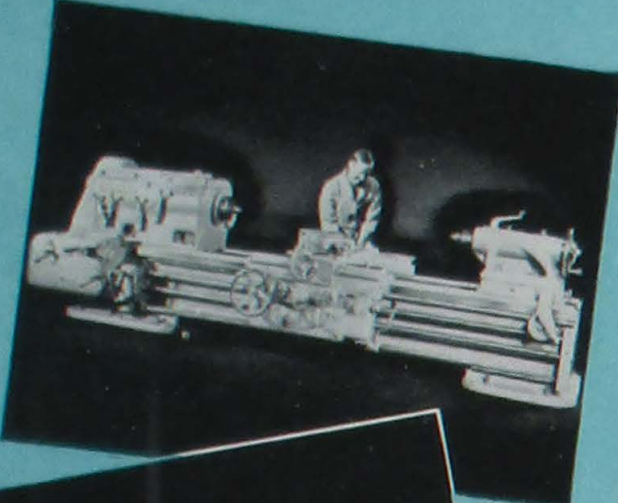
Monarch Saves

to Lathe Buyers

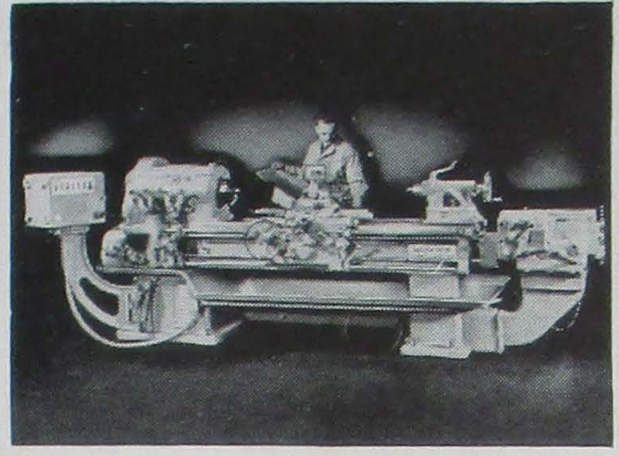


12" x 30" Stepless Spindle Speed Drive Lathe with constant surface cutting speed

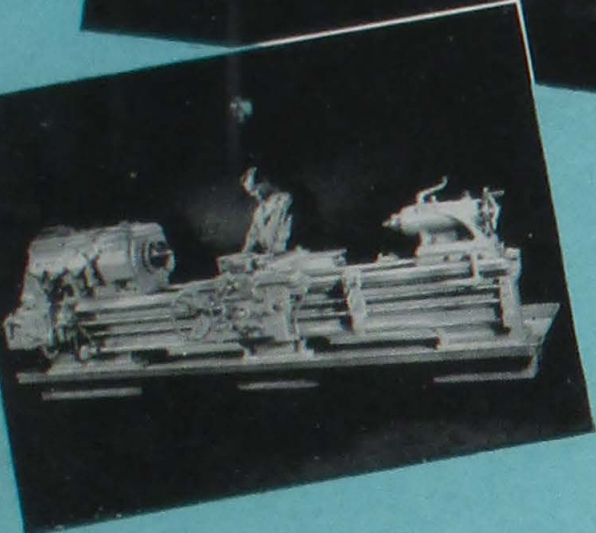
30" x 60" Monarch Lathe; also made in size 36" x 60"



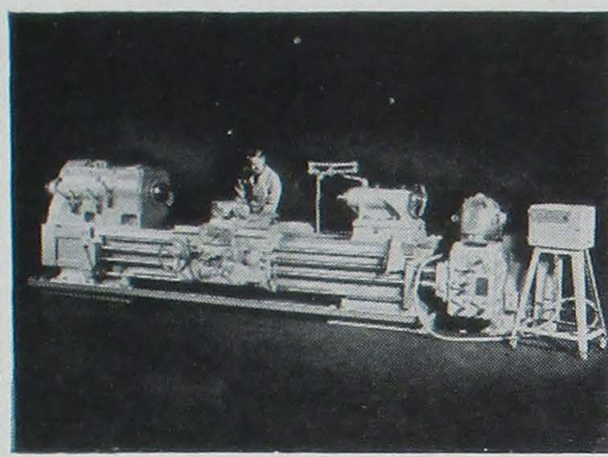
20" x 48" Stepless Spindle Speed Drive Lathe with constant surface cutting speed



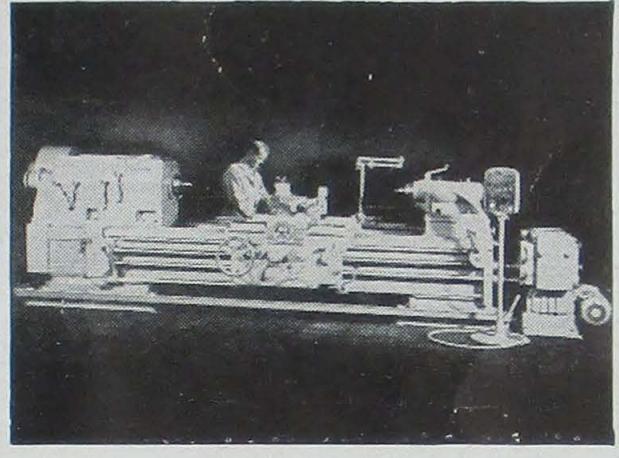
16" x 54" Monarch-Keller Lathe



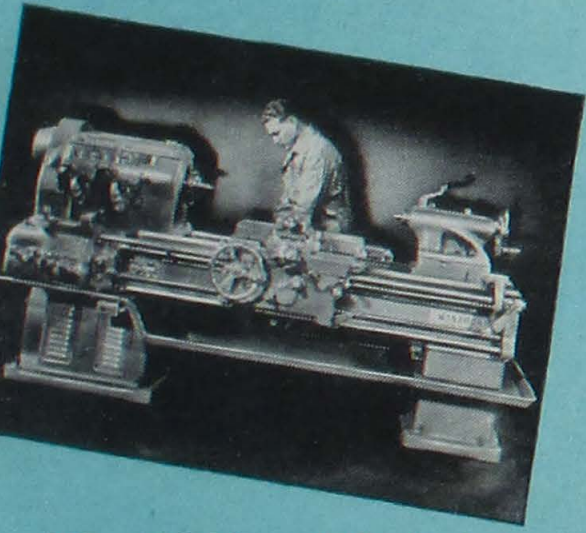
24" x 84" Monarch Lathe; also made in size 27" x 84"



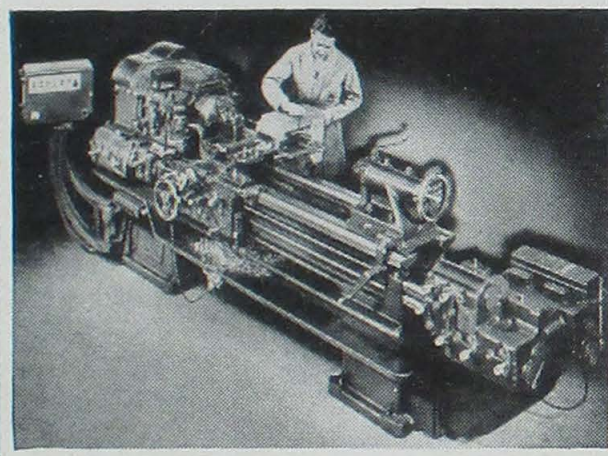
36" x 60" Monarch-Keller Lathe



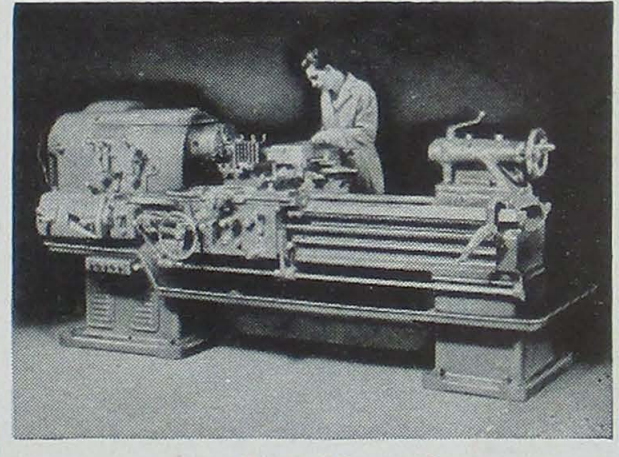
36" x 60" Monarch Automatic Sizing Machine



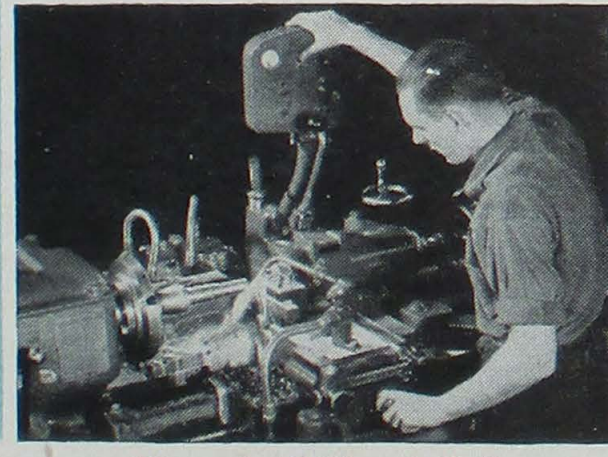
18" x 48" Monarch Toolmaker's Lathe; also made in size 20" x 48"



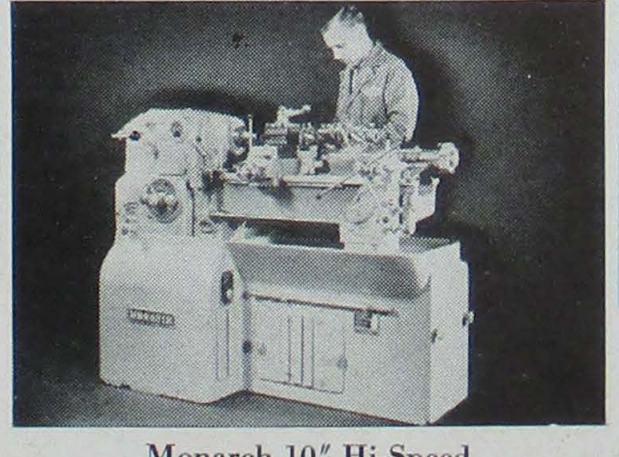
SHAPEMASTER with Keller Electric Controls



Standard Monarch SHAPEMASTER

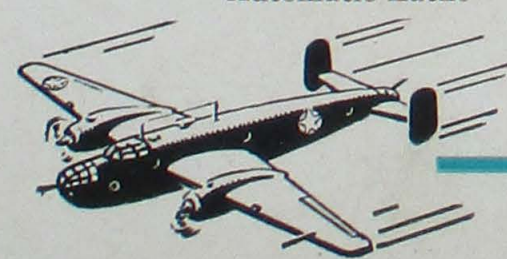


Monarch All-Electric Full Automatic Lathe

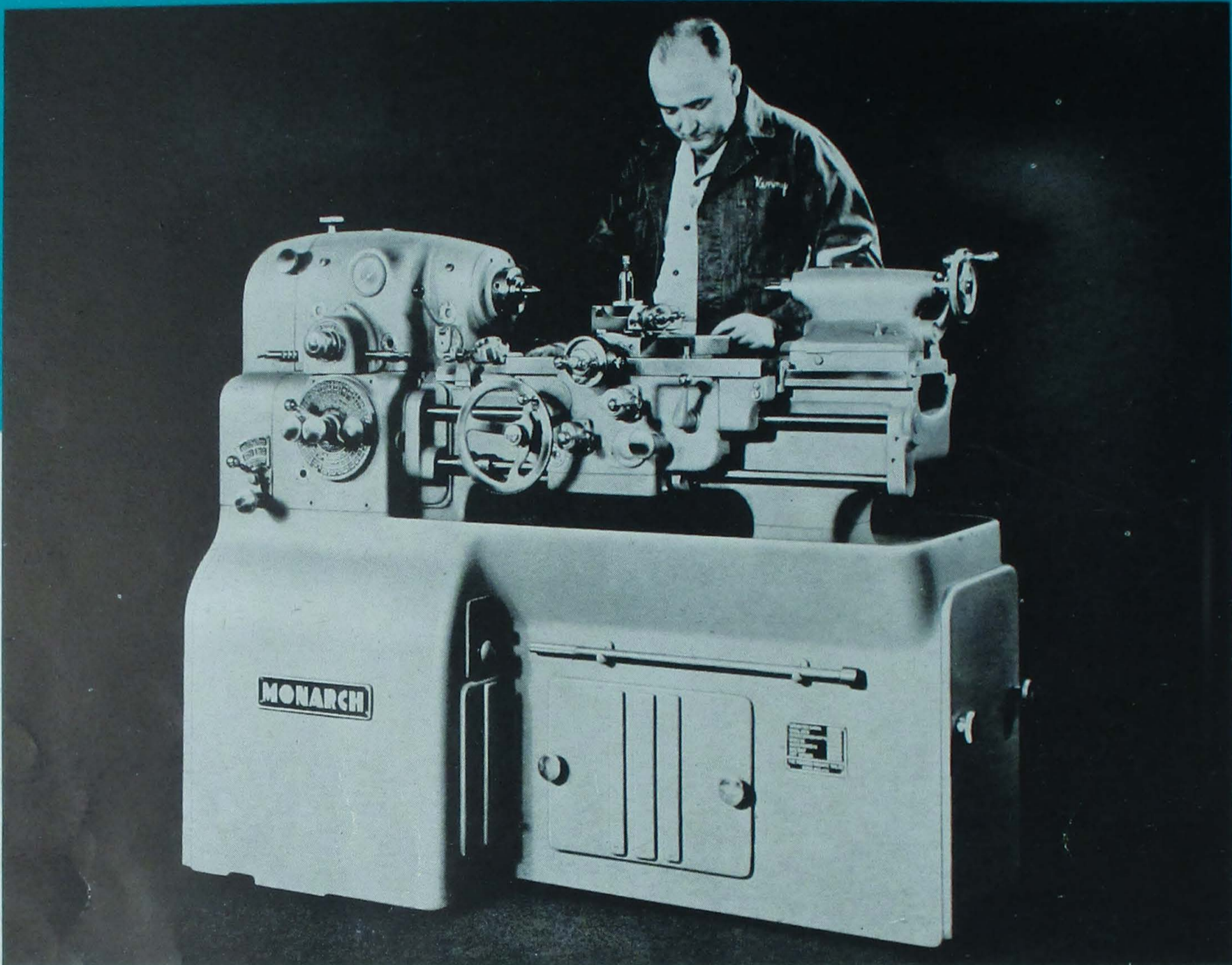


Monarch 10" Hi-Speed Manufacturing Lathe

Time



MONARCH 10" TOOLMAKERS LATHE • MODEL EE



This Sensitive Precision Toolmaker's Lathe bridges the gap between the bench precision lathe and the large regular geared head toolmaker's lathe. In many instances, it replaces the bench lathe. Electrical, stepless spindle speeds are provided, from

25 rpm to 2,500 rpm or higher. The qualities of this lathe have been proved in hundreds of war plants, where it has been especially useful in precision tool and gage making and for the production of small parts on repetitive work.

SPECIFICATIONS

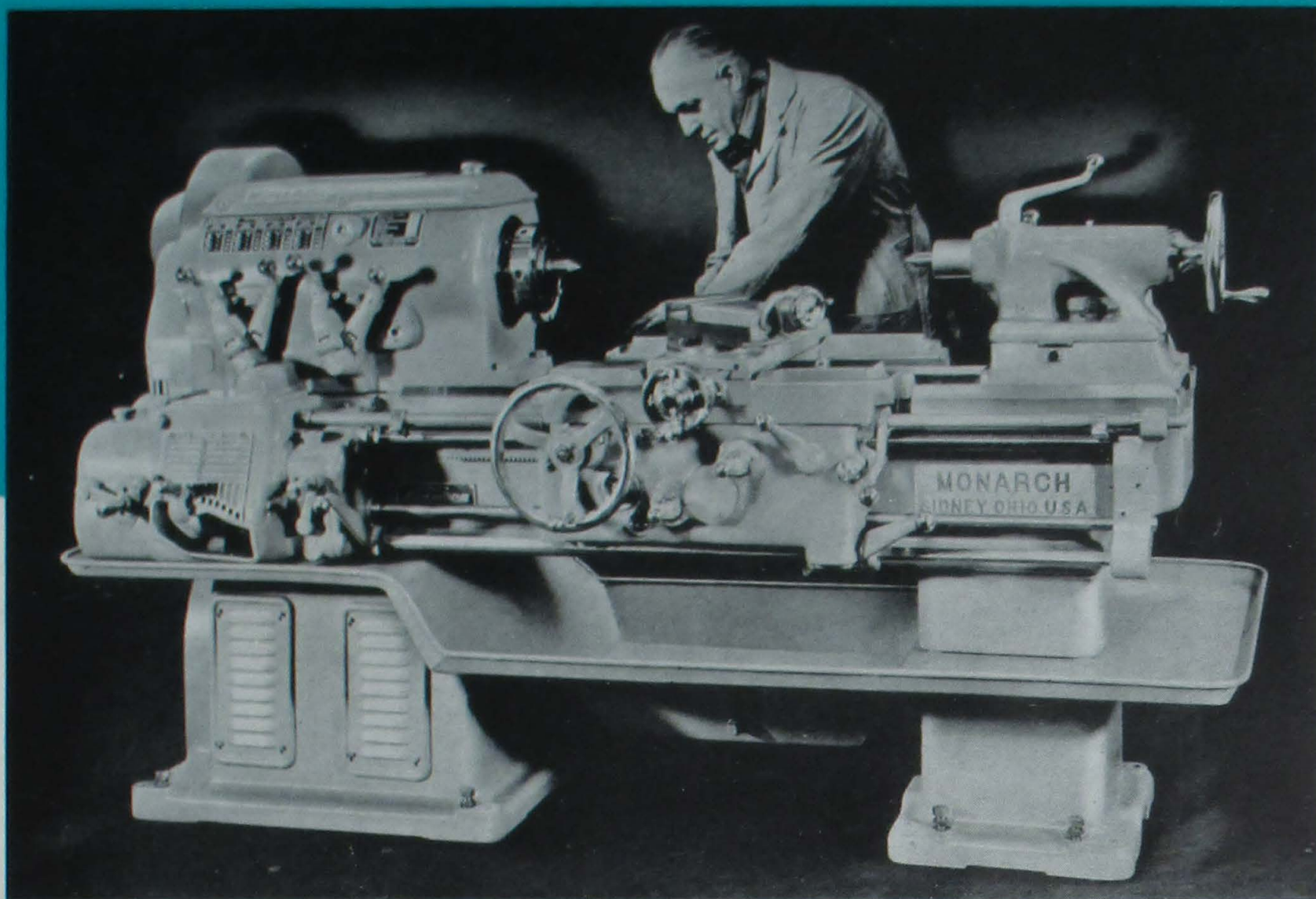
Swing over bed.....	12 $\frac{1}{2}$ "	Tailstock spindle diameter.....	1 $\frac{1}{4}$ "
Swing over compound rest.....	6 $\frac{3}{4}$ "	Carriage bridge width.....	5"
Distance between centers.....	20"	Size of lathe tool.....	$\frac{3}{8}$ " x $\frac{7}{8}$ "
Hole through spindle.....	1 $\frac{13}{32}$ "	Width of bed.....	10 $\frac{1}{2}$ "
Camlock spindle nose.....	3"-D-1	Depth of bed.....	10 $\frac{1}{4}$ "
Range of threads.....	3 to 92	Steady rest opening.....	3"
Range of feeds.....	.001" to .061"	Range of spindle speed.....	Optional
Number of thread and feed changes	50	Net weight without accessories...	2,900 lbs.

STANDARD REGULAR EQUIPMENT

Includes 3 hp 100 to 1 variable-speed electric drive with magnetic switch with start and stop push-button station, built-in leadscrew reverse operated from headstock, built-in oil pan (reservoir type),

cabinet base, large (T-slotted) faceplate, small faceplate, compound rest, steady rest, follow rest, precision dial type micrometer carriage stop, chasing dial, chasing stop, tool post, centers and wrenches.

MONARCH TOOLMAKERS LATHE • MODEL C



The Monarch line of toolmaker's lathes, from 12" to 20" inclusive, is an entirely separate line from the similar sizes of heavy-duty production lathes. They include all the outstanding

Monarch features, such as flame-hardened bedways, Camlock spindle nose, hardened and ground gears, and other advantages which make for fast, accurate production and long lathe life.

SPECIFICATIONS

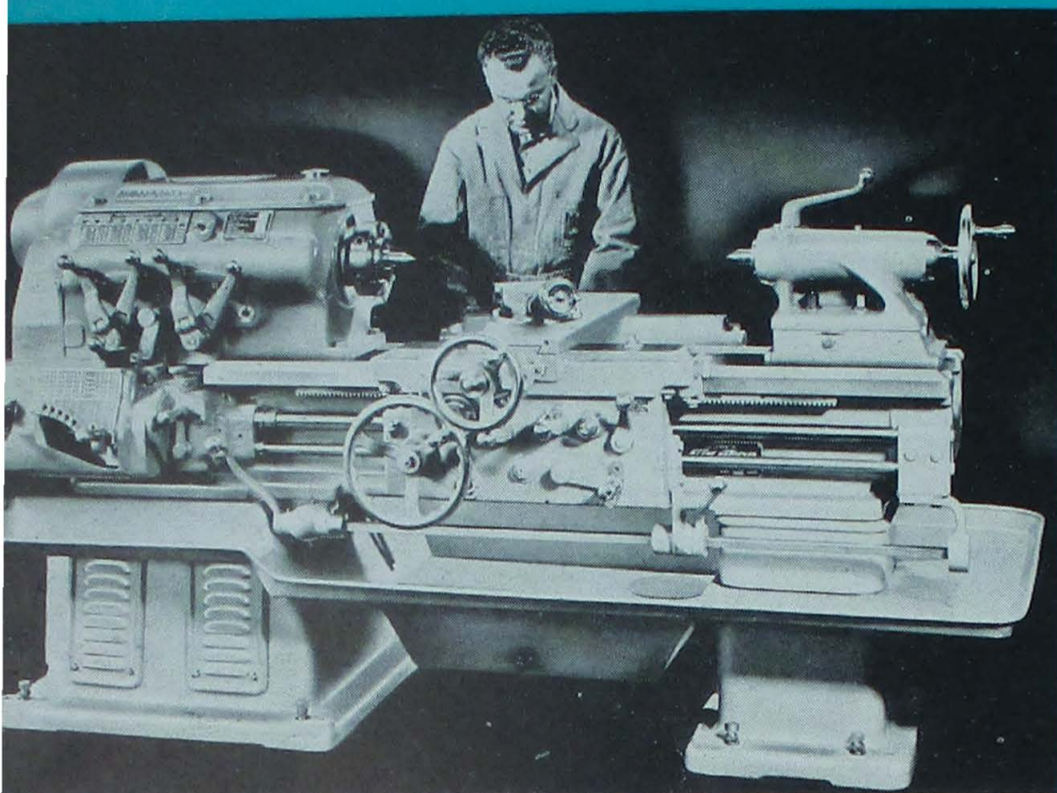
	12" MODEL C	14" MODEL C	16" MODEL C	18" MODEL C	20" MODEL C
Swing over bed.....	14½"	16½"	18½"	20½"	22½"
Swing over cross slide.....	8¼"	9"	11"	12"	14"
Takes between centers, tailstock flush...	30"	30"	30"	48"	48"
Base length shipping weight, without motor.....	3,300 lbs.	4,300 lbs.	4,800 lbs.	6,000 lbs.	6,200 lbs.
Weight each additional two feet.....	275 lbs.	300 lbs.	360 lbs.	400 lbs.	400 lbs.
Hole through spindle.....	1 5/16"	1 9/16"	1 9/16"	1 9/16"	1 9/16"
Camlock spindle nose.....	6"-D-1	6"-D-1	6"-D-1	6"-D-1	6"-D-1
Range of threads per inch, quick-change.....	1½ to 92	2 to 120	2 to 120	2 to 120	2 to 120
Range of feeds per revolution, quick-change.....	.0023" to .140"	.0028" to .168"	.0028" to .168"	.0028" to .168"	.0028" to .168"
Number of threads and feed changes, regular quick-change.....	48	60	60	60	60
Tailstock spindle diameter.....	2 3/8"	2 7/8"	2 7/8"	3 3/8"	3 3/8"
Steady rest opening, regular.....	4½"	5"	5"	6"	6"
Carriage bridge width.....	6"	8"	8"	9"	9"
Size of lathe tool.....	½" x 1 1/8"	5/8" x 1 3/8"	5/8" x 1 3/8"	¾" x 1 5/8"	¾" x 1 5/8"
Motor, size recommended.....	3 to 5 hp	5, 7½ to 10 hp	5, 7½ to 10 hp	7½ to 10 hp	10 hp
Width of bed.....	12"	14 3/4"	16 3/4"	18 1/2"	18 1/2"
Depth of bed.....	12"	12 1/2"	13"	12 1/4"	12 1/4"
Length between centers.....	30", 54", 78" & 102"	30", 54", 78", 102" & 126"	30", 54", 78", 102" & 126"	48", 72", 96", 120" & 144"	48", 72", 96", 120" & 144"

REGULAR EQUIPMENT consists of large and small faceplates, steady rest, compound rest, centers, chasing dial, chasing stop, apron controlled leadscrew re-

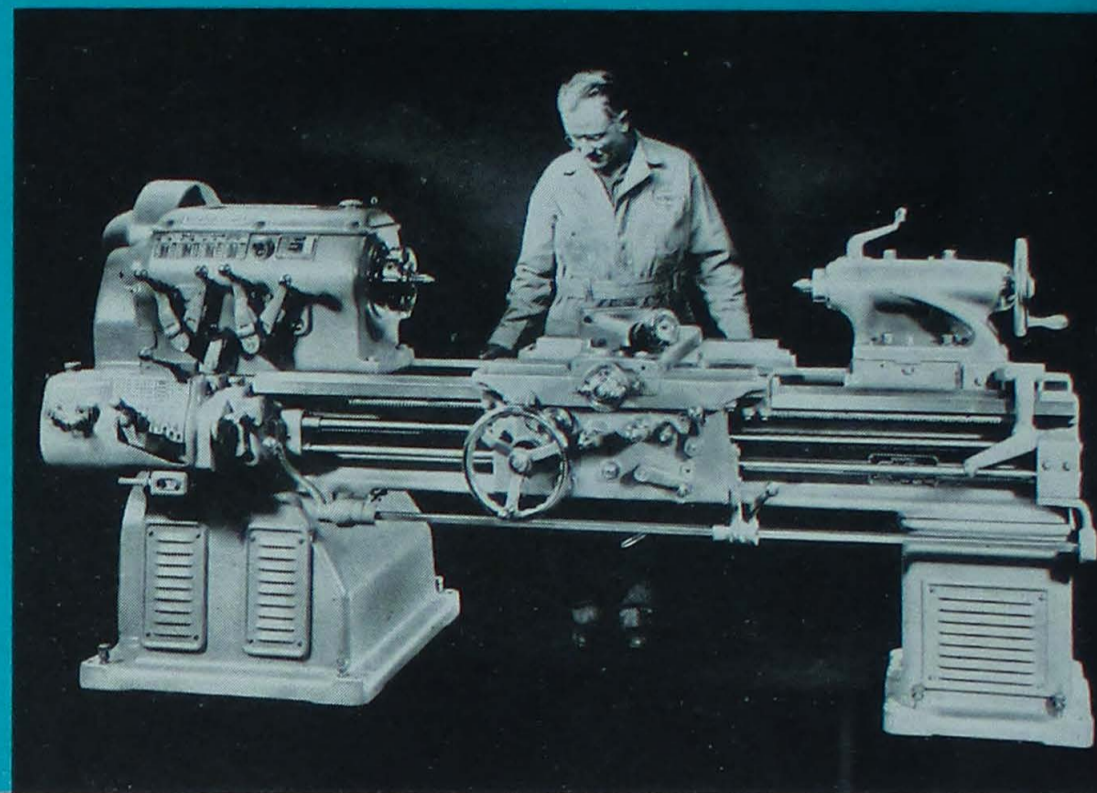
verse, tool post, oil pan and wrenches. Equipped with automatic force-feed lubrication to carriage, bedways, compound rest and apron.

MONARCH PRODUCTION LATHES

MODEL W



MODEL BB



GENERAL DESCRIPTION — Headstocks on all Monarch geared head type lathes provide 16 changes of spindle speeds. All gearing inside the headstock is helical. Gears are heat-treated and tooth contours ground after hardening. All gear changes are made by sliding, heavy, double-sided jaw clutches mounted on ground splines on the spindle and intermediate shafts. Lubrication system combines splash and force feed,

with an oil distributing system to all parts of the headstock that do not dip in the reservoir. For high speed operation, a new method of lubrication reduces frictional heat and prolongs the life of bearings and headstock parts. All shafts in headstock are mounted on anti-friction bearings. All spindles and shafts in headstock and throughout the lathe are heat-treated and hardened. Spindle nose is of Camlock type.

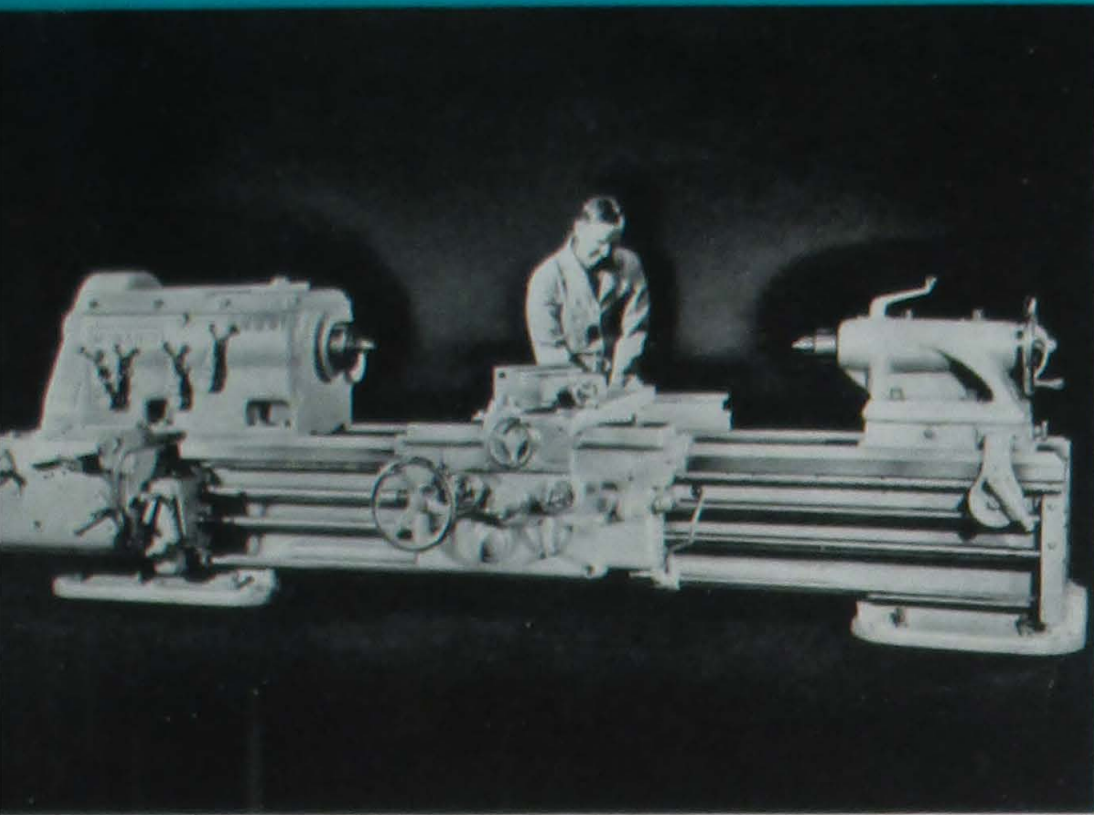
SPECIFICATIONS

	12" MODEL KK	14" MODEL AA	16" MODEL W	18" MODEL BB
Swing over bed.....	14½"	16½"	18½"	20½"
Swing over compound rest.....	8¼"	9"	11"	12"
Takes between centers, tailstock flush.....	30"	30"	30"	48"
Base length weight without motor.....	3,300 lbs.	4,600 lbs.	4,750 lbs.	5,600 lbs.
Weight each additional two feet.....	275 lbs.	330 lbs.	330 lbs.	370 lbs.
Hole through spindle.....	1⅝"	1⅝"	1⅝"	1⅝"
Camlock spindle nose.....	6"-D-1	6"-D-1	6"-D-1	6"-D-1
Range of threads per inch, quick-change.....	1½ to 92	1½ to 92	1½ to 92	1½ to 92
Range of feeds per revolution, quick-change.....	.0023" to .140"	.0038" to .240"	.0038" to .240"	.0038" to .240"
Number of thread and feed changes.....	48	48	48	48
Headstock base length.....	24"	28"	28"	28"
Tailstock spindle diameter.....	2⅜"	2⅞"	2⅞"	3⅜"
Steady rest opening, regular.....	4½"	5"	5"	6"
Carriage bridge width.....	6"	8"	8"	9"
Size of lathe tool.....	½" x 1⅛"	⅝" x 1⅜"	⅝" x 1⅜"	¾" x 1⅝"
Motor, size recommended.....	3 to 7½ hp	5 to 10 hp	5 to 10 hp	7½ to 10 hp
Width of bed.....	12"	16¾"	16¾"	18½"
Depth of bed.....	12"	12"	12"	12"
Distance between centers in multiples of 2'.....	30" to 102"	30" to 14'6"	30" to 14'6"	4' to 18'

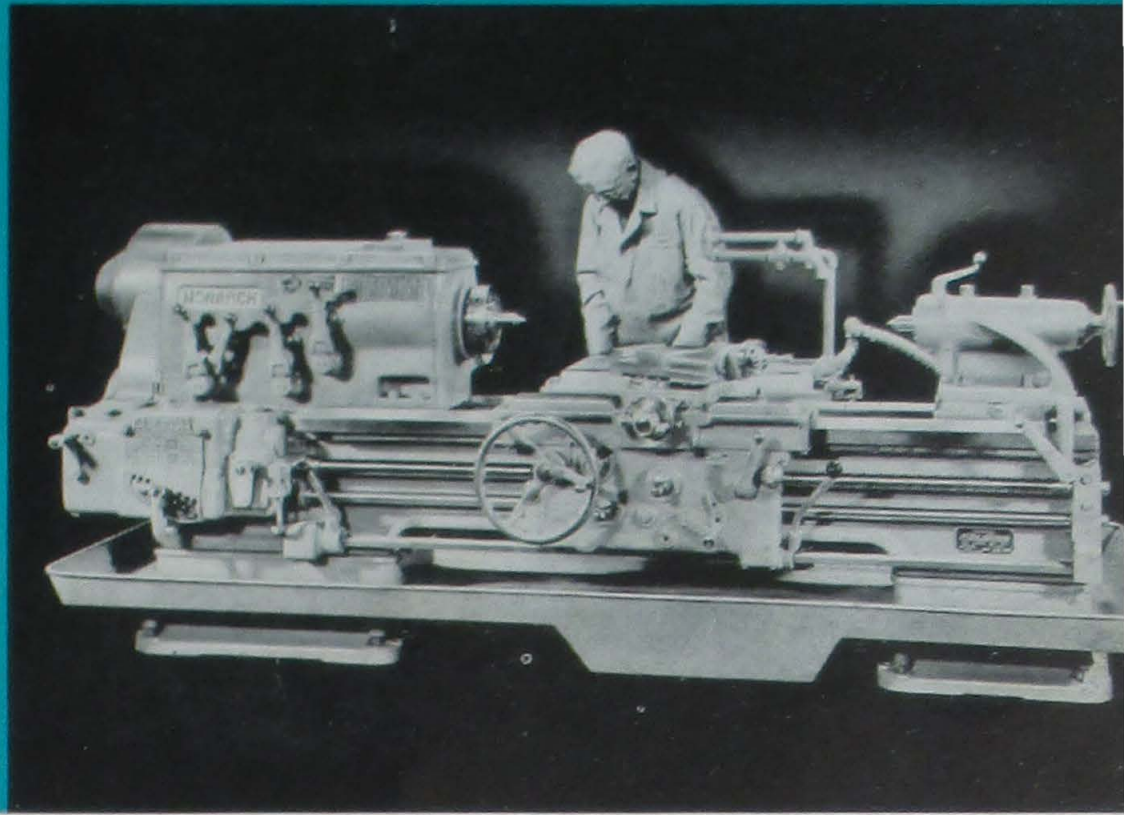
REGULAR EQUIPMENT consists of large and small faceplates, steady rest, compound rest, centers, round tool post, chasing dial, chasing stop and wrenches. Equipped with automatic force-feed lubrication to carriage, bedways, compound rest and apron.

MONARCH PRODUCTION LATHES

MODEL M



MODEL N



BEDS are flame-hardened by exclusive Monarch process and precision-ground. TAILSTOCK BASES are provided with oil reservoir, for lubrication between base and bedways, and are protected by wipers. Tailstock barrels are honed after finish boring. Tailstock spindles are heat-treated and ground, and graduated with length scale measurements.

END GEAR TRAIN has all gears heat-treated, with bores ground and tooth contours either ground or shaved after hardening. All end gears are mounted on anti-friction bearings.

QUICK-CHANGE GEAR BOX has all shafts heat-treated. Shafts rotate on anti-friction bearings, with gears ground or shaved after heat treatment.

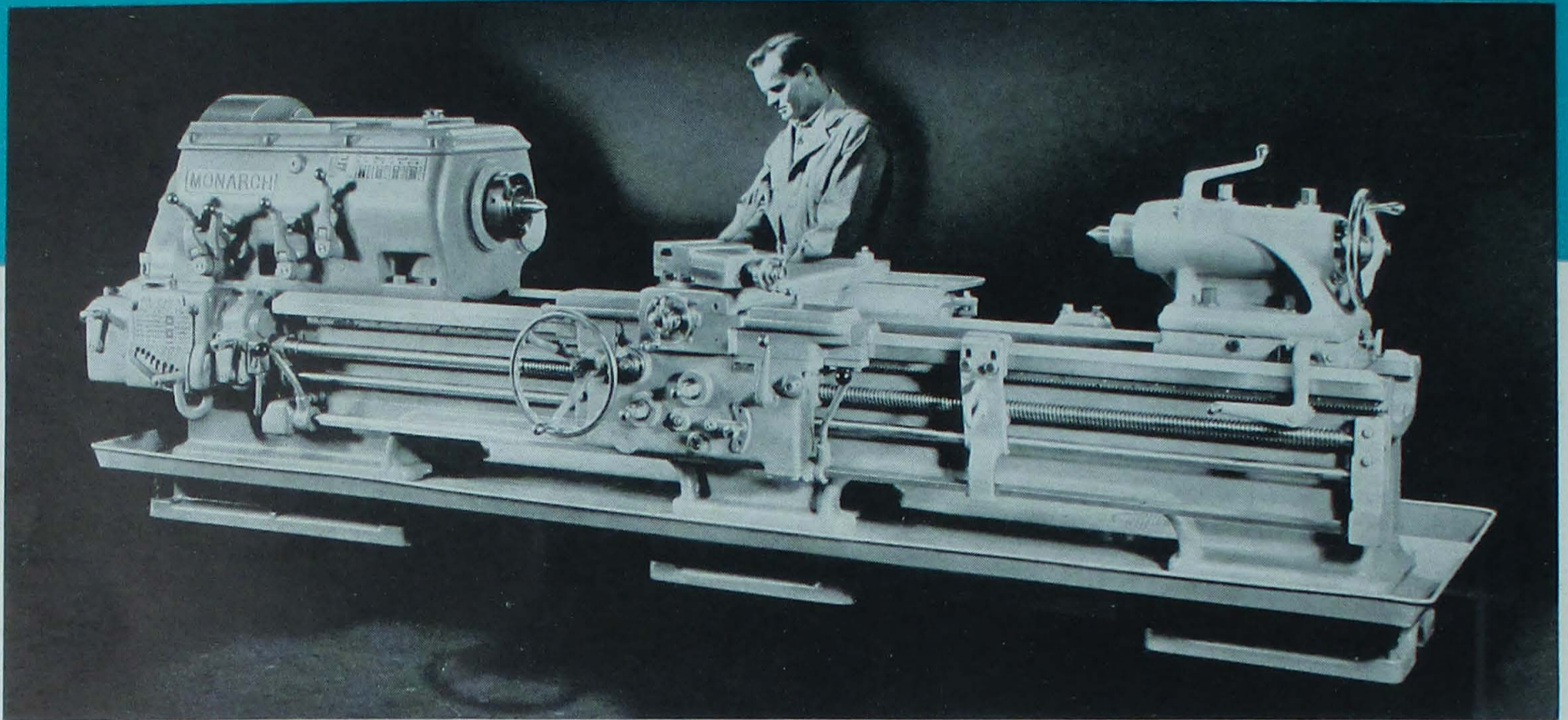
SPECIFICATIONS

	20" MODEL M	22" MODEL M	24" MODEL N	27" MODEL N
Swing over bed.....	22½"	24½"	27½"	30½"
Swing over compound rest.....	13"	15"	14"	18"
Takes between centers, tailstock flush.....	48"	48"	60"	60" 84" 16,110
Base length shipping weight.....	10,100 lbs.	10,300 lbs.	14,800 lbs.	15,300 lbs.
Weight extra two feet.....	600 lbs.	600 lbs.	800 lbs.	800 lbs.
Hole through spindle.....	2 3/16"	2 3/16"	2 3/16"	2 3/16"
Camlock spindle nose.....	8"-D-1	8"-D-1	8"-D-1	8"-D-1
Range of threads per inch, quick-change.....	¾ to 46	¾ to 46	¾ to 46	¾ to 46
Range of feeds per revolution, quick-change.....	.0038" to .240"	.0038" to .240"	.0038" to .240"	.0038" to .240"
Number of thread and feed changes, regular quick-change.....	48	48	48	48
Headstock base length.....	40"	40"	47¼"	47¼"
Tailstock spindle diameter.....	4"	4"	4 7/8"	4 7/8"
Steady rest opening, regular.....	7"	7"	11"	11"
Carriage bridge width.....	9 3/4"	9 3/4"	12"	12"
Size of lathe tool.....	¾" x 1 5/8"	¾" x 1 5/8"	7/8" x 1 3/4"	7/8" x 1 3/4"
Motor, size recommended, ordinary service.....	10 to 15 hp	10 to 15 hp	10 to 20 hp	10 to 20 hp
Motor, size recommended, heavy-duty service.....	20 to 25 hp	20 to 25 hp	20 to 30 hp	20 to 30 hp
Width of bed.....	21 3/4"	21 3/4"	25"	25"
Depth of bed.....	13 7/8"—17 1/4"	13 7/8"—17 1/4"	15 7/8"—23"	15 7/8"—23"
Distance between centers in multiples of 2'.....	4' to 24'	4' to 24'	5' to 23'	5' to 23'

REGULAR EQUIPMENT includes large and small faceplates, steady rest, compound rest, centers, high-duty tool post with two screws, chasing dial, chasing stop and wrenches. Equipped with automatic force-feed lubrication to carriage, bedways, compound rest and apron.

MONARCH PRODUCTION LATHES

MODEL NN



APRONS are of heavy wall box section type, with force-feed, pump lubrication. All shafts and gears are heat-treated. Rotating parts mounted on anti-friction bearings.

CARRIAGES have long wings to provide extra bear-

ing support on the bed, and to withstand strain under heavy cuts. Wipers are used on carriage wings.

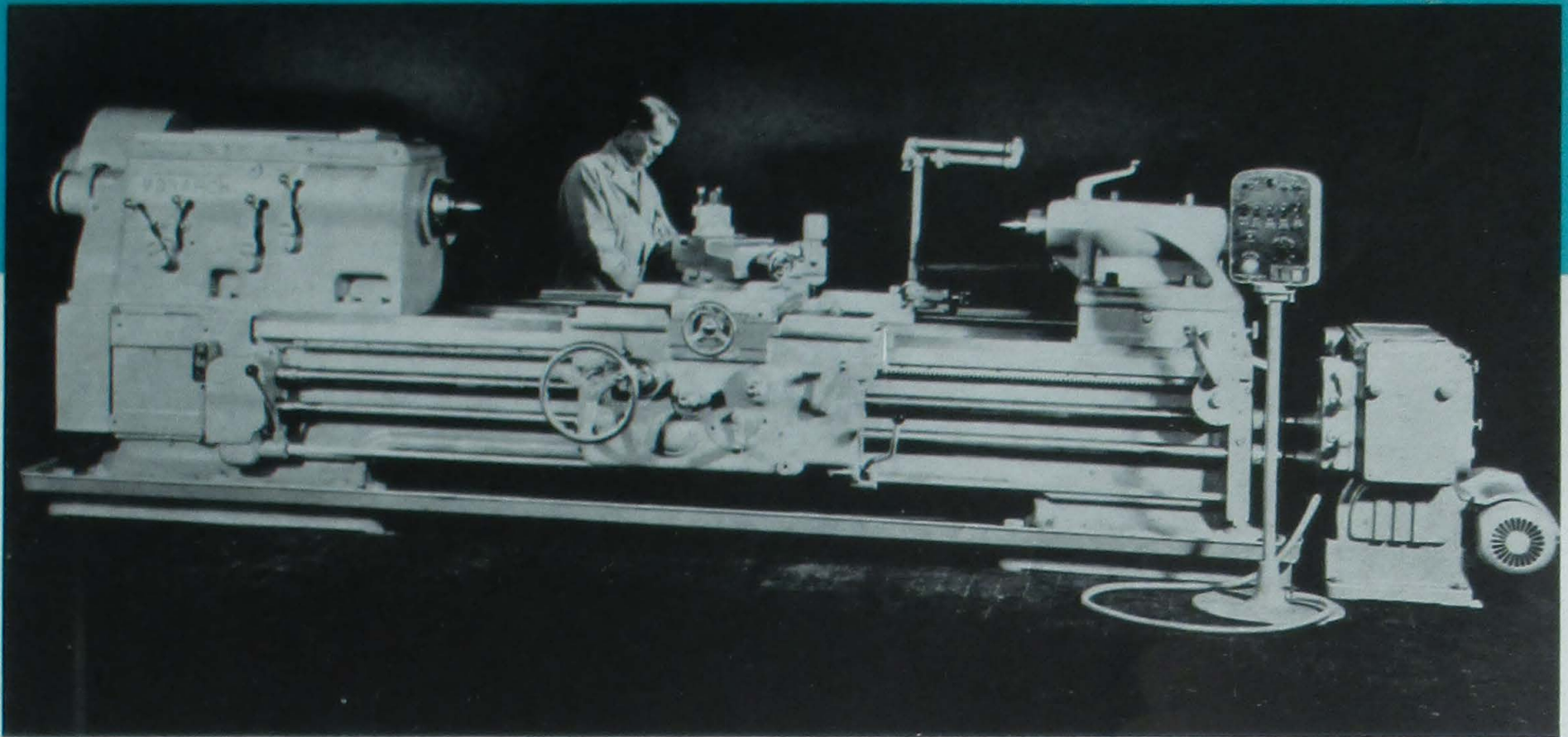
LEADSCREWS are chased from special high carbon, free-cutting steel. Monarch patented correcting device enables chasing of extremely accurate leadscrews.

SPECIFICATIONS

	30" MODEL NN	36" MODEL NN
Swing over bed.....	34½"	37½"
Swing over compound rest.....	18"	21½"
Takes between centers, tailstock flush.....	60"	60"
Base length shipping weight.....	20,500 lbs.	21,500 lbs.
Weight extra two feet.....	1,100 lbs.	1,100 lbs.
Hole through spindle.....	2⅜"	2⅜"
Camlock spindle nose.....	8"-D-1	8"-D-1
Range of threads per inch, quick-change.....	½ to 28	½ to 28
Range of feeds per revolution, quick-change.....	.006" to .363"	.006" to .363"
Number of threads and feed changes, regular quick-change.....	48	48
Headstock base length.....	47¼"	47¼"
Tailstock spindle diameter.....	4⅞"	4⅞"
Steady rest opening, regular.....	12"	12"
Carriage bridge width.....	14½"	14½"
Size of lathe tool.....	7/8" x 1¾"	7/8" x 1¾"
Motor, size recommended, ordinary service.....	20 to 25 hp	20 to 25 hp
Motor, size recommended, heavy-duty service.....	30 to 40 hp	30 to 40 hp
Width of bed.....	31½"	31½"
Depth of bed.....	19"—26½"	19"—26½"
Distance between centers in multiples of 2'.....	5' to 23'	5' to 23'

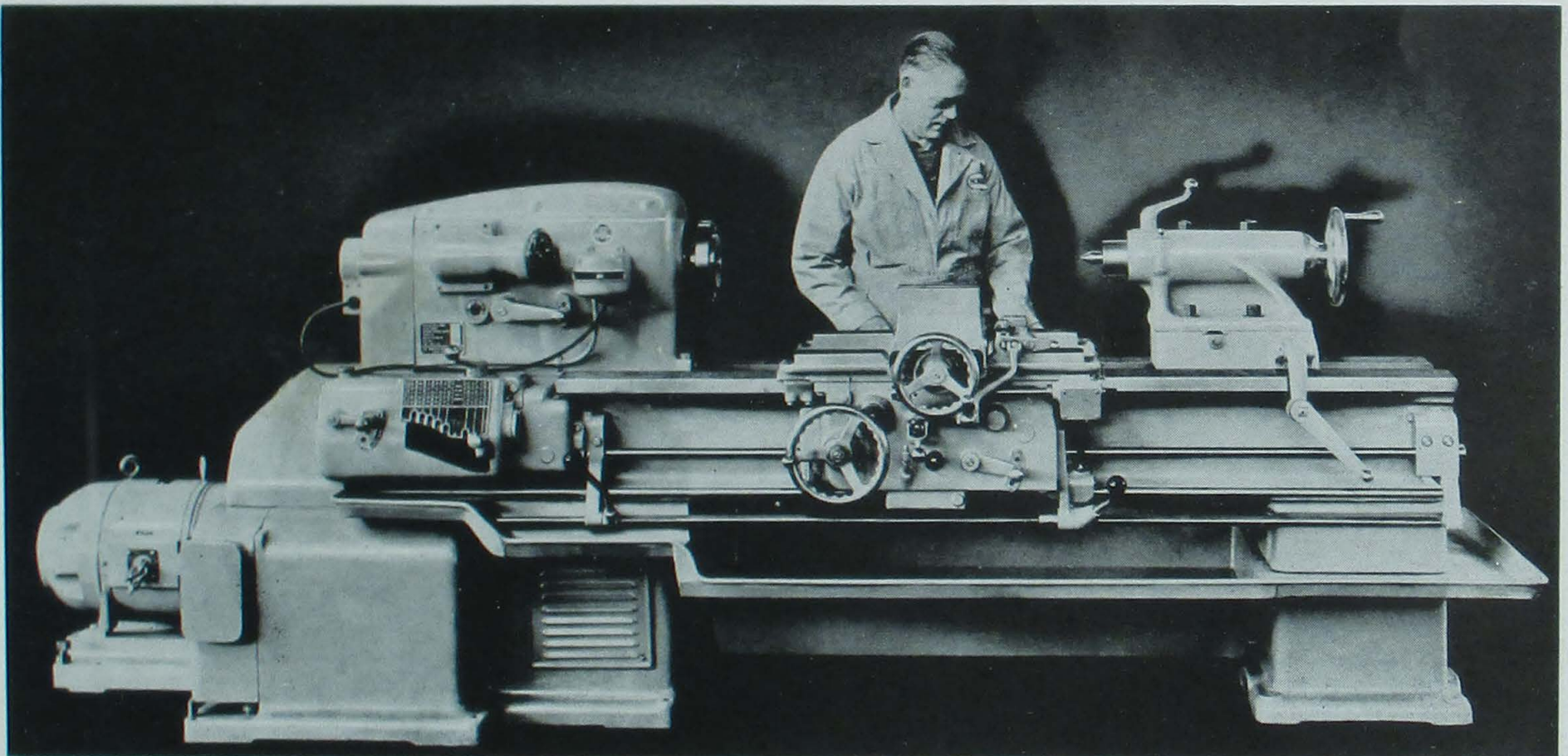
REGULAR EQUIPMENT includes large and small faceplates, high-duty tool post with two screws, compound rest, steady rest, centers, chasing dial, chasing stop and wrenches. Equipped with automatic force-feed lubrication to carriage, bedways, compound rest and apron.

MONARCH AUTOMATIC SIZING MACHINE



MONARCH AUTOMATIC SIZING makes the production lathe an automatic machine for such work as step turning, step boring, step facing, many classes of

contour work or a combination of all these types of work. Automatic Sizing controls can be applied to all Monarch Lathes larger than the 12" size.

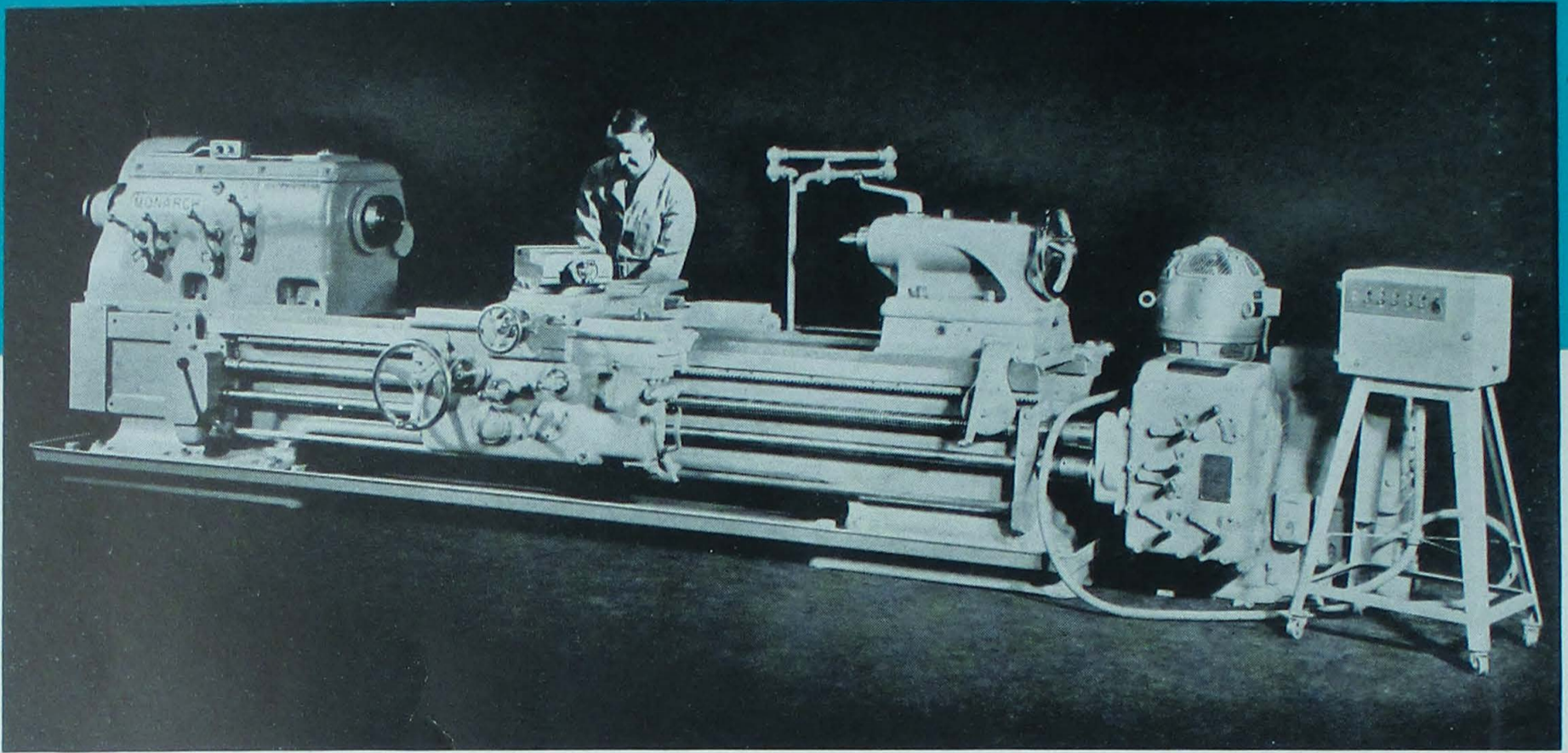


STEPLESS SPINDLE SPEED DRIVE LATHE

These lathes are available in 16" and 20" size, driven by electrical means, giving 100 to 1 stepless spindle speeds. Constant surface cutting speed control can be

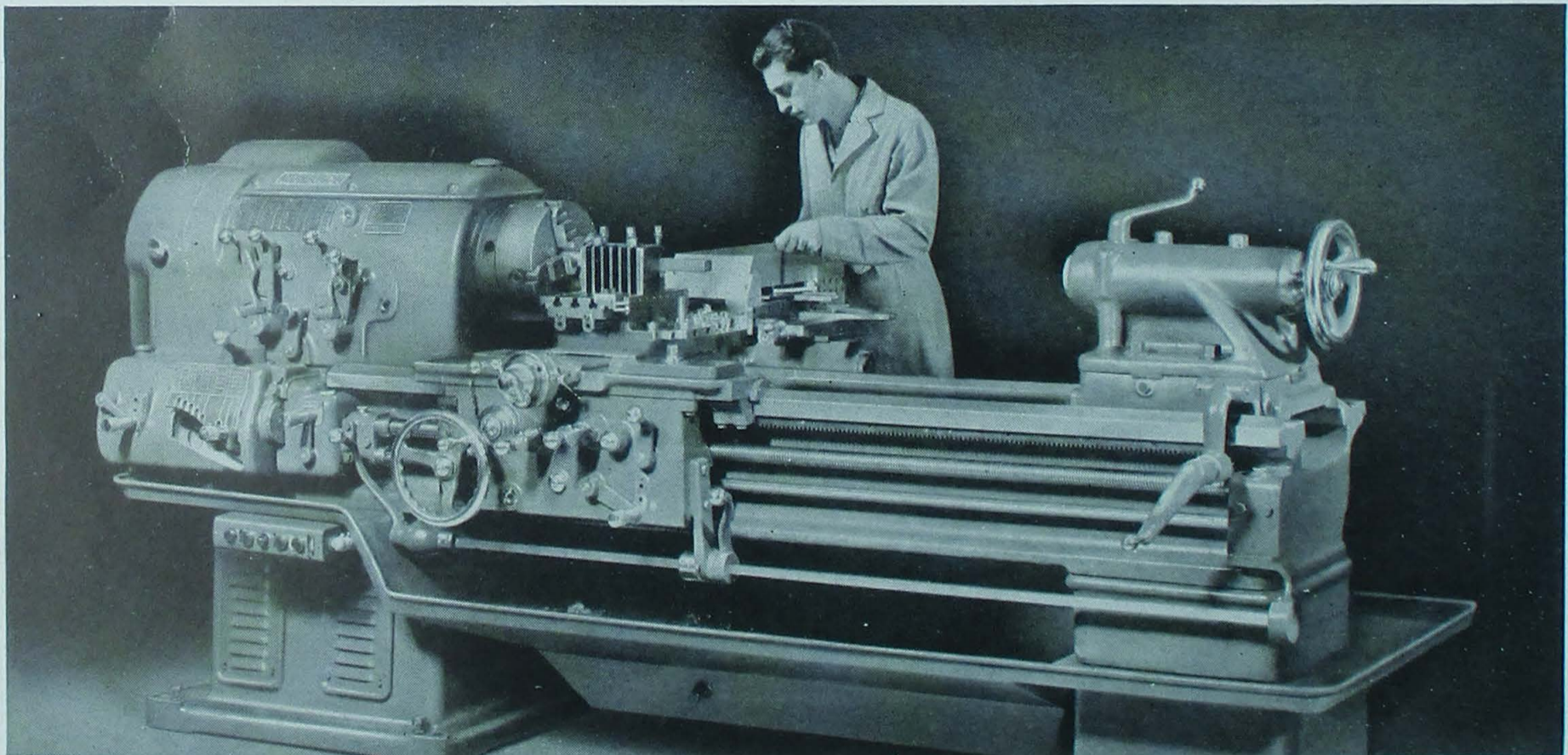
furnished when required. A back geared unit can be supplied when needed to give ample power for metal removal at slow spindle speeds.

MONARCH-KELLER LATHE



The Monarch-Keller Lathe is a combination of any Monarch Lathe (except 10" EE, 12" C and 12" KK) with Keller electric controls. It permits turning, boring or facing of irregular contours from a thin metal template. The lathe may be operated automatically or the controls may be disconnected quickly and the

lathe made available for regular work. A wide variety of work may be turned with this lathe, automatically and with high speed and extremely close tolerances. Many hundreds of these lathes helped speed vital war production in our larger war plants and will effect substantial economies in peacetime.

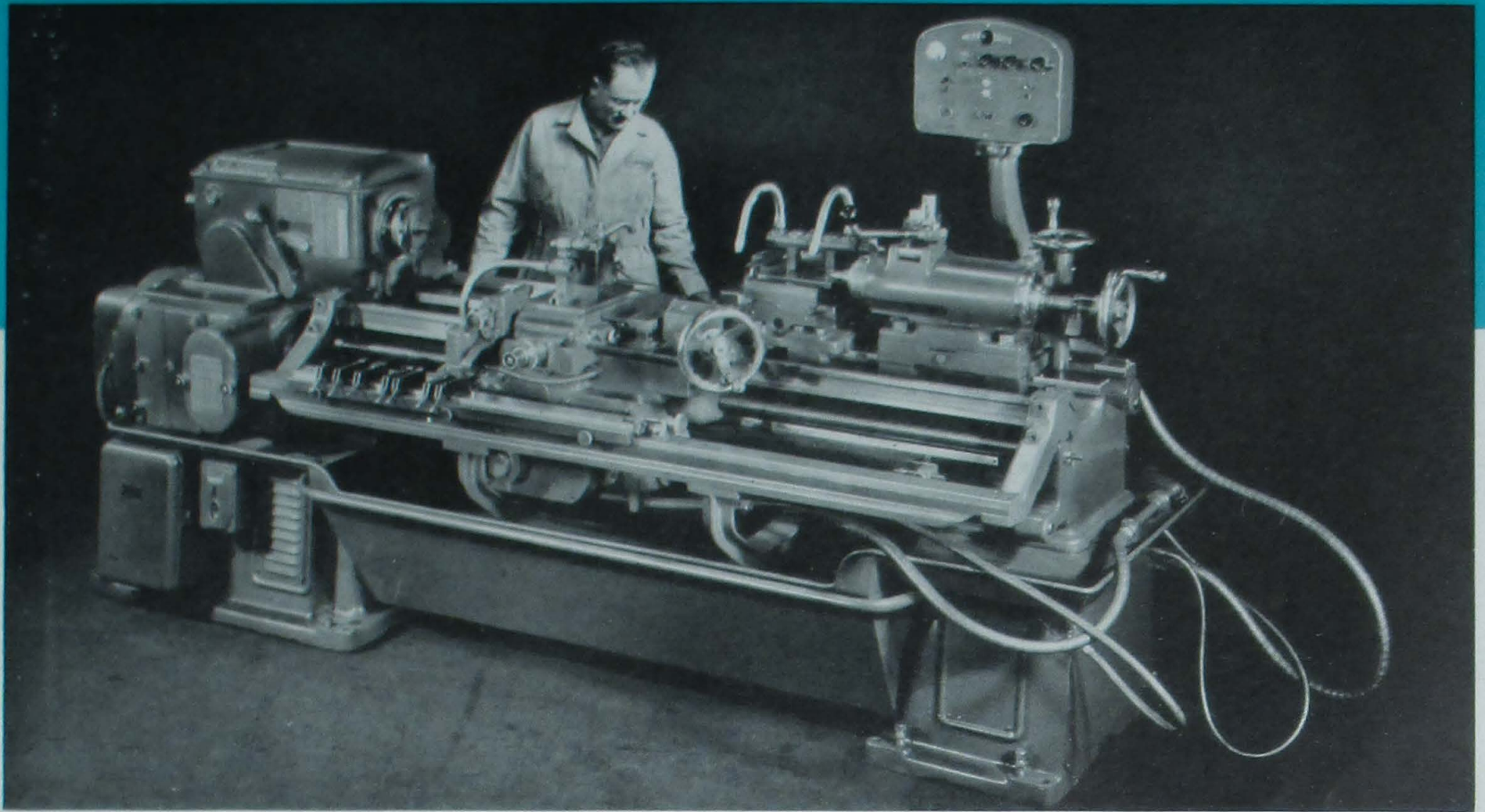


MONARCH SHAPEMASTER

This amazing turning machine produces mechanically perfect molds, dies, punches or similar shapes from four to five times faster than by other methods. From

one master cam, literally thousands of different round, oval or other shapes can be turned, bored or faced with precision and speed, in any quantity.

MONARCH MAGNAMATIC LATHE



For many varieties of turning, boring or facing work, the Monarch Magnamatic is an amazing timesaver. Average set-up time for automatic lathe jobs is about 15 minutes, thus permitting the Magnamatic to be used economically even on short runs, yet its com-

pletely automatic operation, with all electric controls centered on one panel, makes it invaluable for large quantity production. Any number of diameters and lengths with intervening tapers or contours are produced automatically and precisely on the Magnamatic.

FOR ONE PART OR 1,000,000

If your requirements involve turning round or almost any machinable shape, in lots of from one piece to a million or more, the chances are that the jobs can be done on Monarch Turning Machines. If the work is so unusual that it cannot be done on a standard Monarch machine with available accessories, it is more than likely that we know how and are willing to build the machine for you. Information and assistance will be supplied by any of our branch offices or representatives listed on the next page. If it's a turning job, ask Monarch!

MONARCH ENGINEERS ARE AT YOUR SERVICE

Monarch branch offices and sales representatives are located in or convenient to every large industrial center. These engineers are competent to work with you on any turning problem. They will provide you with illustrated bulletins and complete information on all types of Monarch Turning Machines and accessories. They will give you fast service on special turning problems. Your inquiries are welcomed.

BRANCH OFFICES

CHICAGO 6, ILLINOIS
Monarch Machine Tool Co.,
622 W. Washington Blvd.,
Phone: Haymarket 3534.

DETROIT 2, MICHIGAN
Monarch Machine Tool Co.,
801 Fisher Building,
Phone: Trinity 1-0426.

NEWARK 2, NEW JERSEY
Monarch Machine Tool Co.,
635 Industrial Office Bldg.,
Phone: Mitchell 2-1770.

CLEVELAND 6, OHIO
Monarch Machine Tool Co.,
Room 209 Upper Carnegie Bldg.,
10465 Carnegie Avenue,
Phone: Garfield 2590.

PITTSBURGH 22, PENNSYLVANIA
Monarch Machine Tool Co.,
512 Empire Building,
Liberty Ave. & Stanwix St.,
Phone: Atlantic 6428.

DEALERS

ATLANTA, GEORGIA
J. R. Walraven,
1241 Fairview Rd., N. E.,
Phone: Crescent 4311.

BOSTON, MASSACHUSETTS
Wigglesworth Machinery Co.,
199 Bent Street
Cambridge 41, Mass.,
Phone: Kirkland 5243.

BUFFALO, NEW YORK
G. W. Brunton & Son,
2882 Delaware Avenue,
First National Bank Bldg.,
Kenmore, N. Y.,
Phone: Riverside 2325.

CHARLOTTE 1, N. CAROLINA
Charlotte Supply Co.,
500 South Mint Street,
Phone: 2-1156.

CHATTANOOGA 8, TENNESSEE
Hamilton Machinery Co.,
1426 Cowart Street,
Phone: 7-3447.

CINCINNATI 9, OHIO
Alfred A. Troyke,
422 Appleton Street,
Phone: Jefferson 4422.

DALLAS, TEXAS
Machinery Sales & Supply Co.,
2124 Main St.,
Phone: 7-3116.

DAYTON 2, OHIO
C. H. Gosiger Mch. Co.,
Bacon & McDonough Sts.,
Phone: Fulton 5174.

DENVER 2, COLORADO
F. J. Leonard Co.,
514-18th St., Conoco Bldg.,
Phone: Keystone 7229.

GREEN BAY, WISCONSIN
Bay Verte Machinery Co.,
127-131 N. Pearl St.,
Phone: Adams 6010.

HARTFORD, CONNECTICUT
Lyman A. Smith,
410 Asylum St.,
Phone: 7-0105.

HOUSTON 1, TEXAS
Steel & Machine Tool Sales Co.,
6416 Navigation Blvd.,
Phone: Wayside 7113.

KANSAS CITY 6, MISSOURI
English Brothers Mch. Co.,
410-418 W. Fifth St.,
Phone: Victor 5575.

LOS ANGELES 11, CALIFORNIA
Moore Machinery Company,
3876 Santa Fe Avenue,
Phone: Kimball 8211.

MINNEAPOLIS 1, MINNESOTA
The John C. Eide Co.,
204 Washington Ave.,
Phone: Geneva 7709.

MUSKEGON 82, MICHIGAN
Lakeshore Machinery & Supply Co.,
400 West Laketon Ave.,
Phone: 26-655.

NEW ORLEANS 6, LOUISIANA
Dixie Mill Supply Co.,
Tchoupitoulas & St. Joseph Sts.,
Phone: Raymond 6101.

OMAHA 2, NEBRASKA
Cardinal Supply & Mfg. Co.,
427-30 Sunderland Bldg.,
Phone: Atlantic 1155.

PHILADELPHIA 3, PA.
Swind Machinery Co.,
Broad Street Station Bldg.,
Phone: Rittenhouse 4340.

ROCHESTER 7, NEW YORK
W. W. Wentz,
1515 Monroe Ave.,
Phone: Main 5048.

ST. LOUIS 6, MISSOURI
Colcord-Wright Mach. & Sup.,
1223-1229 N. Broadway,
Phone: Central 6970.

SALT LAKE CITY 1, UTAH
Galigher Company,
48 S. Second East St.,
Phone: 4-3546.

SAN FRANCISCO 9, CALIF.
Moore Machinery Co.,
1699 Van Ness Ave.,
Phone: Tuxedo 6000.

SEATTLE 4, WASHINGTON
Hallidie Machinery Co.,
2245 First Ave., South,
Phone: Main 2651.

SHREVEPORT, LOUISIANA
Dixie Mill Supply Co.,
200 Edwards St.,
Phone: 2-0331.

SPRINGFIELD, MASS.
Arthur H. MacBriar,
P. O. Box 233,
Forest Park Station,
Phone: 4-4459.

SYRACUSE 2, NEW YORK
H. A. Smith Machinery Co.,
Eric Blvd., E. and S. Townsend Sts.,
Phone: 2-7246.

TULSA 1, OKLAHOMA
Machine Tool & Supply Co.,
215-217 E. First Street,
Phone: 3-2175.

CANADIAN REPRESENTATIVES

MONTREAL, QUEBEC
Williams & Wilson, Ltd.,
544 Inspector St.,
Phone: Marquette 4591.

QUEBEC, QUEBEC
Williams & Wilson, Ltd.,
203 St. John's St.

TORONTO, ONTARIO
Williams & Wilson, Ltd.,
11 Front Street East,
Phone: Adelaide 8731.

WINDSOR, ONTARIO
Williams & Wilson, Ltd.,
301 Security Building,
Phone: 3-5676.

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