SOUTH BEND LATHES

CATALOG
Nº 97

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WE GUARANTEE every South Bend Lathe to be accurate and mechanically perfect; to give you entire satisfaction and the service you have a right to expect. We will replace, free of charge, F.O.B. South Bend, Indiana, U.S.A., within one year from the date of purchase, any lathe part that proves defective, either in material or workmanship.

If you are interested in a lathe and are not familiar with the quality and workmanship of South Bend Lathes, we will, on request, ship any size or type of South Bend Lathe anywhere in the United States for use in your shop. If for any reason you are not satisfied, you may return it to us within thirty days and we will pay the return freight charges and refund your money.

SOUTH BEND LATHE WORKS

We reserve the right to make improvements in design or price changes without notice.

NEW MODEL
SOUTH BEND LATHES
BACK-GEARED, SCREW CUTTING, PRECISION LATHES

The South Bend Lathe Works was established in South Bend, Indiana in 1906 and for thirty-one years has been devoted to the manufacture of South Bend Lathes exclusively.

The New Model Series "N" and Series "R" Lathes shown in this catalog are the result of thirty-one years of experience in building lathes. Many improvements in design have been made, and some of them are shown for the first time in this catalog. More important is the superior quality of workmanship which is made possible by the highly specialized skill of our experienced employees and the excellent equipment of our shops.

It has always been the policy of this company to produce a good lathe at a moderate price. The excellent performance of South Bend Lathes in industry has created a popular demand and enabled us to manufacture lathe units in large quantities. The increased production permits us to offer South Bend Lathes at prices which make them unquestionably the greatest lathe value per dollar invested.

Accuracy and durability are built into every South Bend Lathe. Each lathe is operated and thoroughly tested before it leaves the factory. Given the proper care, a South Bend Lathe will last a lifetime. Many of our lathes that have been in constant use for ten to fifteen years are as accurate as the day they left the factory.

South Bend Lathe Works

Established November, 1906

425 EAST MADISON ST. - - - SOUTH BEND, IND., U. S. A.

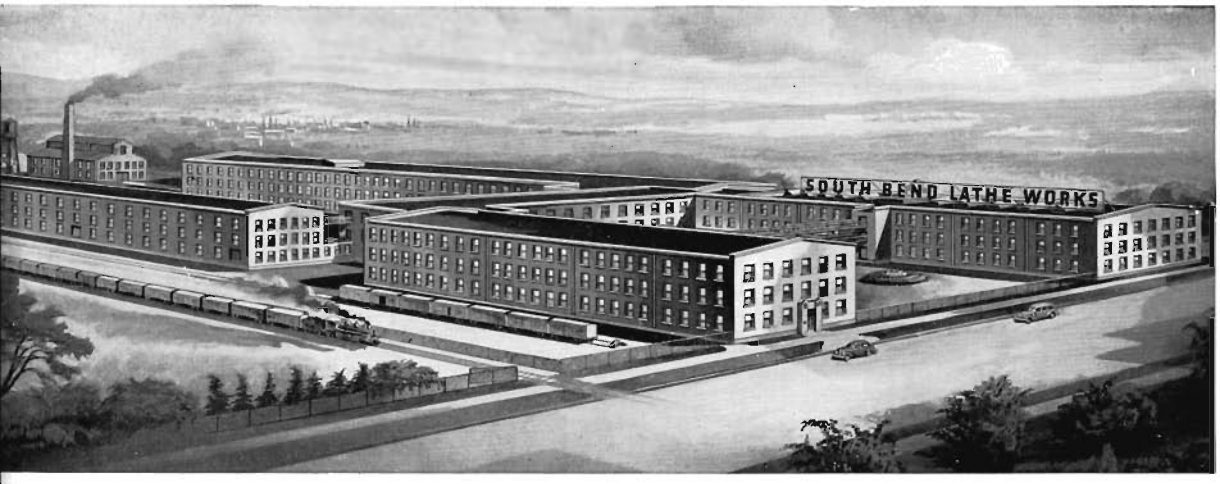
CABLE ADDRESS "TWINS" SOUTH BEND

CODES USED

Western Union Five Letter Edition — Western Union Universal Edition
A. B. C. Fifth Edition Improved — Bentley's Complete Phrase and 2nd Editions
Acme — Lieber's — Standard — Our Own

January, 1938

Reprinted May, 1938



FACTORY

The factory of the South Bend Lathe Works was established in 1906 and for 31 years has been devoted to manufacturing lathes exclusively.

DISPLAY

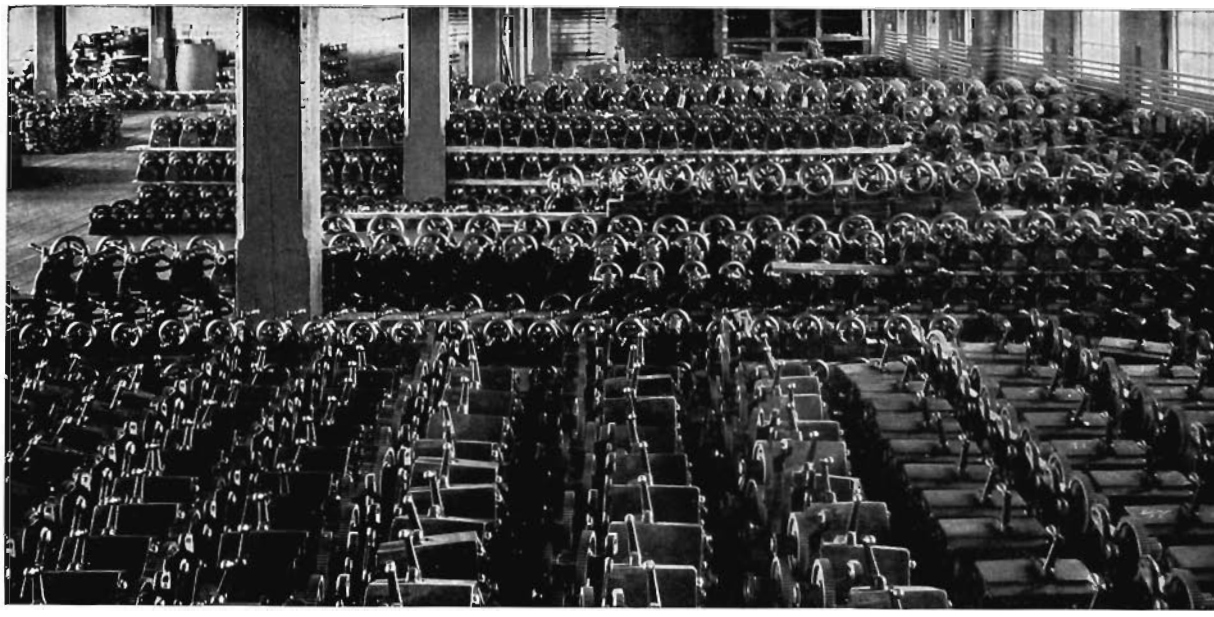
In this factory display room more than 30 South Bend Lathes are set up and ready to demonstrate. Visitors are alwayswelcome.

ASSEMBLY

This is the assembly floor for Underneath Belt Motor Driven Lathes. South Bend Lathes are assembled in large lots.

STOCK

Units for each size lathe are manufactured in lots of 300 to 1000 and are carried in stock ready for assembling any size or type of lathe.



PRODUCTION

The shops where parts for South Bend Lathes are machined are equipped with the most modern type of production machinery.

LATHES

In this room there are more than 50 South Bend Lathes in operation machining parts for South Bend Lathes.

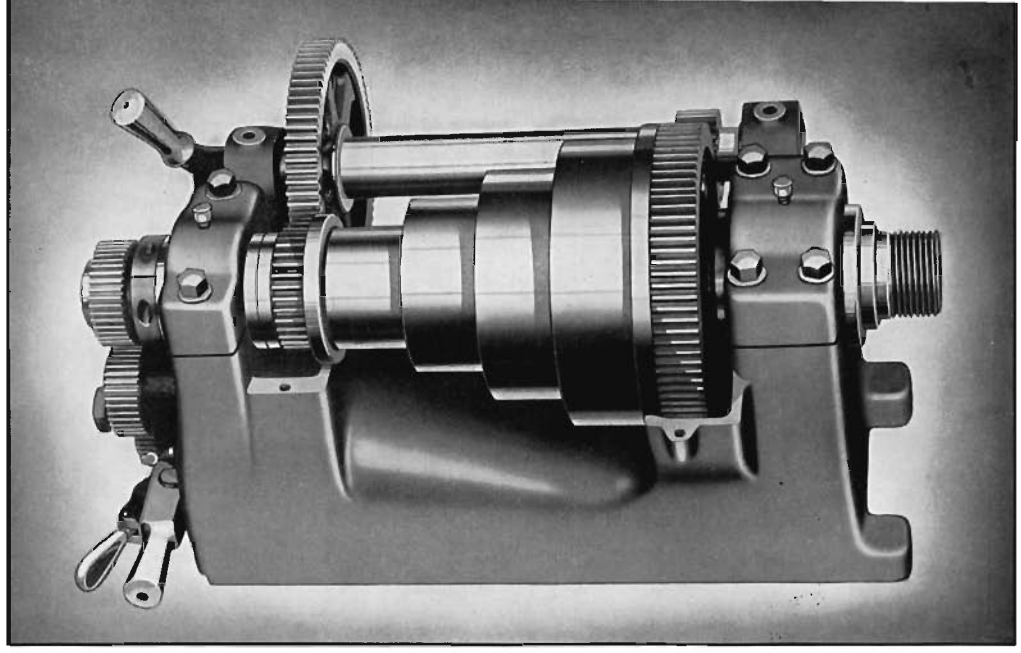


Fig. 1. The Lathe Headstock with Gear Guards Removed to Show Back Gears.

Headstock Has Hardened and Ground Spindle

Phosphor Bronze Bearings—Adjustable for Wear

Headstocks used on all New Model, Series "N" and Series "R" Lathes, are back-geared, as shown above. An improved wrenchless bull gear lock permits engaging or disengaging the back gears without using a wrench.

A 4-step cone pulley providing eight changes of spindle speeds (four direct belt drive and four back-geared) is used for the 13″, 15″ and 16″ lathes. A 3-step cone pulley providing six changes of spindle speeds (three direct belt drive and three back-geared) is used for the 9″ and 11″ lathes.

The headstock spindle is made of a special quality spindle steel heat-treated, hardened and ground. The spindle is hollow so that bars and tubes may be passed through the lathe headstock for machining. The tapered hole in the spindle and all bearing surfaces are accurately ground. Spindle has a hardened and ground thrust bearing and an adjustable take-up nut to eliminate end play.

The spindle bearings are made of best quality phosphor bronze and are adjustable for wear. A felt pad oiling system provides ample lubrication for the spindle bearings.

The 9-inch swing 1″ Collet Lathe has integral cast iron spindle bearings which are adjustable for wear and have a capillary oiling system.

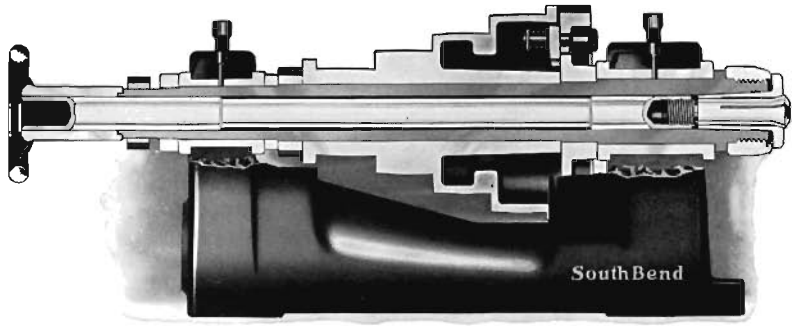


Fig. 2. Cross Section View of Headstock Used on 13″, 15″, and 16″ Lathes. Note Application of Draw-in Collet Chuck Attachment.

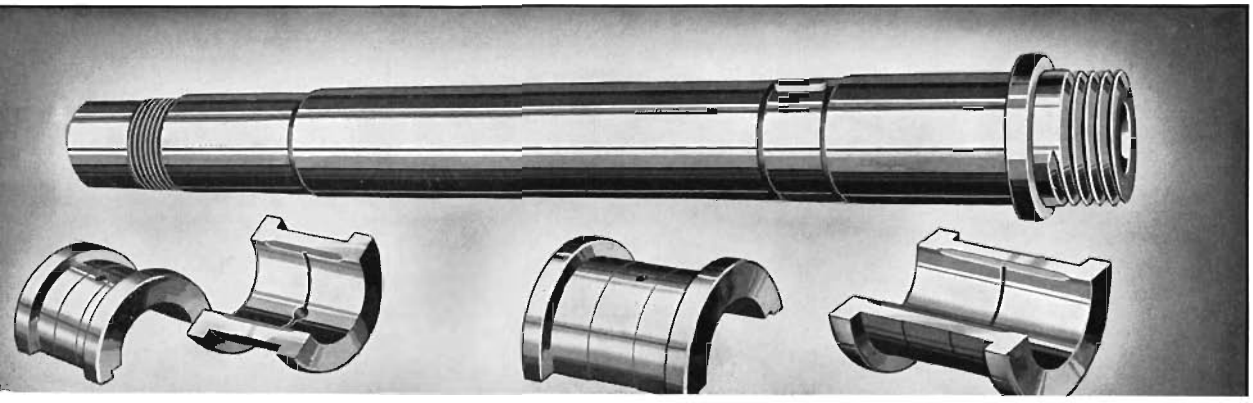


Fig. 3. Hardened and Ground Headstock Spindle and Phosphor Bronze Spindle Bearings.

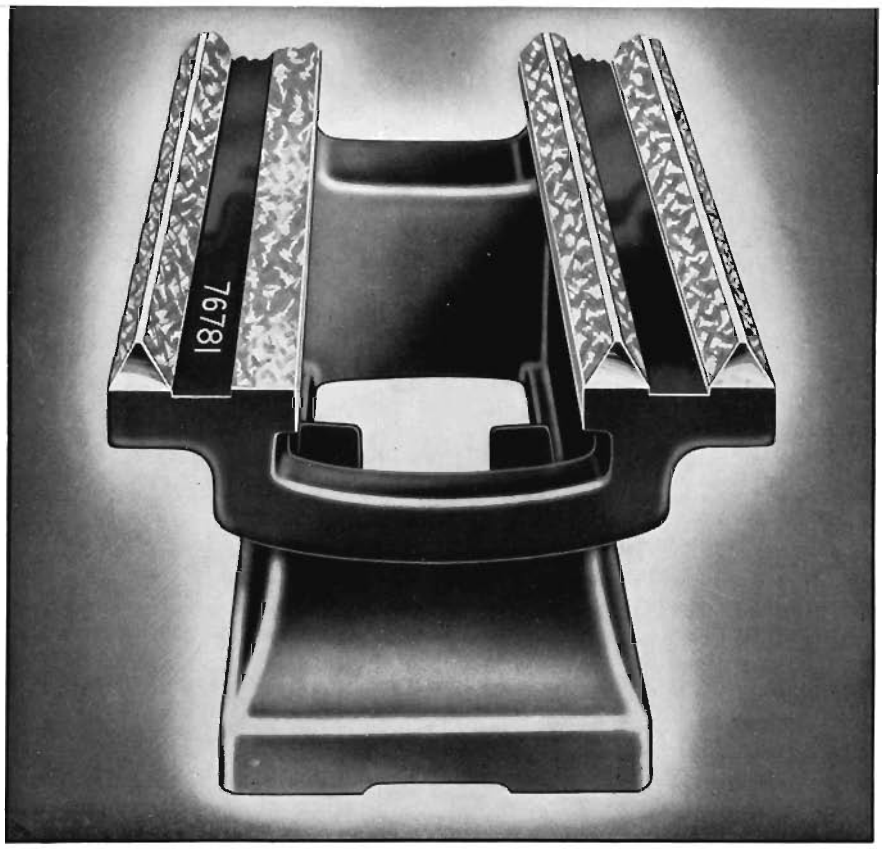


Fig. 4. End View of Lathe Bed.

Heavy Semi-Steel Lathe Bed

Has Three "V"-Ways and One Flat Way

Beds for Series "N" and Series "R" South Bend Lathes are heavily constructed with large box braces cast in at short intervals. The beds are made of a special grade of iron with 50 per cent steel which makes a hard close-grained casting having unusual strength and long wearing qualities.

Three large V-ways and one flat way align the headstock, carriage and tailstock on the bed. The carriage slides on the two outside V-ways and the headstock and tailstock are aligned by the inside V-way. The ways are carefully hand-scraped the entire length of the bed.

Careful inspection is made to be sure that a uniform bearing is obtained the full length of the bed and that all ways are straight and parallel. The serial number is stamped on the bed as shown.

Tailstock Has Graduated and Ground Spindle

Set-Over for Taper Turning—Self-Ejecting Center

The tailstock for all sizes and types of South Bend Lathes is offset to allow the compound rest to swivel parallel to the bed. A sensitive screw adjustment is provided to set over the tailstock top for taper turning.

The tailstock spindle for all Series "N", Series "R" and "Junior" lathes is graduated for drilling to accurate depths. An improved double plug binder securely locks the spindle without altering the alignment of the centers.

The tailstock center is made of tool steel hardened and ground all over, and is self-ejecting. A brass quill and oil well are provided for oiling the center.

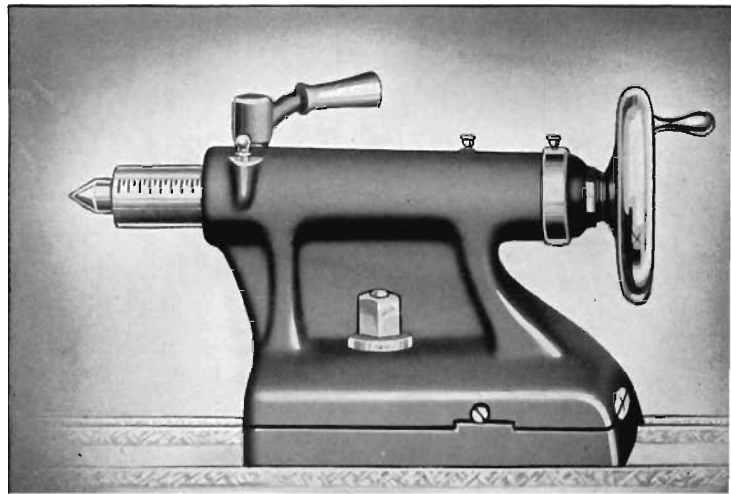


Fig. 5. Tailstock Used on South Bend Series "N" and Series "R" Lathes.

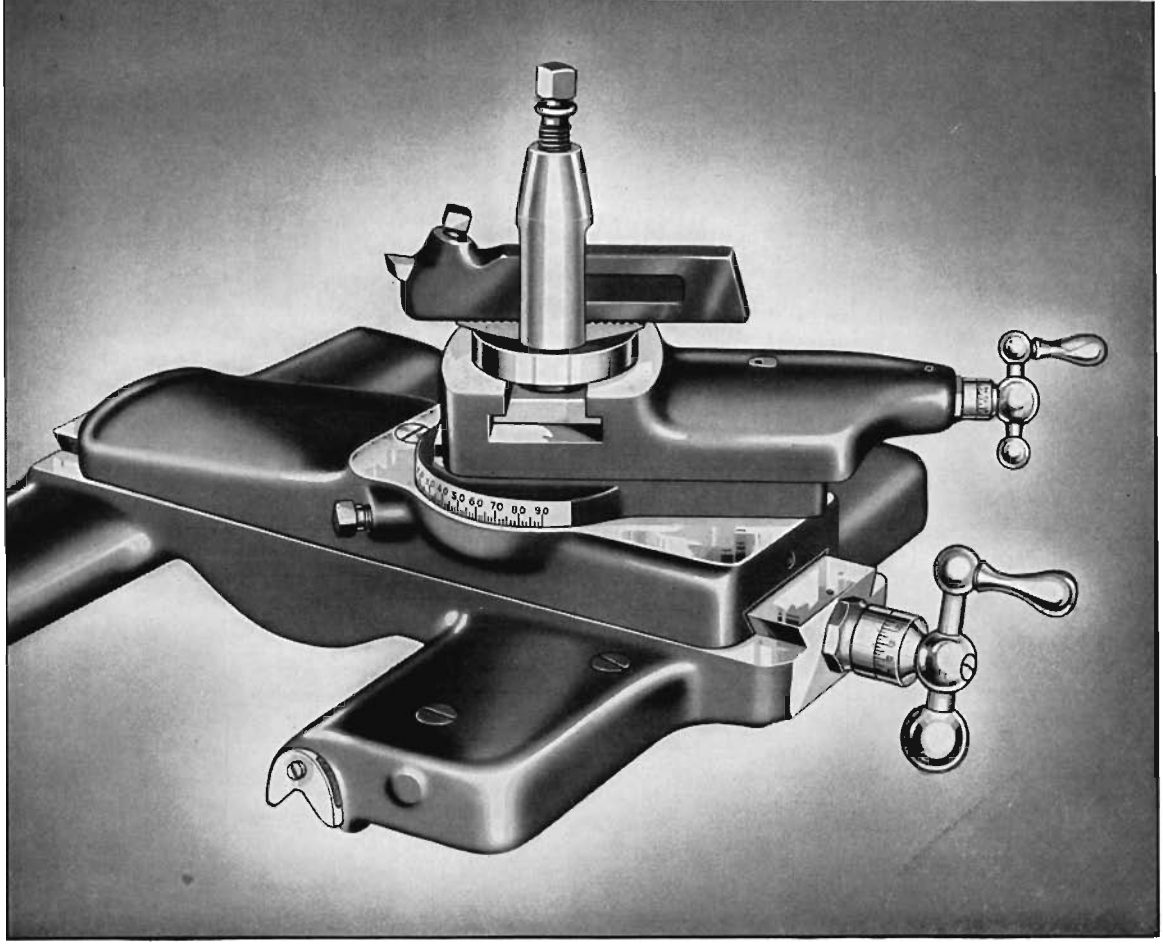


Fig. 6. Improved Saddle and Compound Rest used on Series "R" 13-inch South Bend Lathes.

Improved Saddle and Compound Rest

Dovetails Have Adjustable Tapered Gibs

The saddle for Series "N" and Series "R" South Bend Lathes has unusually long bearings carefully hand-scraped to conform with the outer V-ways of the lathe bed. Felt pad wipers are attached to each end of the saddle to clean and oil the V-ways of the bed. The cross slide bridge is wide and deep, providing a rigid support for the tool rest and is scraped square with the V-ways of the saddle.

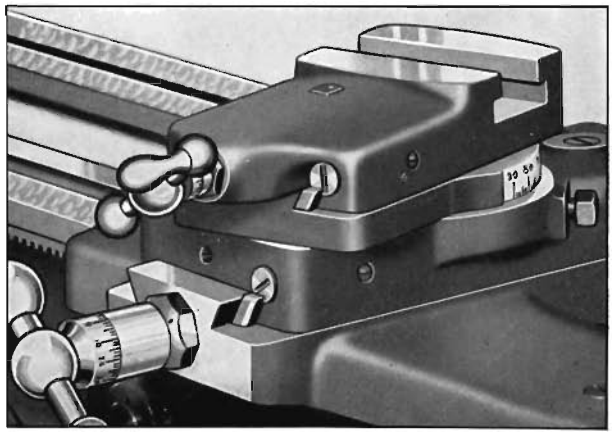


Fig. 7. Close-up Showing Adjustable Tapered Gibs Used on Compound Rest Base and Top Dovetails.

Both the compound rest base and the compound rest top dovetails are hand-scraped and lapped and have adjustable tapered gibs. The compound rest base is drilled and tapped for the thread cutting stop screw. The compound rest swivel bearing is accurately hand-scraped and fitted. The swivel is graduated 180-degrees and may be set at any angle for turning and boring bevels and tapers.

The cross feed screw and compound rest screw have accurately graduated collars reading in thousandths of an inch. These collars are adjustable and may be set at zero whenever desired. Crank handles for both compound rest screw and cross feed screw are of polished steel.

The tool post, tool post ring, and tool post rocker are made of drop forged steel, heat-treated and hardened. Rocker adjustment is provided for adjusting the cutting edge of tool to desired height.

Gear Box

The Gear Box at right, used on 13-inch Series "R" Quick Change Gear Lathes, has 48 changes—2 to 112 Threads per inch—right or left hand. Power feeds .020" to .003" per revolution of spindle.

Steel Gears in Gear Box

All the gears in the Quick Change Gear Box of each size South Bend Lathe are made of steel cut from the solid bar, accurately hobbed on the latest gear cutting machines, and carefully tested for accuracy.

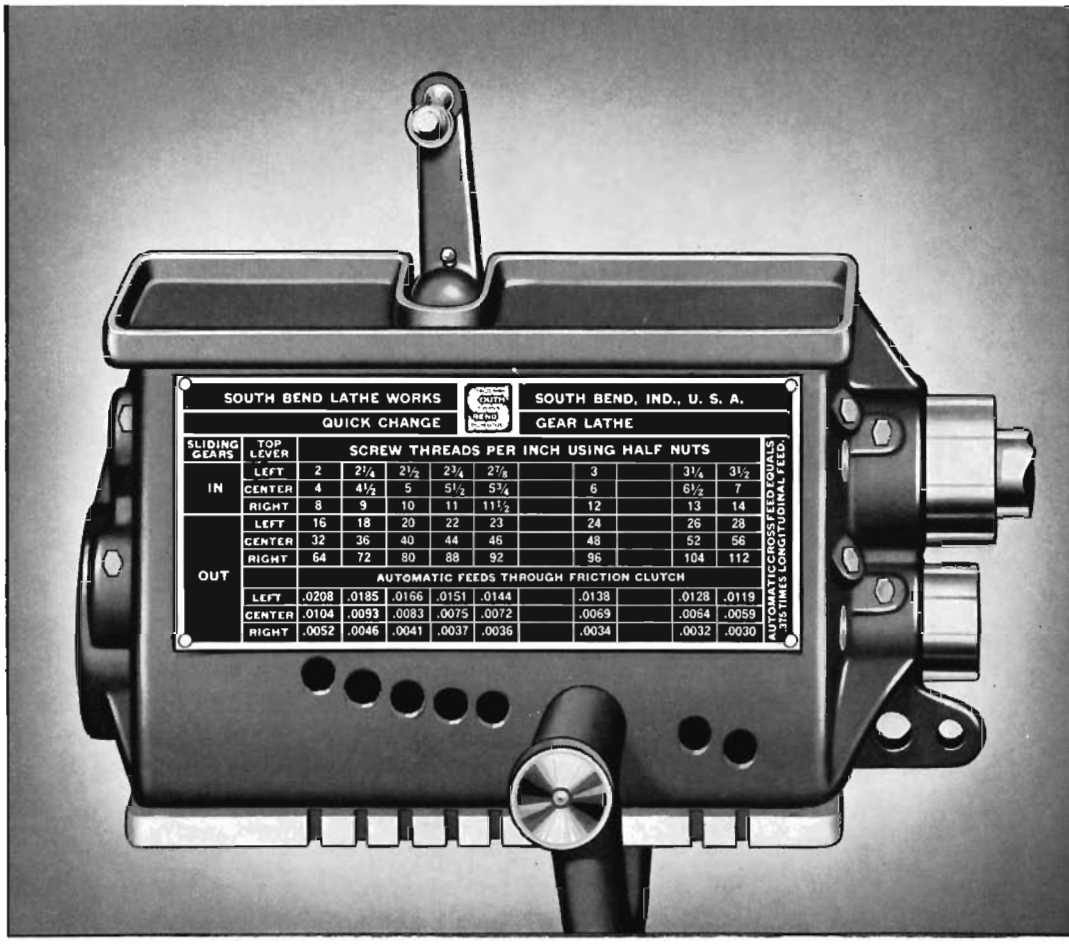


Fig. 8.

Quick Change Gear Box

For Series "N" and Series "R" South Bend Precision Lathes

The quick change gear box shown above is used on all sizes of Series "N" and Series "R" South Bend Quick Change Gear Lathes. This gear box provides for cutting 48 different right hand and left hand screw threads ranging from 2 to 112 per inch on 9" to 16" Lathes and from 4 to 224 per inch on 9-inch—1" Collet Lathes.

All changes for threads and feeds are made by shifting levers on the gear box and by sliding the primary gears on the end of the lathe. No pick-off gears or loose gears of any kind are required.

Twenty-four automatic power longitudinal turning feeds are also listed on the index chart attached to the quick change gear box. The feeds listed range from .002" to .015" per revolution of the lathe spindle on 15" and 16" lathes, from .003" to .020" on 9", 11" and 13" lathes and from .0015" to .020" on 9-inch—1" Collet Lathes. Twenty-four coarser feeds are also available.

A series of forty-eight automatic power cross feeds are also available through the quick change gear mechanism, but are not listed on the index chart.

Lead Screws Used on South Bend Precision Lathes

Will Cut Threads to Most Exacting Tool Room Specifications

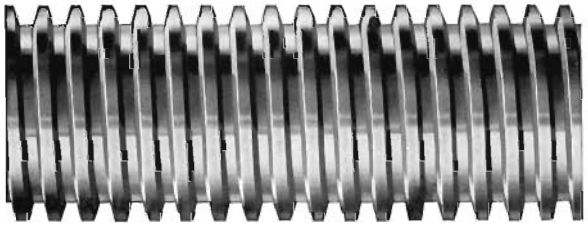


Fig. 9. Section of Acme Thread Lead Screw (actual size) used on the 16-inch South Bend Lathe.

Lead screws used on South Bend Lathes have Acme standard right hand threads and are cut with precision accuracy on special machines equipped with master lead screws.

Each lead screw is tested for accuracy of lead, form of thread and pitch diameter and will meet the most exacting requirements in making the finest precision thread gauges, master taps, special screws, threaded spindles, etc. The threads of the lead screw will remain accurate for the life of the lathe if properly lubricated and cared for.

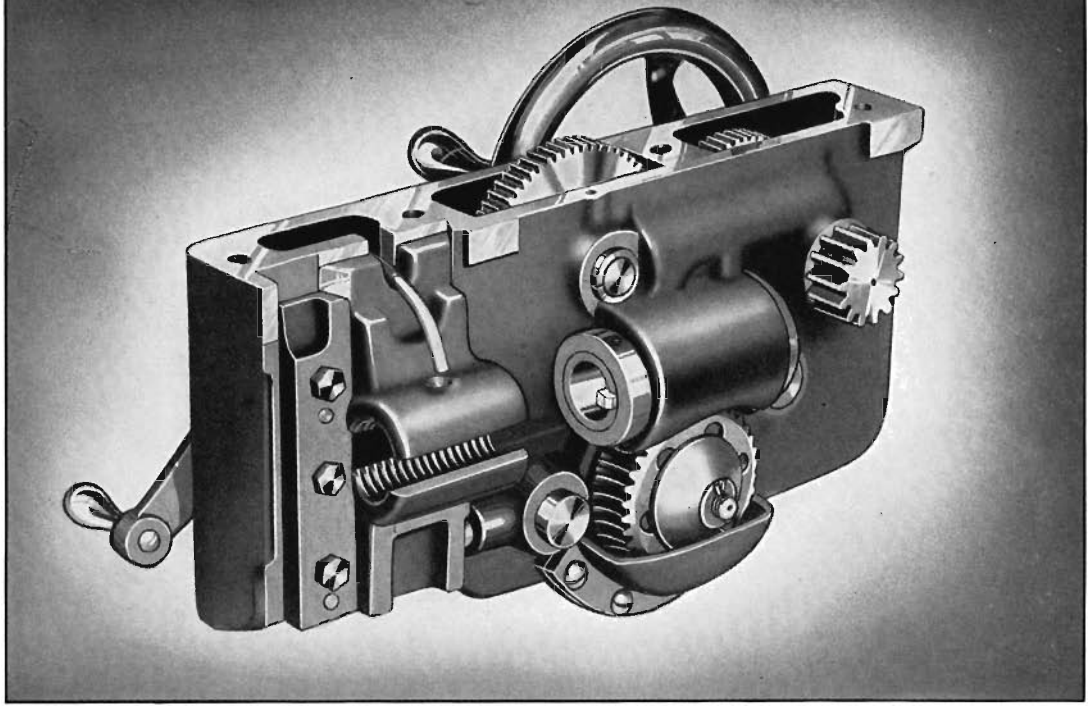


Fig. 10. Back View of Series "N" Double Wall Apron Showing Rigid Box Type Construction.

New Series "N" Double Wall Apron

Used on All Series "N" 15″ and 16″ Lathes

The Series "N" double wall apron shown above is rigidly constructed and provides substantial support for both ends of the gear shafts. A sliding gear shift is used to change from automatic cross feed to automatic longitudinal feed.

The multiple disc friction clutch used for operating both the automatic cross feeds and the automatic longitudinal feeds is shown in Fig. 11. Alternate steel discs are keyed to the clutch shaft and worm wheel respectively. A slight turn of the clutch knob will engage or disengage the clutch, placing the automatic feeds in operation. This clutch will engage or release instantly. It is smooth in operation and will not stick or slip under heavy cuts.

The half-nuts for thread cutting are close coupled and are dovetailed into the back wall of the apron, as shown in Fig. 10 above. The half-nuts and threads of the lead screw are used only when cutting screw threads as a spline in the lead screw drives the worm which operates the automatic power carriage feeds. An automatic safety interlock prevents engaging the half-nuts or automatic longitudinal feeds when the other is already engaged.

Gears in apron are made of steel and have reservoir and felt wick oiling system. The rack pinion, shown at right end of apron (Fig. 10) is rigidly supported by substantial bearings in both the front wall and back wall of the apron.

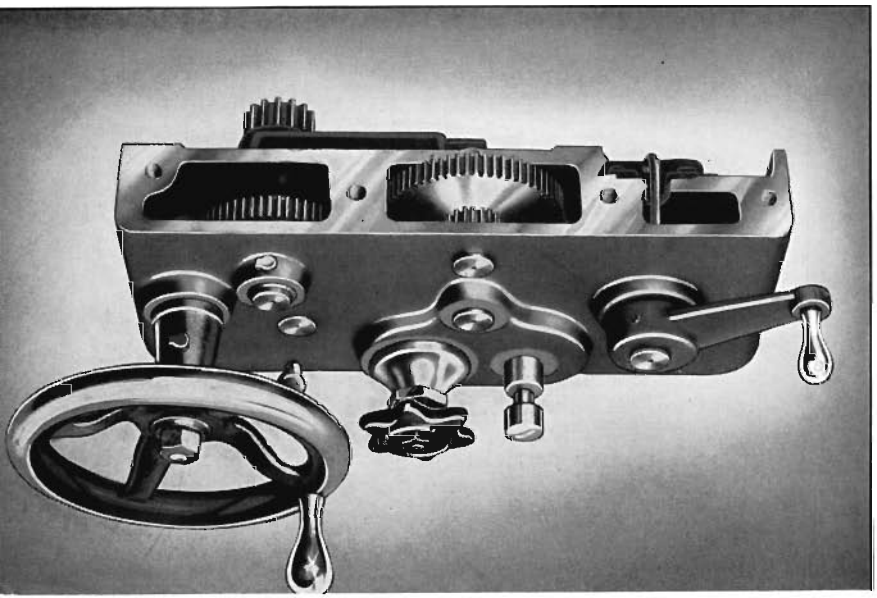


Fig. 12. (Left) Front View of New Double Wall Apron.

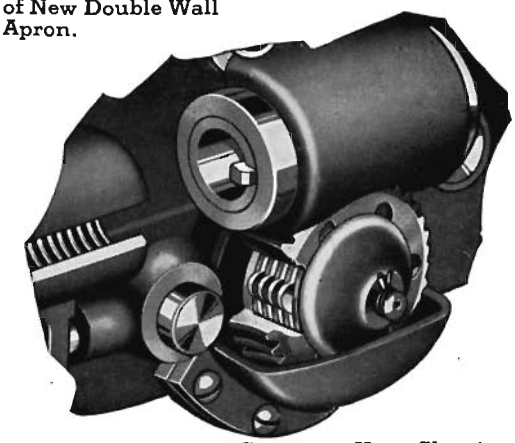


Fig. 11. (Above) Cut-away View Showing the Multiple Disc Friction Feed Clutch.

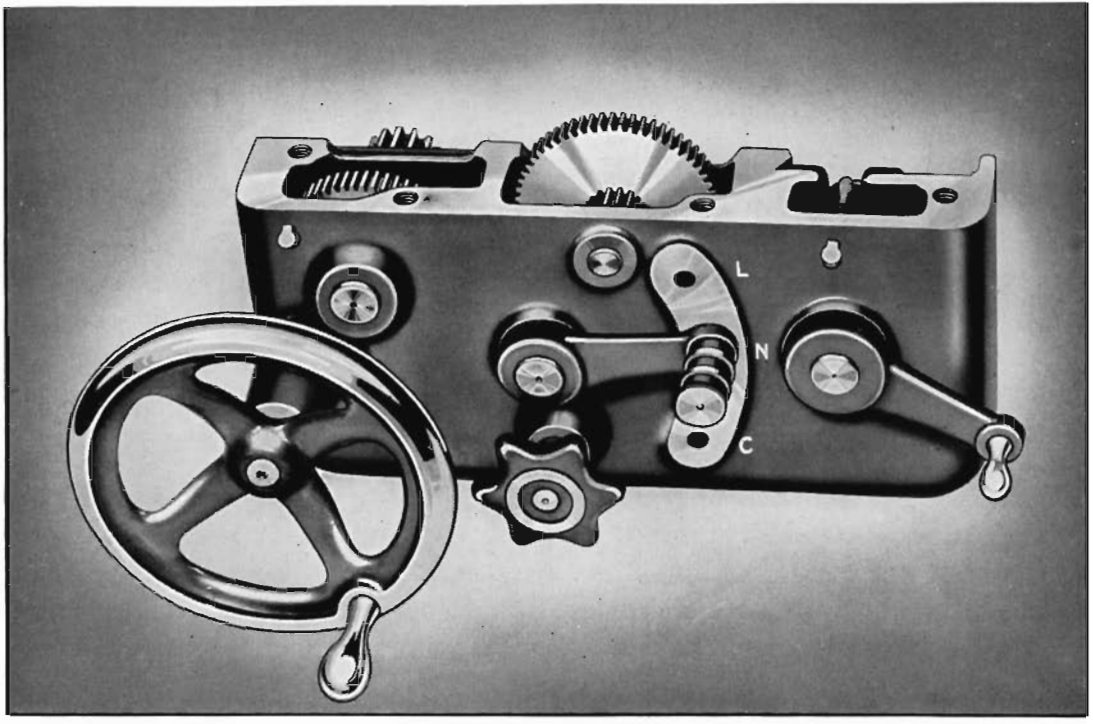


Fig. 13. Front View of Series "R" Double Wall Apron Showing Rigid Box Type Construction.

New Series "R" Double Wall Apron

Used on All Series "R" 9″, 11″ and 13″ Lathes

The Series "R" double wall apron shown above is rigidly constructed and provides substantial support for both ends of the gear shafts. A tumbler gear shift is used to change from automatic cross feed to automatic longitudinal feed.

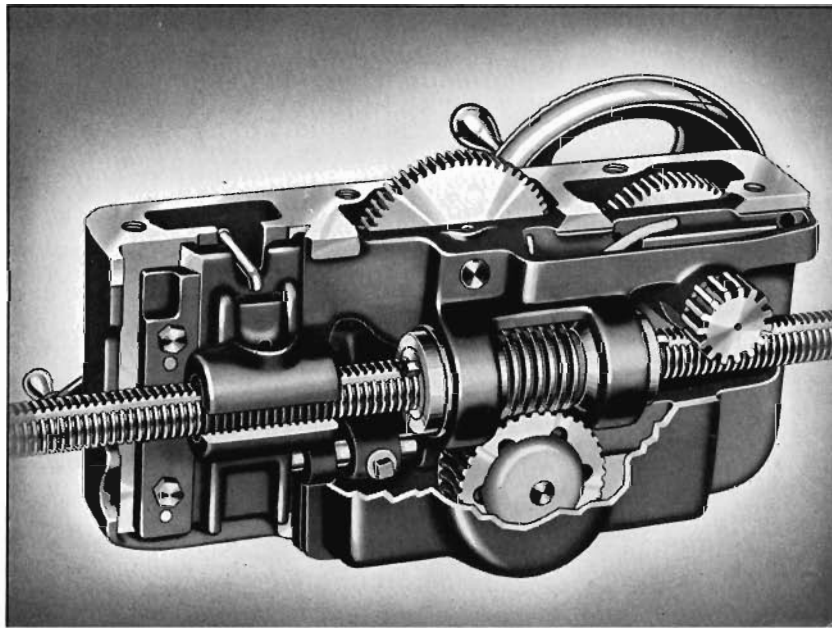
The multiple disc friction clutch used for operating both the automatic cross feeds and the automatic longitudinal feeds is shown in Fig. 14. Alternate steel discs are keyed to the clutch shaft and worm wheel respectively. A slight turn of the clutch knob will engage or disengage the clutch, placing the automatic feeds in operation. This clutch will engage or release instantly. It is smooth in operation and will not stick or slip under heavy cuts.

The half-nuts for thread cutting are close coupled and are dovetailed into the back wall of the apron, as shown in Fig. 15 below. The half-nuts and threads of the lead screw are used only when cutting screw threads as a spline in the lead screw drives the worm which operates the automatic power carriage feeds. An automatic safety interlock prevents engaging the half-nuts or automatic feeds when the other is already engaged.

Gears in apron are made of steel and have reservoir and felt wick oiling system. The rack pinion, shown at right end of apron (Fig. 15) is rigidly supported by substantial bearings in both the front wall and back wall of the apron.

Fig. 15. (Right) Back View of New Double Wall Apron.

Fig. 14. (Above) Cut-away View Showing the Multiple Disc Friction Feed Clutch.



New Model South Bend Precision Lathes

The New Model Series "N" and Series "R" South Bend Lathes are made in Standard Change Gear Type and Quick Change Gear Type and with Countershaft Drive or Individual Motor Drive. Special features will be found on pages 4 to 11.

Different Types of Lathes

Quick Change Gear Lathes are preferred in busy shops where frequent changes of feeds and threads are required. The quick change gear feature is especially desirable in the tool room and maintenance department of the manufacturing plant, large machine shops doing general machine work and on production operations requiring changes of threads or feeds. See page 7.

Standard Change Gear Lathes are identical with the Quick Change Gear Lathes except that they have independent change gears instead of a quick change gear box. The Standard Change Gear Lathe is popular for production operations in manufacturing plants and for general machine work in small shops. See page 56.

The 9-inch Swing 1" Collet Capacity Lathes are the same as the 9-inch Standard and Quick Change Gear Lathes except that they have a special headstock with 1 3/8" hole through the spindle and will take collets up to 1" capacity. Headstock spindle is hardened and runs in integral cast iron bearings which are adjustable for wear.

Geared Screw Feed Lathes. The 9-inch "Junior" and 9-inch "Workshop" Lathes shown on pages 48 to 53 have automatic longitudinal geared screw feed for the carriage and hand operated cross feed. This simplified design permits the attractive prices on these lathes with no sacrifice in quality or accuracy.

Different Types of Drives for Lathes

The Underneath Belt Motor Drive is a fully enclosed individual drive with no exposed moving belts, pulleys or gears. The motor and drive mechanism are mounted in the base of the lathe underneath the headstock. A belt tension release permits easy shifting of the cone pulley belt. See page 54.

The Pedestal Adjustable Motor Drive is efficient and practical, and it is reasonable in price. The motor and countershaft are mounted on a pedestal back of the lathe and belt tension adjustment is provided. See page 55.

Bench Motor Drive. The Adjustable Horizontal Motor Drive for South Bend Bench Lathes provides adjustment for both the motor belt and the cone pulley belt. A tension release lever permits easy shifting of the cone pulley belt. See page 38.

Countershaft Drive is supplied for shops that are equipped with lineshaft for power. The South Bend double friction countershaft permits reversing the lathe spindle; or, if preferred, two forward countershaft speeds may be obtained.

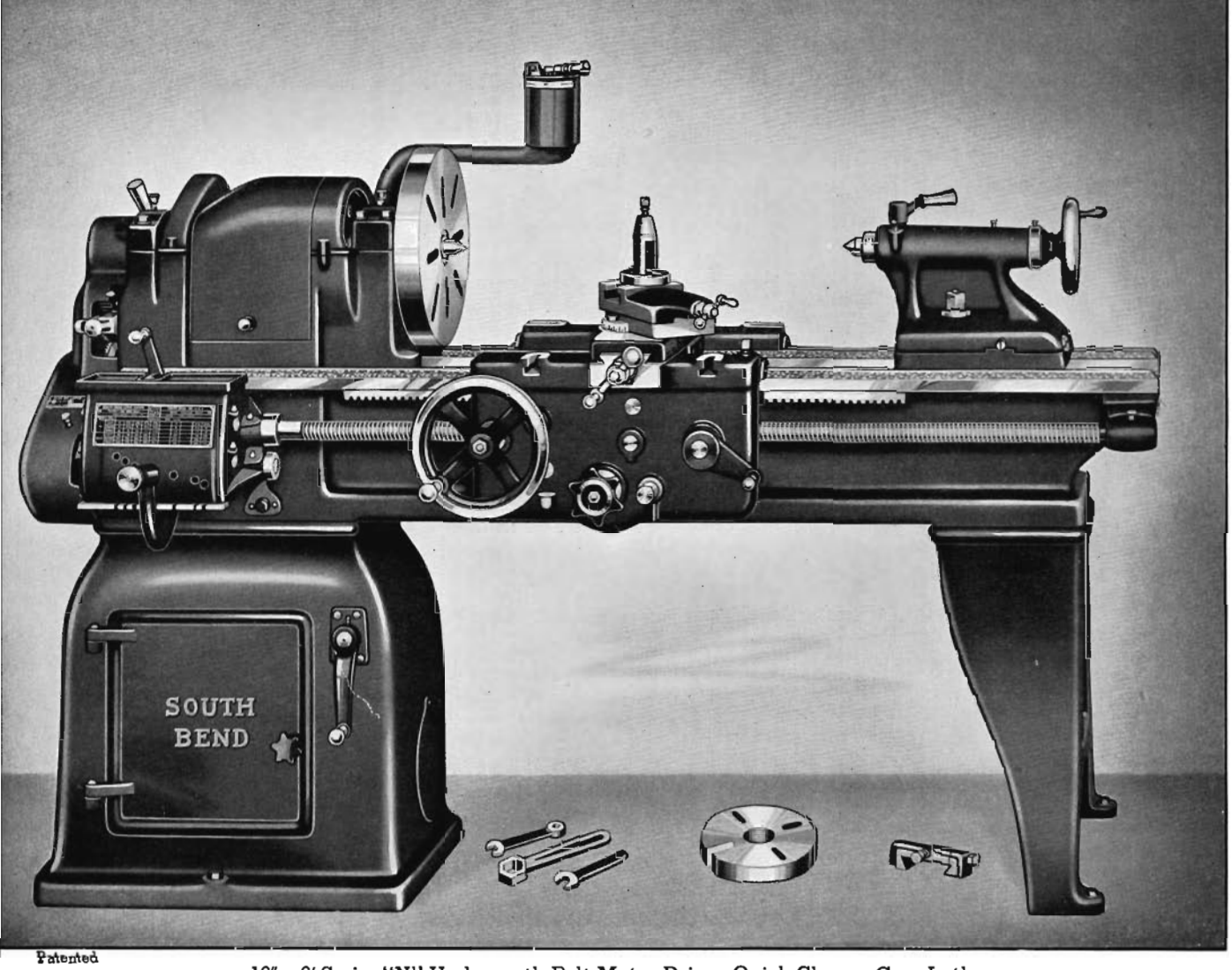
Specifications of New Model South Bend Precision Lathes

The specifications listed below apply to all types of Series "N" and Series "R" New Model quick change gear and standard change gear South Bend precision lathes, 9-inch 1" Collet Lathes, 9-inch "Junior" Lathes and 9-inch "Workshop" Lathes.

Size and Type of Lathe	16-inch Series "N" Lathes	15-inch Series "N" Lathes	13-inch Series "R" Lathes	11-inch Series "R" Lathes	9-inch 1" Collet Capacity Lathes	9-inch Series "R" Lathes	9-inch "Junior" Lathes	9-inch "Workshop" Lathes
Swing over lathe bed	16¼"	15¼"	13¼"	11⅛"	9¼"	9¼"	9¼"	9¼"
Swing over chip guard	9¾"	9⅜"	8¼"	7"	5 11/16"	5 11/16"	5 11/16"	5½"
Swing over saddle, chip guard removed*	9¾"	9⅜"	9¼"	7"	6⅜"	6⅜"	6⅜"	5½"
Spindle nose, diameter and thread	2⅜"-6	2¼"-6	1⅞"-8	1⅝"-8	2¼"-8	1½"-8	1½"-8	1½"-8
Hole through headstock spindle	1⅜"	1⅛"	1"	⅞"	1⅜"	¾"	¾"	¾"
Maximum collet capacity	⅞"	¾"	⅝"	17/32"	1"	½"	½"	½"
Spindle centers for headstock & tailstock Standard Morse Taper	No. 3	No. 3	No. 3	No. 2	No. 2	No. 2	No. 2	No. 2
Motor Speed R.P.M.	1150	1150	1150	1725	1725	1725	1725	1725
Spindle speeds, Motor drive								
Back Gear Speeds	17, 28	19, 32	24, 38	40, 69	50, 79, 129	45, 75	45, 75	40, 68
" " "	44, 73	48, 81	58, 92	118	100, 158, 258	128	128	122
Open Belt Speeds	138, 223	139, 223	173, 270	238, 377	277, 434, 700	246, 410	246, 410	202, 353
" " "	353, 587	340, 568	410, 646	608	554, 868, 1400	700	700	630
High Spindle Speeds (Optional at Extra Cost)	.....	.....	.....	80, 138, 236	Included in	90, 150, 256	90, 150, 256	73, 129, 231
	.....	.....	.....	477, 754, 1216	Price of lathe	492, 820, 1400	492, 820, 1400	380, 670, 1200
Cone pulley belt, width	2¼"	2"	1¾"	1½"	1¼"	1¼"	1¼"	1"
Standard size of motor	1 H.P.	1 H.P.	¾ H.P.	½ H.P.	¾ H.P.	½ H.P.	¼ H.P.	¼ H.P.
V-belts for motor, number used	3 belts	3 belts	2 belts	1 belt	1 belt	1 belt	1 belt	1 belt
Countershaft friction pulleys	10" x 3⅝"	10" x 3⅝"	8" x 2⅜"	6⅞" x 2 3/16"	6⅞" x 2 3/16"	6⅞" x 2 3/16"	6⅞" x 2 3/16"	6⅞" x 2 3/16"
Countershaft speed	225 R.P.M.	225 R.P.M.	250 R.P.M.	300 R.P.M.	300 R.P.M.	300 R.P.M.	300 R.P.M.	288 R.P.M.
Thread Cutting Range:								
Quick change gear lathes	2 to 112	2 to 112	2 to 112	2 to 112	4 to 224	2 to 112	.....	.....
Standard, "Junior," and "Workshop" lathes	2 to 112	2 to 112	2 to 112	4 to 112	4 to 112	4 to 112	4 to 112	4 to 112
Feeds, longitudinal, automatic friction:								
Quick change gear lathes ..... (pg. 7)	.002" to .015"	.002" to .015"	.003" to .020"	.003" to .020"	.0015" to .020"	.003" to .020"	.....	.....
Standard change gear lathes .. (pg. 56)	.002" to .020"	.002" to .020"	.002" to .020"	.002" to .015"	.002" to .015"	.002" to .015"	.....	.....
Feeds, longitudinal, lead screw and half-nut. "Junior" and "Workshop"	.....	.....	.....	.....	.....	.....	.002" to .015"	.002" to .015"
Lead screw, diameter and threads	1⅛"-6	1⅛"-6	1"-6	⅞"-8	¾"-8	¾"-8	¾"-8	¾"-8
Feeds, cross, automatic friction:								
Quick change gear lathes ..... (pg. 7)	.002" to .015"	.002" to .015"	.001" to .008"	.001" to .008"	.0005" to .008"	.001" to .008"	.....	.....
Standard change gear lathes .. (pg. 56)	.002" to .020"	.002" to .020"	.0007" to .0075"	.0007" to .0056"	.0007" to .0056"	.0007" to .0056"	.....	.....
Tailstock spindle travel	5¾"	5¼"	4¼"	3"	2⅛"	2⅛"	2⅛"	2"
Tailstock top set-over for taper turning	1"	15/16"	15/16"	⅞"	¾"	¾"	¾"	⅝"
Compound rest cross slide travel	10"	8⅝"	9"	8"	7"	7"	7"	5½"
Compound rest top angular hand feed	4⅜"	3½"	3¼"	2⅝"	2"	2"	2"	2⅛"
Tool post opening for tool holder shank	⅝" x 1⅜"	½" x 1⅛"	½" x 1⅛"	⅜" x ⅞"	⅜" x 13/16"	⅜" x 13/16"	⅜" x 13/16"	⅜" x ¾"
Tool holder takes cutter bits	⅜" sq.	5/16" sq.	5/16" sq.	¼" sq.	¼" sq.	¼" sq.	¼" sq.	¼" sq.
Large face plate, diameter	13¼"	12½"	10¾"	9"	7⅜"	7⅜"	.....	.....
Small face plate, diameter	8 1/16"	7⅝"	6⅝"	5⅝"	5⅝"	5⅝"	5⅝"	5⅛"
Taper attachment, maximum length will turn at one setting	12"	10"	10"	9"	9"	9"	9"	7"
Taper attachment, maximum taper per ft.	3"	3"	3"	3"	3"	3"	3"	3"

*This capacity slightly less on lathes when fitted with Taper Attachment.

Metric Screw Thread Cutting Equipment shown on page 69.



Patented

16" x 6' Series "N" Underneath Belt Motor Driven Quick Change Gear Lathe

16-inch Underneath Belt Motor Driven Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 16-inch Underneath Belt Motor Driven Lathes have the precision and accuracy for fine machine work and the power and rigidity for production operations. See pages 4 to 11. The underneath belt motor drive is fully enclosed and is silent, powerful and economical. See page 54.

Equipment included in price of lathe consists of: 1 H.P. instant reversing motor, reversing switch, wiring, 3 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

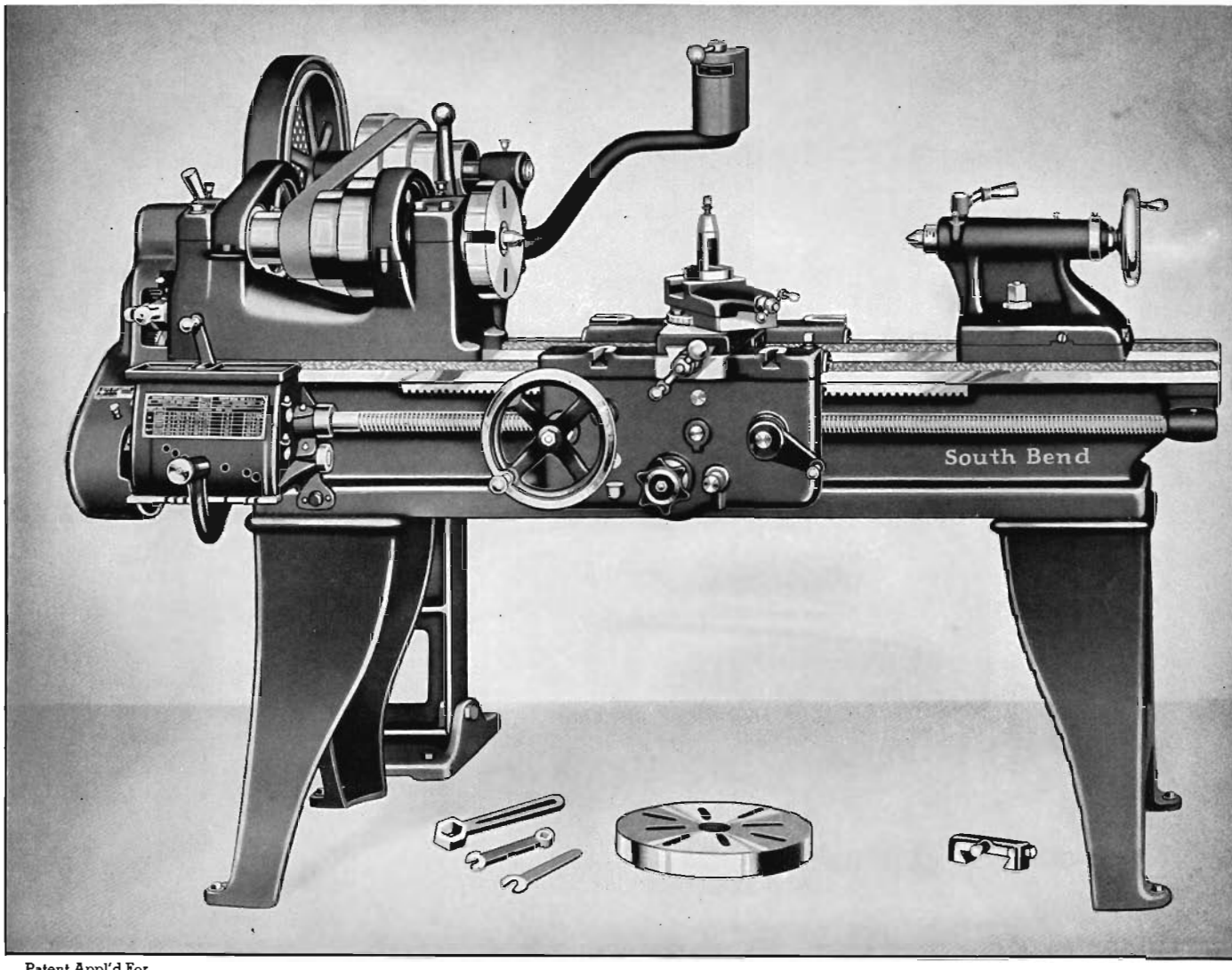
Specifications

Swing over lathe bed	16¼ in.
Swing over saddle slide, chip guard removed	9¾ in.
Spindle nose, size	2⅜ in. diam., 6 threads
Hole through spindle 1⅜ in., Maximum collet capacity	⅞ in.
Centers, head and tail spindle	No. 3 Morse Taper
Cone pulley belt width	2¼ in.
V-belts for motor (three used), width	17/32 in.
8 spindle speeds	17, 28, 44, 73, 138, 223, 353, 587 R.P.M.
Thread cutting range, quick change	2 to 112 per in.
Thread cutting range, standard change	2 to 112 per in.
Compound rest top, angular feed	4⅜ in.
Standard change gear lathe information	see page 56
Quick change gear box	see page 7
For additional specifications	see page 11

Net Factory Prices of 16-inch Underneath Belt Motor Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
16¼	6	34	1	2300	123-C	Babes	$889.00	$929.00	$971.00	117-C	Bapvo	$969.00	$1009.00	$1051.00
16¼	7	46	1	2380	123-D	Babgu	911.00	951.00	993.00	117-D	Barve	991.00	1031.00	1073.00
16¼	8	58	1	2460	123-E	Babiw	933.00	973.00	1015.00	117-E	Baryo	1013.00	1053.00	1095.00
16¼	10	82	1	2620	123-G	Babma	981.00	1021.00	1063.00	117-G	Basoz	1061.00	1101.00	1143.00
16¼	12	106	1	2850	123-H	Babob	1048.00	1088.00	1130.00	117-H	Bavco	1128.00	1168.00	1210.00

Prices of Lathes with 12-foot bed include center leg.



Patent Appl'd For

16″ x 6′ Series "N" Pedestal Adjustable Motor Driven Quick Change Gear Lathe

16-inch Pedestal Adjustable Motor Driven Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 16-inch Pedestal Adjustable Motor Driven Lathes have the power for taking heavy cuts and the accuracy required for the most exacting machine work. See pages 4 to 11. The pedestal adjustable motor drive is moderate in price, efficient and convenient. See page 55.

Equipment included in price of lathe consists of: 1 H.P. instant reversing motor, reversing switch, wiring, 3 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

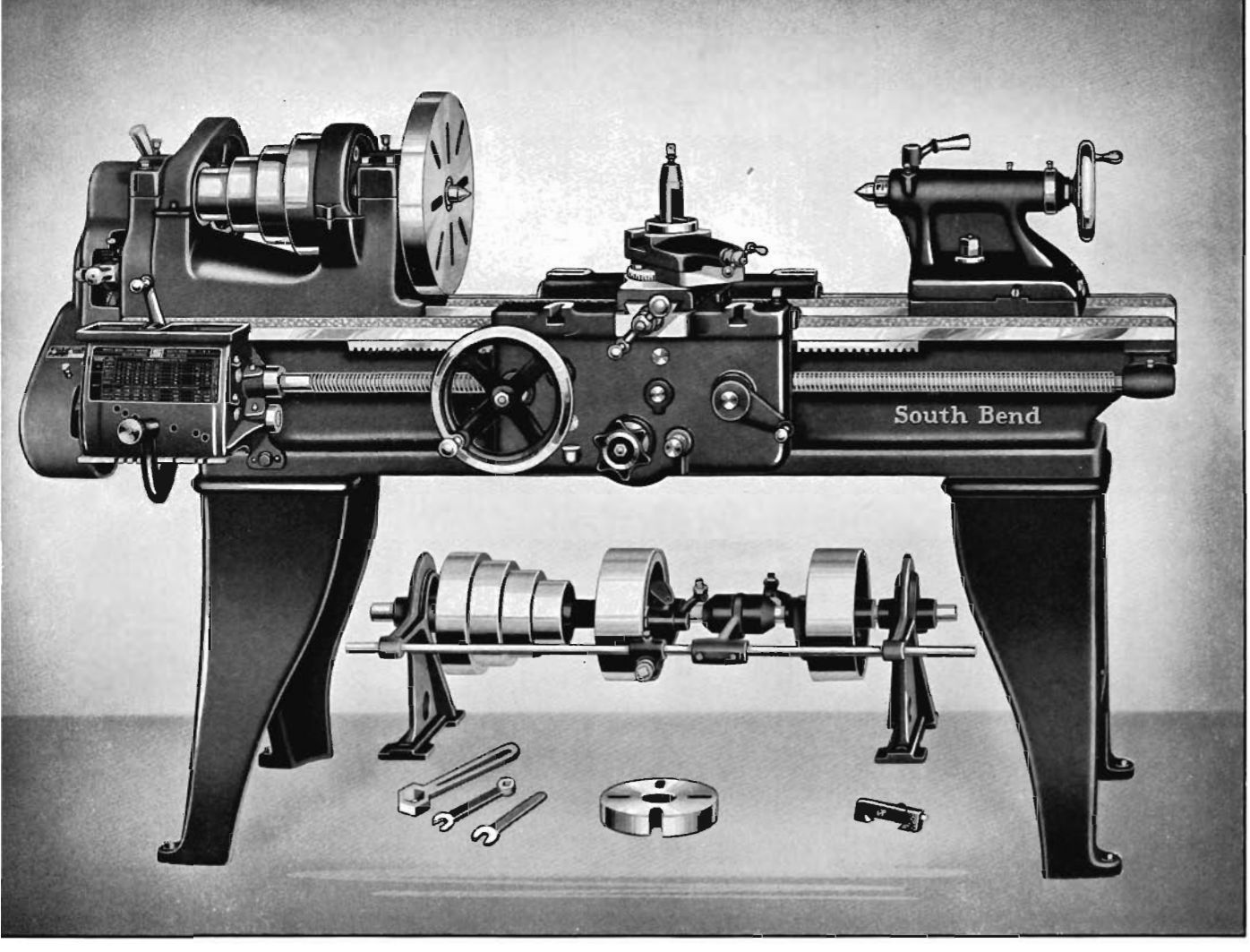
Specifications

Swing over lathe bed	16¼ in.
Swing over saddle slide, chip guard removed	9¾ in.
Spindle nose, size	2⅜ in. diam., 6 threads
Hole through spindle 1⅜ in., Maximum collet capacity	⅞ in.
Centers, head and tail spindle	No. 3 Morse Taper
Cone pulley belt width	2¼ in.
V-belts for motor (three used), width	17/32 in.
8 spindle speeds	17, 28, 44, 73, 138, 223, 353, 587 R.P.M.
Thread cutting range, quick change	2 to 112 per in.
Thread cutting range, standard change	2 to 112 per in.
Compound rest top, angular feed	4⅜ in.
Standard change gear lathe information	see page 56
Quick change gear box	see page 7
For additional specifications	see page 11

Net Factory Prices of 16-inch Pedestal Adjustable Motor Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
16¼	6	34	1	2165	923-C	Pirel	$783.00	$795.00	$860.00	917-C	Lapin	$863.00	$875.00	$940.00
16¼	7	46	1	2245	923-D	Piren	805.00	817.00	882.00	917-D	Lalos	885.00	897.00	962.00
16¼	8	58	1	2325	923-E	Pabit	827.00	839.00	904.00	917-E	Larag	907.00	919.00	984.00
16¼	10	82	1	2485	923-G	Pabog	875.00	887.00	952.00	917-G	Lamar	955.00	967.00	1032.00
16¼	12	106	1	2715	923-H	Pacen	942.00	954.00	1019.00	917-H	Lanos	1022.00	1034.00	1099.00

Prices of Lathes with 12-foot bed include center leg.



16″ x 6′ Series "N" Countershaft Driven Quick Change Gear Lathe

16-inch Countershaft Driven Quick Change Gear Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

16-inch Countershaft Driven Quick Change Gear Lathes are recommended for production operations, maintenance work and for general machine work where frequent changes for threads and feeds are required. See pages 4 to 11. Full quick change gear equipment is furnished for cutting screw threads and for friction longitudinal feeds and cross feeds. For further details see page 7.

Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box, installation plan, and instruction book "How to Run a Lathe."

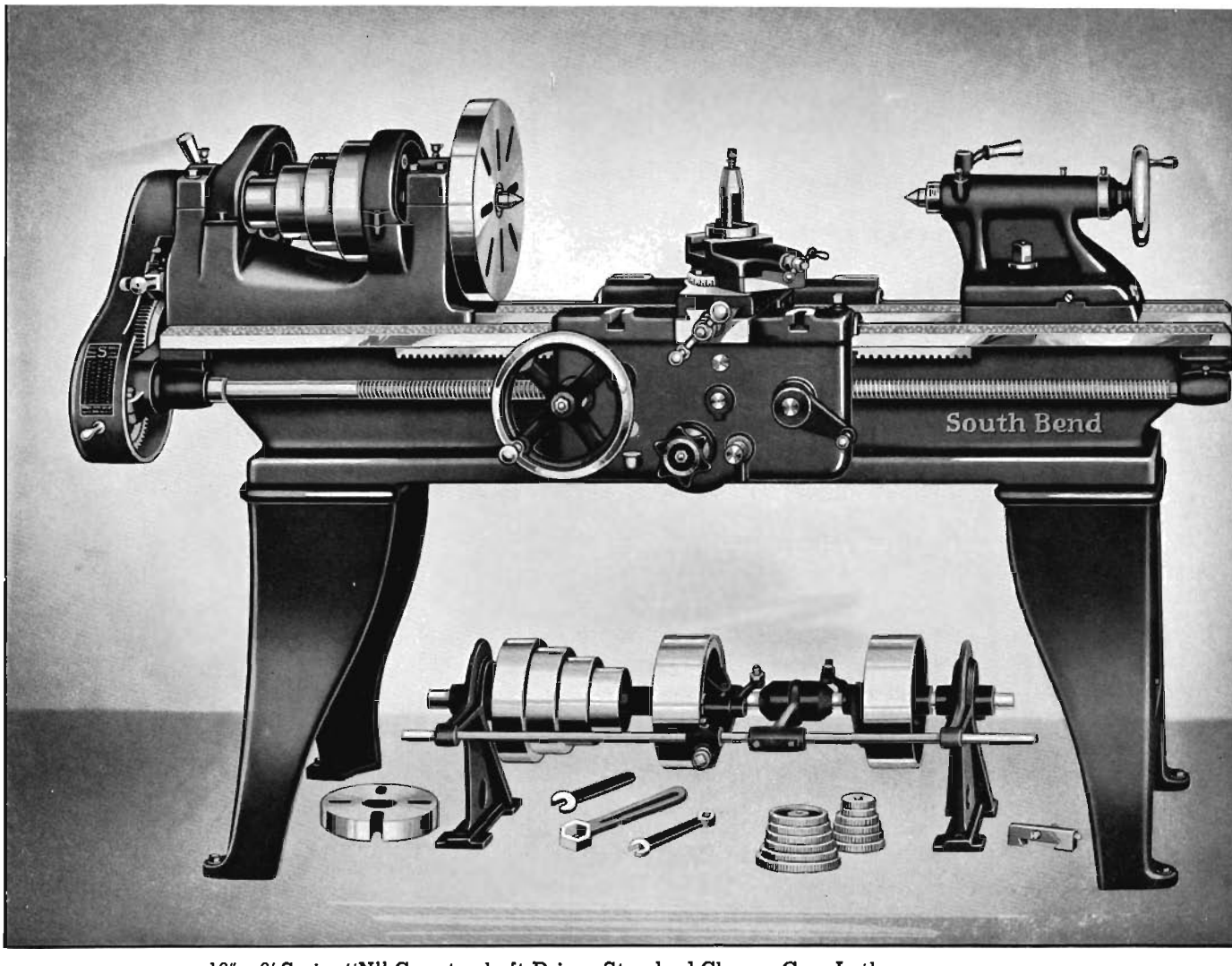
Specifications

Swing over lathe bed	16¼ in.
Swing over saddle slide, chip guard removed	9¾ in.
Spindle nose, size	2⅜ in. diam., 6 threads
Hole through spindle 1⅜ in., Maximum collet capacity	⅞ in.
Centers, head and tail spindle	No. 3 Morse Taper
Cone pulley belt width	2¼ in.
8 spindle speeds	18, 29, 45, 75, 141, 228, 360, 598 R.P.M.
Thread cutting range (see page 7)	2 to 112 per in.
Compound rest top, angular feed	4⅜ in.
Tailstock top, set-over for taper turning	1 in.
Tailstock spindle travel	5¾ in.
Recommended countershaft speed	225 R.P.M.
Countershaft friction pulley size	10 in. x 3⅝ in.
For additional specifications	see page 11

Net Factory Prices of 16-inch Countershaft Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Quick Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
16¼	6	34	1⅜	9¾	2¼	225	1	17-C	Alcis	1875	$722.00
16¼	7	46	1⅜	9¾	2¼	225	1	17-D	Alcot	1955	744.00
16¼	8	58	1⅜	9¾	2¼	225	1	17-E	Algat	2035	766.00
16¼	10	82	1⅜	9¾	2¼	225	1	17-G	Algoy	2195	814.00
16¼	12	106	1⅜	9¾	2¼	225	1	17-H	Alguz	2425	881.00

Prices of Lathes with 12-foot bed include center leg.



16″ x 6′ Series "N" Countershaft Driven Standard Change Gear Lathe

16-inch Countershaft Driven Standard Change Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

16-inch Countershaft Driven Standard Change Gear Lathes are recommended for production operations and for general machine work of all kinds. See pages 4 to 11. Independent change gears are furnished for cutting right and left hand screw threads and for friction longitudinal feeds and cross feeds. See page 56 for further details.

Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and instruction book "How to Run a Lathe."

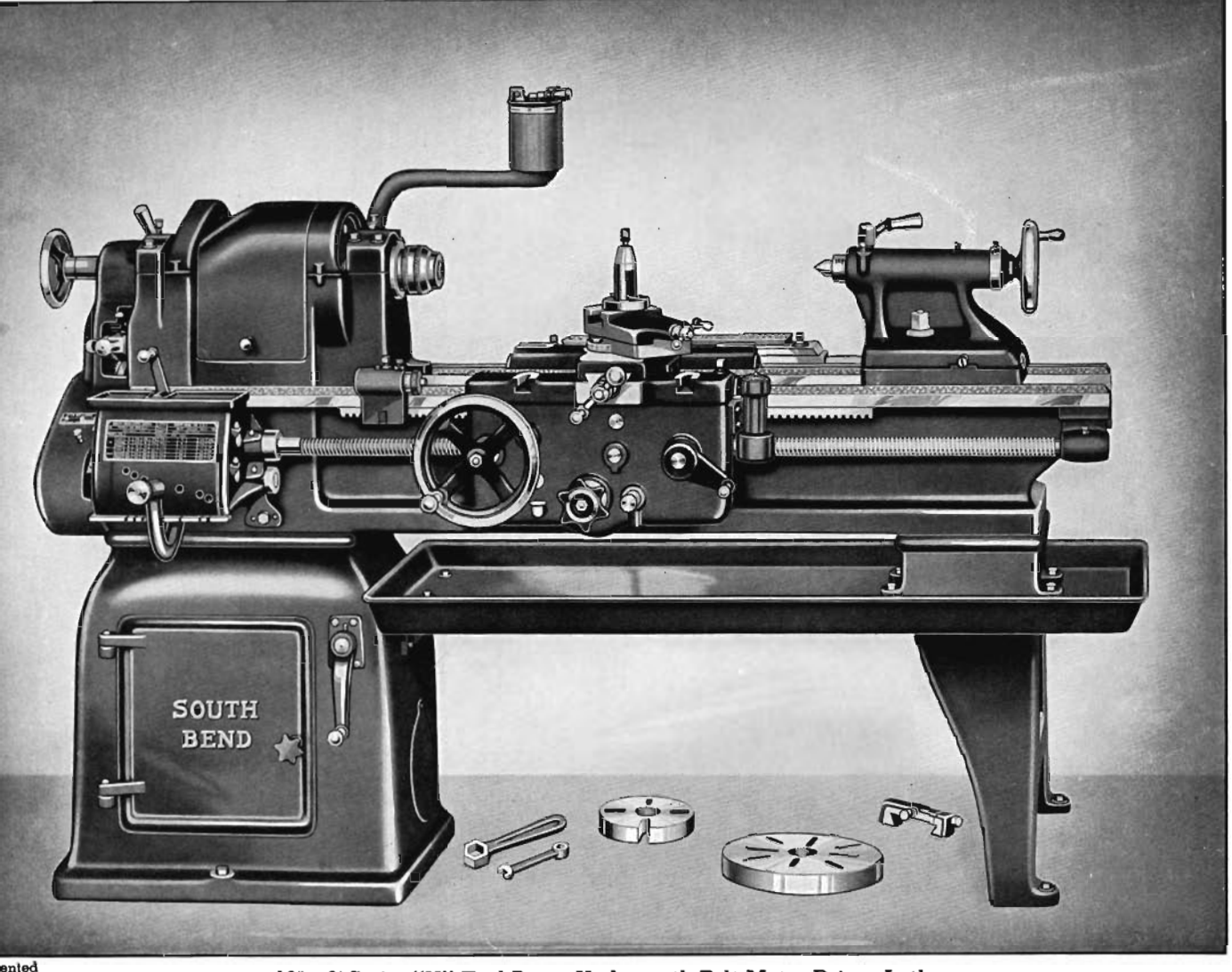
Specifications

Swing over lathe bed ..... 16¼ in.
Swing over saddle slide, chip guard removed ..... 9¾ in.
Spindle nose, size ..... 2⅜ in. diam., 6 threads
Hole through spindle 1⅜ in., Maximum collet capacity ... ⅞ in.
Centers, head and tail spindle ..... No. 3 Morse Taper
Cone pulley belt width ..... 2¼ in.
8 spindle speeds ..... 18, 29, 45, 75, 141, 228, 360, 598 R.P.M.
Thread cutting range (incl. 11½ pipe thread) . 2 to 112 per in.
Compound rest top, angular feed ..... 4⅜ in.
Tailstock top, set-over for taper turning ..... 1 in.
Tailstock spindle travel ..... 5¾ in.
Recommended countershaft speed ..... 225 R.P.M.
Countershaft friction pulley size ..... 10 in. x 3⅝ in.
For additional specifications ..... see page 11

Net Factory Prices of 16-inch Countershaft Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Standard Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
16¼	6	34	1⅜	9¾	2¼	225	1	23-C	Amnuc	1840	$642.00
16¼	7	46	1⅜	9¾	2¼	225	1	23-D	Ampay	1920	664.00
16¼	8	58	1⅜	9¾	2¼	225	1	23-E	Andun	2000	686.00
16¼	10	82	1⅜	9¾	2¼	225	1	23-G	Anler	2160	734.00
16¼	12	106	1⅜	9¾	2¼	225	1	23-H	Anlot	2390	801.00

Prices of Lathes with 12-foot bed include center leg.



ented

16″ x 6′ Series "N" Tool Room Underneath Belt Motor Driven Lathe

16-inch Tool Room Underneath Belt Motor Driven Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

16-inch Tool Room Quick Change Gear Lathes have the precision and accuracy for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. See pages 4 to 11 for description and specifications.

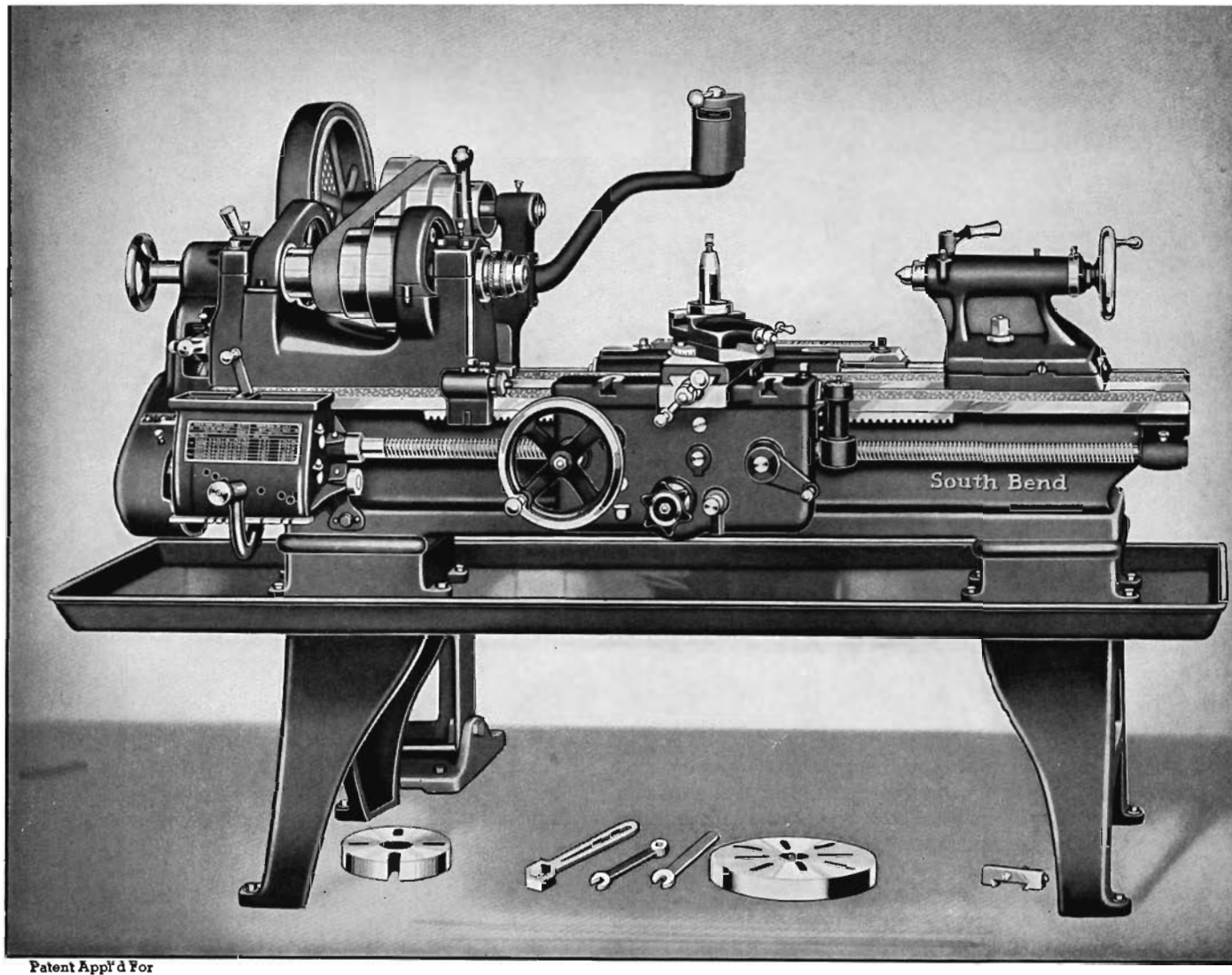
The underneath belt motor drive is especially desirable for tool room lathes as it permits placing the lathe in the most convenient location in the shop. The drive is fully enclosed and is silent, powerful and economical. For illustration and detailed description see page 54.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, chip pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of lathe consists of: 1 H.P. instant reversing motor, reversing switch, wiring, 3 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 16-inch Tool Room Precision Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Collet Capacity Inches 1/16″ up by 64ths to	Size Motor Used H.P.	Underneath Belt Motor Driven Lathes					
							Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
										3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
16¼	6	34	9¾	1⅜	⅞	1	8117-C	2525	Balha	$1260.00	$1300.00	$1342.00
16¼	7	46	9¾	1⅜	⅞	1	8117-D	2605	Barso	1287.00	1327.00	1369.00
16¼	8	58	9¾	1⅜	⅞	1	8117-E	2685	Balib	1314.00	1354.00	1396.00



Patent Appl'd For

16" x 6' Series "N" Tool Room Pedestal Adjustable Motor Driven Lathe

16-inch Tool Room Precision Lathes—Pedestal Motor Drive—C'shaft Drive

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

16-inch Tool Room Quick Change Gear Lathes have the precision and accuracy required for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. For detailed description of features and specifications see pages 4 to 11.

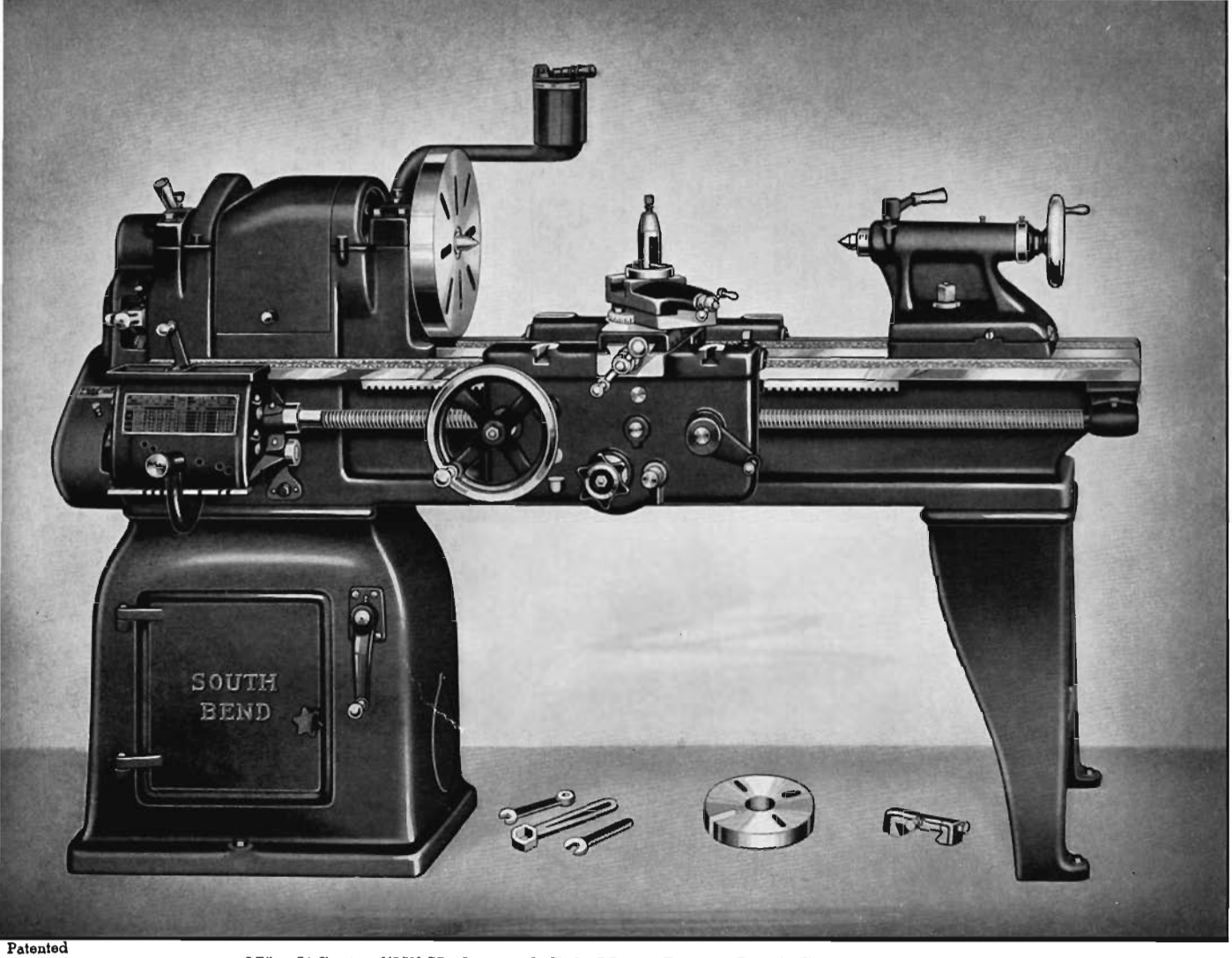
Countershaft driven and pedestal adjustable motor driven tool room lathes are priced in the tabulation below. Countershaft driven lathes are recommended for shops equipped with lineshafting. The pedestal adjustable motor driven lathe is recommended to those desiring an efficient motor driven lathe at a moderate price.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, oil pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of tool room lathe consists of: countershaft or pedestal motor drive with motor and switch as illustrated and described on pages 13 and 14 under 16-inch countershaft driven and pedestal motor driven lathes, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 16-inch Tool Room Precision Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Collet Capacity Inches 1/16" up by 64ths to	Power Required H.P.	Countershaft Driven Lathes				Pedestal Motor Driven Lathes					
					Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
												3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
16¼	6	34	⅞	1	8017-C	2125	Larel	$1025.00	8917-C	2415	Basoy	$1166.00	$1178.00	$1243.00
16¼	7	46	⅞	1	8017-D	2205	Laboz	1052.00	8917-D	2495	Batec	1193.00	1205.00	1270.00
16¼	8	58	⅞	1	8017-E	2285	Lerem	1079.00	8917-E	2575	Batel	1220.00	1232.00	1297.00



Patented

15" x 6' Series "N" Underneath Belt Motor Driven Quick Change Gear Lathe

15-inch Underneath Belt Motor Driven Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 15-inch Underneath Belt Motor Driven Lathes have the precision and accuracy for fine machine work and the power and rigidity for production operations. See pages 4 to 11. The underneath belt motor drive is fully enclosed and is silent, powerful and economical. See page 54.

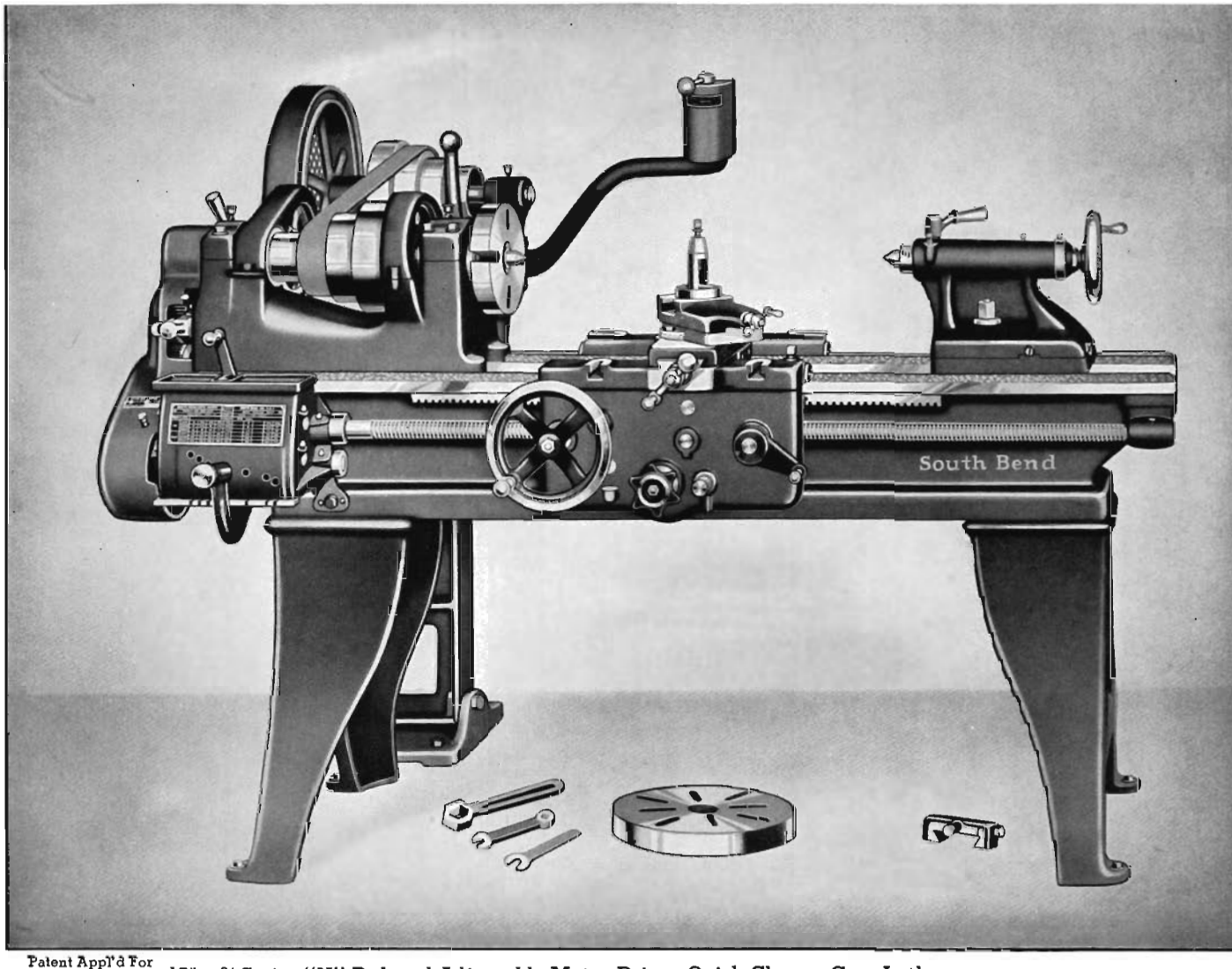
Equipment included in price of lathe consists of: 1 H.P. instant reversing motor, reversing switch, wiring, 3 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed.....15¼ in.
Swing over saddle slide, chip guard removed.....9⅜ in.
Spindle nose, size.....2¼ in. diam., 6 threads
Hole through spindle 1⅛ in., Maximum collet capacity...¾ in.
Centers, head and tail spindle.....No. 3 Morse Taper
Cone pulley belt width.....2 in.
V-belts for motor (three used), width.....17/32 in.
8 spindle speeds.....19, 32, 48, 81, 139, 223, 340, 568 R.P.M.
Thread cutting range, quick change.....2 to 112 per in.
Thread cutting range, standard change.....2 to 112 per in.
Compound rest top, angular feed.....3½ in.
Standard change gear lathe information.....see page 56
Quick change gear box.....see page 7
For additional specifications.....see page 11

Net Factory Prices of 15-inch Underneath Belt Motor Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
15¼	5	24½	1	1995	121-B	Babsf	$779.00	$819.00	$861.00	114-B	Bayba	$849.00	$889.00	$931.00
15¼	6	36½	1	2070	121-C	Babuh	799.00	839.00	881.00	114-C	Bayce	869.00	909.00	951.00
15¼	7	48½	1	2145	121-D	Babvi	819.00	859.00	901.00	114-D	Bayfo	889.00	929.00	971.00
15¼	8	60½	1	2225	121-E	Babyl	843.00	883.00	925.00	114-E	Bazca	913.00	953.00	995.00
15¼	10	84½	1	2390	121-G	Bacac	891.00	931.00	973.00	114-G	Bebke	961.00	1001.00	1043.00



Patent Appl'd For

15″ x 6′ Series "N" Pedestal Adjustable Motor Driven Quick Change Gear Lathe

15-inch Pedestal Adjustable Motor Driven Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 15-inch Pedestal Adjustable Motor Driven Lathes have the power for taking heavy cuts and the accuracy required for the most exacting machine work. See pages 4 to 11. The pedestal adjustable motor drive is moderate in price, efficient and convenient. See page 55.

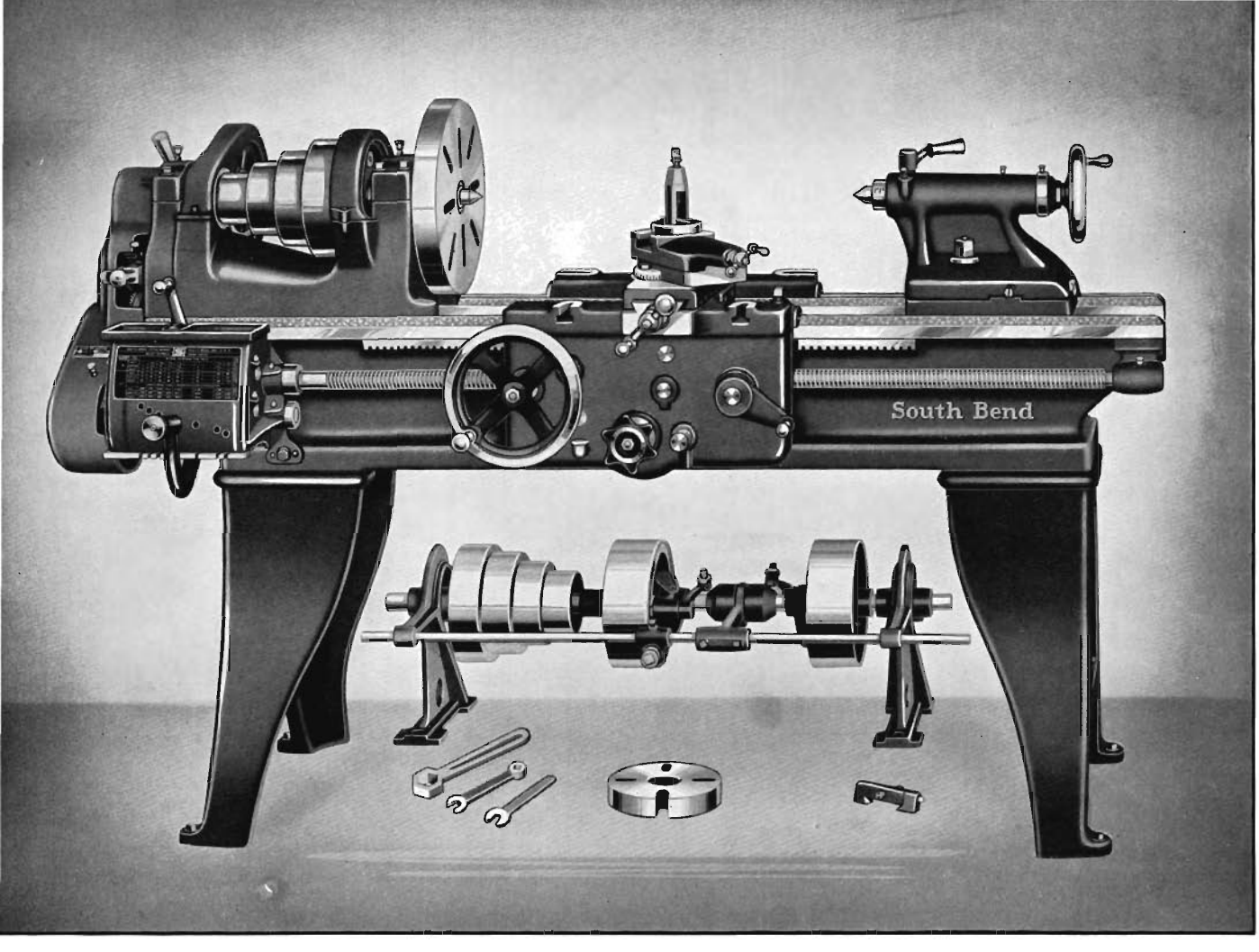
Equipment included in price of lathe consists of: 1 H.P. instant reversing motor, reversing switch, wiring, 3 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed	15¼ in
Swing over saddle slide, chip guard removed	9⅜ in.
Spindle nose, size	2¼ in. diam., 6 threads
Hole through spindle 1⅛ in., Maximum collet capacity	¾ in.
Centers, head and tail spindle	No. 3 Morse Taper
Cone pulley belt width	2 in.
V-belts for motor (three used), width	17/32 in.
8 spindle speeds	19, 32, 48, 81, 139, 223, 340, 568 R.P.M.
Thread cutting range, quick change	2 to 112 per in.
Thread cutting range, standard change	2 to 112 per in.
Compound rest top, angular feed	3½ in.
Standard change gear lathe information	see page 56
Quick change gear box	see page 7
For additional specifications	see page 11

Net Factory Prices of 15-inch Pedestal Adjustable Motor Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
15¼	5	24½	1	1735	921-B	Tanat	$671.00	$683.00	$748.00	914-B	Tinuk	$741.00	$753.00	$818.00
15¼	6	36½	1	1810	921-C	Tapom	691.00	703.00	768.00	914-C	Tixap	761.00	773.00	838.00
15¼	7	48½	1	1885	921-D	Tawig	711.00	723.00	788.00	914-D	Tokul	781.00	793.00	858.00
15¼	8	60½	1	1965	921-E	Teray	735.00	747.00	812.00	914-E	Tolex	805.00	817.00	882.00
15¼	10	84½	1	2130	921-G	Tetul	783.00	795.00	860.00	914-G	Tomil	853.00	865.00	930.00



15" x 6' Series "N" Countershaft Driven Quick Change Gear Lathe

15-inch Countershaft Driven Quick Change Gear Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

15-inch Countershaft Driven Quick Change Gear Lathes are recommended for production operations, maintenance work and for general machine work where frequent changes for threads and feeds are required. See pages 4 to 11. Full quick change gear equipment is furnished for cutting screw threads and for friction longitudinal feeds and cross feeds. For further details see page 7.

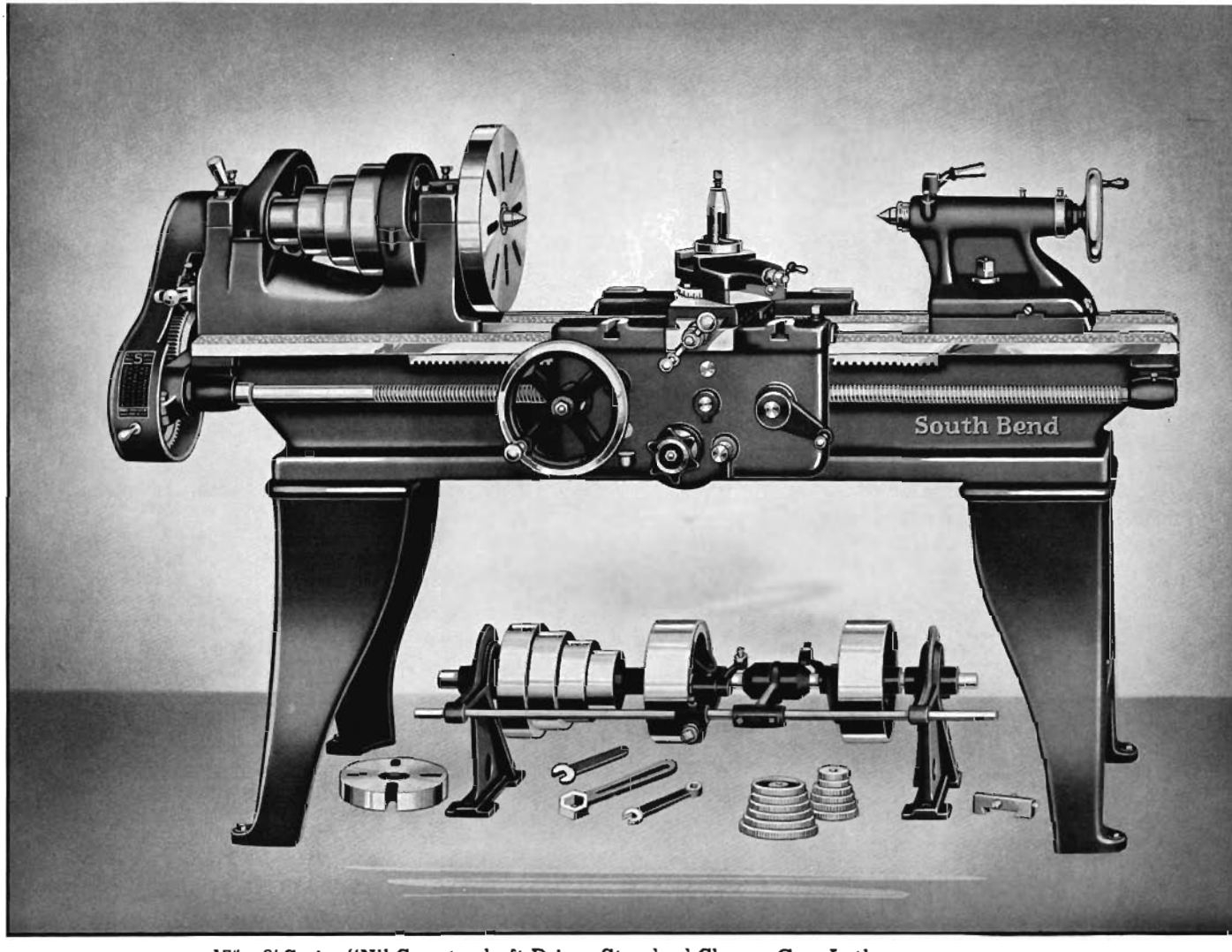
Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box, installation plan, and instruction book "How to Run a Lathe."

Specifications

Swing over lathe bed ..... 15¼ in.
Swing over saddle slide, chip guard removed ..... 9⅜ in.
Spindle nose, size ..... 2¼ in. diam., 6 threads
Hole through spindle 1⅛ in., Maximum collet capacity ... ¾ in.
Centers, head and tail spindle ..... No. 3 Morse Taper
Cone pulley belt width ..... 2 in.
8 spindle speeds .... 20, 33, 51, 83, 143, 226, 355, 579 R.P.M.
Thread cutting range (See page 7) ..... 2 to 112 per in.
Compound rest top, angular feed ..... 3½ in.
Tailstock top, set-over for taper turning ..... 15/16 in.
Tailstock spindle travel ..... 5¼ in.
Recommended countershaft speed ..... 225 R.P.M.
Countershaft friction pulley size ..... 10 in. x 3⅝ in.
For additional specifications ..... see page 11

Net Factory Prices of 15-inch Countershaft Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Quick Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
15¼	5	24½	1⅛	9⅜	2	225	1	14-B	Almec	1575	$614.00
15¼	6	36½	1⅛	9⅜	2	225	1	14-C	Almid	1650	634.00
15¼	7	48½	1⅛	9⅜	2	225	1	14-D	Alnog	1725	654.00
15¼	8	60½	1⅛	9⅜	2	225	1	14-E	Alpad	1805	678.00
15¼	10	84½	1⅛	9⅜	2	225	1	14-G	Alpig	1970	726.00



15″ x 6′ Series "N" Countershaft Driven Standard Change Gear Lathe

15-inch Countershaft Driven Standard Change Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

15-inch Countershaft Driven Standard Change Gear Lathes are recommended for production operations and for general machine work of all kinds. See pages 4 to 11. Independent change gears are furnished for cutting right and left hand screw threads and for friction longitudinal feeds and cross feeds. See page 56 for further details.

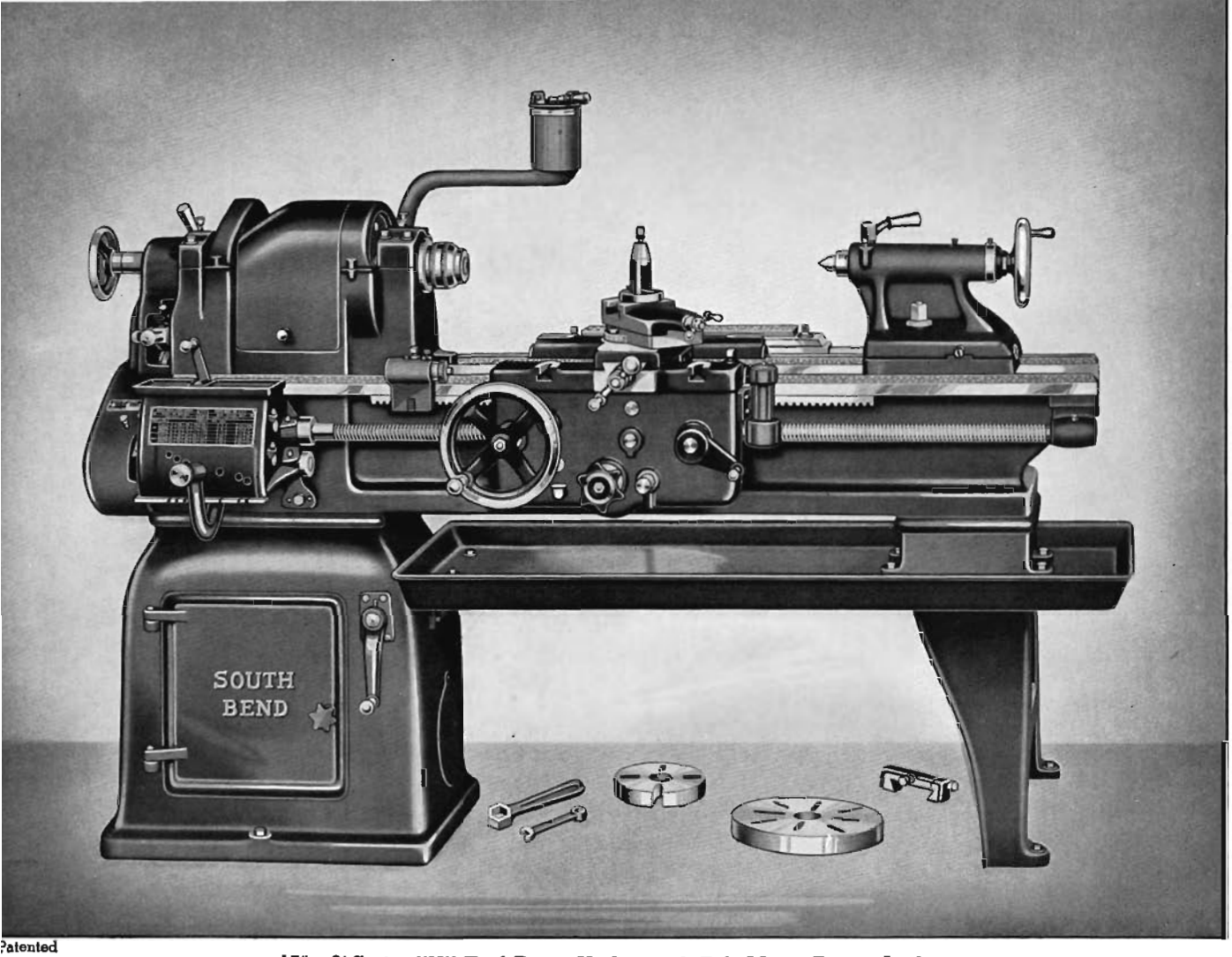
Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and instruction book "How to Run a Lathe."

Specifications

Swing over lathe bed ..... 15¼ in.
Swing over saddle slide, chip guard removed ..... 9⅜ in.
Spindle nose, size ..... 2¼ in. diam., 6 threads
Hole through spindle 1⅛ in., Maximum collet capacity ... ¾ in.
Centers, head and tail spindle ..... No. 3 Morse Taper
Cone pulley belt width ..... 2 in.
8 spindle speeds .... 20, 33, 51, 83, 143, 226, 355, 579 R.P.M.
Thread cutting range (incl. 11½ pipe thread) .. 2 to 112 per in.
Compound rest top, angular feed ..... 3½ in.
Tailstock top, set-over for taper turning ..... 15/16 in.
Tailstock spindle travel ..... 5¼ in.
Recommended countershaft speed ..... 225 R.P.M.
Countershaft friction pulley size ..... 10 in. x 3⅝ in.
For additional specifications ..... see page 11

Net Factory Prices of 15-inch Countershaft Driven Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Standard Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
15¼	5	24½	1⅛	9⅜	2	225	1	21-B	Anpat	1550	$544.00
15¼	6	36½	1⅛	9⅜	2	225	1	21-C	Anpoy	1625	564.00
15¼	7	48½	1⅛	9⅜	2	225	1	21-D	Anrob	1700	584.00
15¼	8	60½	1⅛	9⅜	2	225	1	21-E	Anrug	1780	608.00
15¼	10	84½	1⅛	9⅜	2	225	1	21-G	Ansay	1945	656.00



Patented

15″ x 6′ Series "N" Tool Room Underneath Belt Motor Driven Lathe

15-inch Tool Room Underneath Belt Motor Driven Precision Lathes

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

15-inch Tool Room Quick Change Gear Lathes have the precision and accuracy for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. See pages 4 to 11 for description and specifications.

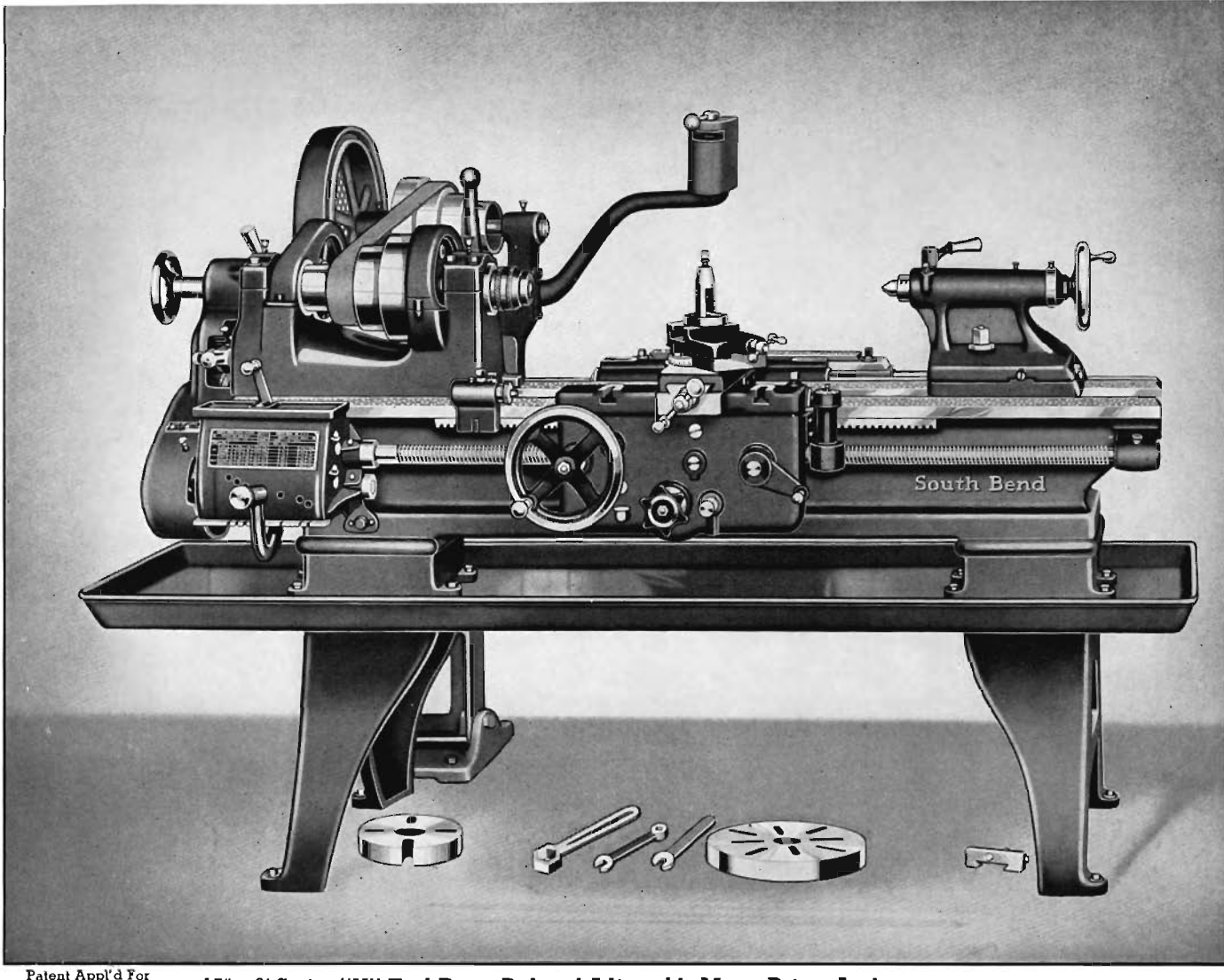
The underneath belt motor drive is especially desirable for tool room lathes as it permits placing the lathe in the most convenient location in the shop. The drive is fully enclosed and is silent, powerful and economical. For illustration and detailed description see page 54.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, chip pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of lathe consists of: 1 H.P. instant reversing motor, reversing switch, wiring, 3 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 15-inch Tool Room Precision Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Collet Capacity 1/16″ up by 64ths to	Size Motor Used H.P.	Catalog Number	Underneath Belt Motor Driven Lathes				
								Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
										3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
15¼	6	36½	9⅜	1⅛	¾	1	8114-C	2255	Balfy	$1136.00	$1176.00	$1218.00
15¼	7	48½	9⅜	1⅛	¾	1	8114-D	2330	Bapyt	1160.00	1200.00	1242.00
15¼	8	60½	9⅜	1⅛	¾	1	8114-E	2405	Barok	1188.00	1228.00	1270.00



Patent Appl'd For

15″ x 6′ Series "N" Tool Room Pedestal Adjustable Motor Driven Lathe

15-inch Tool Room Precision Lathes—Pedestal Motor Drive—C'shaft Drive

Series "N"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

15-inch Tool Room Quick Change Gear Lathes have the precision and accuracy required for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. For detailed description of features and specifications see pages 4 to 11.

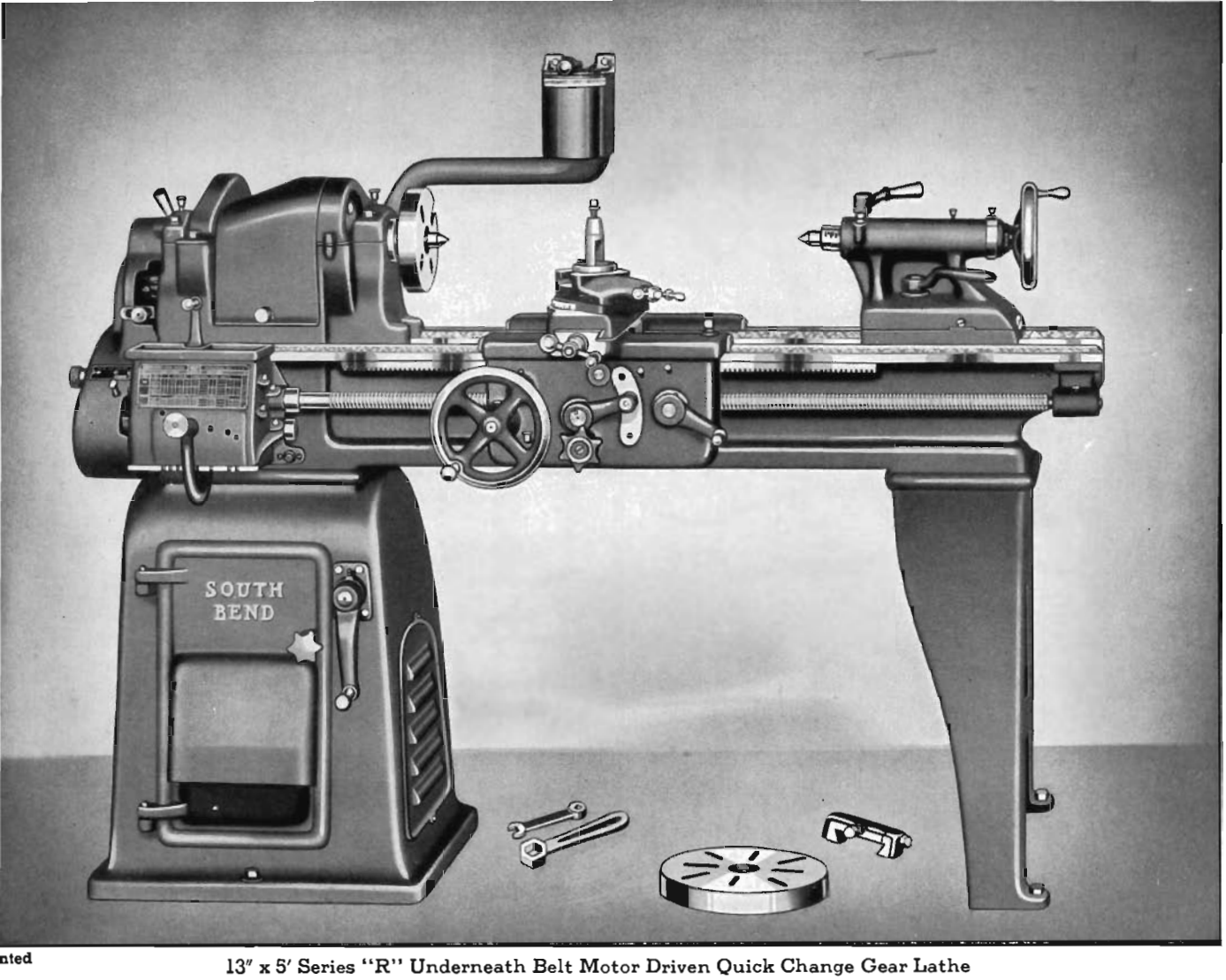
Countershaft driven and pedestal adjustable motor driven tool room lathes are priced in the tabulation below. Countershaft driven lathes are recommended for shops equipped with lineshafting. The pedestal adjustable motor driven lathe is recommended to those desiring an efficient motor driven lathe at a moderate price.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, oil pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of tool room lathe consists of: countershaft or pedestal motor drive with motor and switch as illustrated and described on pages 19 and 20 under 15-inch countershaft driven and pedestal motor driven lathes, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 15-inch Tool Room Precision Lathes—Series "N"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Collet Capacity Inches 1/16″ up by 64ths to	Power Required H.P.	Countershaft Driven Lathes				Pedestal Motor Driven Lathes					
					Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
												3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
15¼	6	36½	¾	1	8014-C	1860	Karex	$914.00	8914-C	2020	Cefur	$1041.00	$1053.00	$1118.00
15¼	7	48½	¾	1	8014-D	1935	Kerob	938.00	8914-D	2095	Cilug	1065.00	1077.00	1142.00
15¼	8	60½	¾	1	8014-E	2010	Kexoy	966.00	8914-E	2170	Cinar	1093.00	1105.00	1170.00



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13″ x 5′ Series "R" Underneath Belt Motor Driven Quick Change Gear Lathe

13-inch Underneath Belt Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 13-inch Underneath Belt Motor Driven Lathes have the precision and accuracy for fine machine work and the power and rigidity for production operations. See pages 4 to 11. The underneath belt motor drive is fully enclosed and is silent, powerful and economical. See page 54.

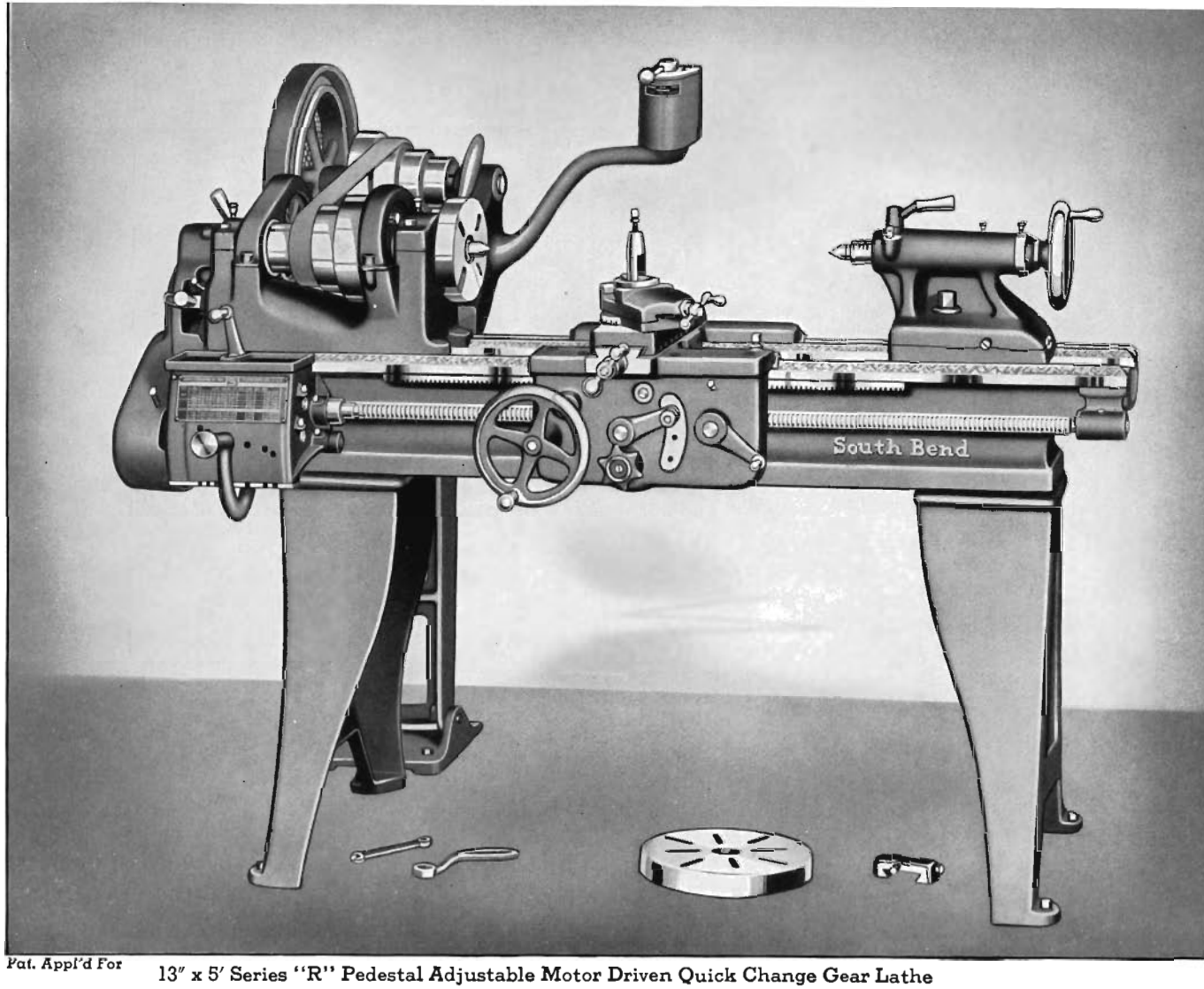
Equipment included in price of lathe consists of: ¾ H.P. instant reversing motor, reversing switch, wiring, 2 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed.....13¼ in.
Swing over saddle slide, Chip guard removed.....9¼ in.
Spindle nose, size.....1⅞ in. diam., 8 threads
Hole through spindle 1 in., Maximum collet capacity....⅝ in.
Centers, head and tail spindle.....No. 3 Morse Taper
Cone pulley belt width.....1¾ in.
V-belts for motor (two used), width.....17/32 in.
8 spindle speeds....24, 38, 58, 92, 173, 270, 410, 646 R.P.M.
Thread cutting range, quick change.....2 to 112 per in.
Thread cutting range, standard change.....2 to 112 per in.
Compound rest top, angular feed.....3¼ in.
Standard change gear lathe information.....see page 56
Quick change gear box.....see page 7
For additional specifications.....see page 11

Net Factory Prices of 13-inch Underneath Belt Motor Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
13¼	4	16	¾	1460	112-A	Betat	$653.00	$665.00	$664.00	113-A	Becka	$713.00	$725.00	$724.00
13¼	5	28	¾	1510	112-B	Bacik	668.00	680.00	679.00	113-B	Becno	728.00	740.00	739.00
13¼	6	40	¾	1560	112-C	Bacmo	685.00	697.00	696.00	113-C	Bedme	745.00	757.00	756.00
13¼	7	52	¾	1615	112-D	Badap	704.00	716.00	715.00	113-D	Besec	764.00	776.00	775.00



Pat. Appl'd For

13" x 5' Series "R" Pedestal Adjustable Motor Driven Quick Change Gear Lathe

13-inch Pedestal Adjustable Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 13-inch Pedestal Adjustable Motor Driven Lathes have the power for taking heavy cuts and the accuracy required for the most exacting machine work. See pages 4 to 11. The pedestal adjustable motor drive is moderate in price, efficient and convenient. See page 55.

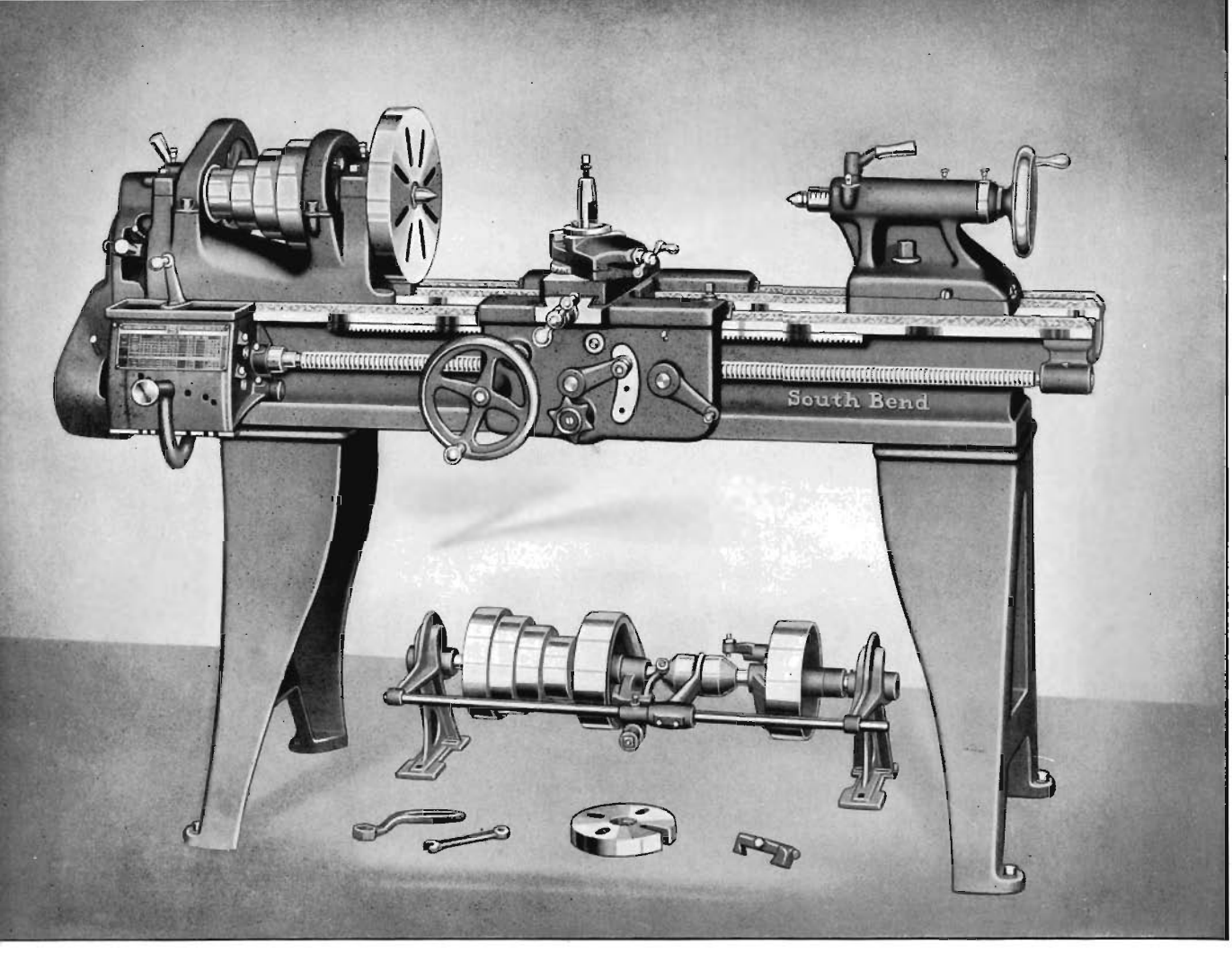
Equipment included in price of lathe consists of: ¾ H.P. instant reversing motor, reversing switch, wiring, 2 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed	13¼ in.
Swing over saddle slide, Chip guard removed	9¼ in.
Spindle nose, size	1⅞ in. diam., 8 threads
Hole through spindle 1 in., Maximum collet capacity	⅝ in.
Centers, head and tail spindle	No. 3 Morse Taper
Cone pulley belt width	1¾ in.
V-belts for motor (two used), width	17/32 in.
8 spindle speeds	24, 38, 58, 92, 173, 270, 410, 646 R.P.M.
Thread cutting range, quick change	2 to 112 per in.
Thread cutting range, standard change	2 to 112 per in.
Compound rest top, angular feed	3¼ in.
Standard change gear lathe information	see page 56
Quick change gear box	see page 7
For additional specifications	see page 11

Net Factory Prices of 13-inch Pedestal Adjustable Motor Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
13¼	4	16	¾	1205	912-A	Raxib	$572.00	$584.00	$583.00	913-A	Repoc	$632.00	$644.00	$643.00
13¼	5	28	¾	1255	912-B	Rolex	587.00	599.00	598.00	913-B	Ravel	647.00	659.00	658.00
13¼	6	40	¾	1305	912-C	Rezob	604.00	616.00	615.00	913-C	Roser	664.00	676.00	675.00
13¼	7	52	¾	1360	912-D	Rimoy	623.00	635.00	634.00	913-D	Robog	683.00	695.00	694.00



13″ x 5′ Series "R" Countershaft Driven Quick Change Gear Lathe

13-inch Countershaft Driven Quick Change Gear Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

13-inch Countershaft Driven Quick Change Gear Lathes are recommended for production operations, maintenance work and for general machine work where frequent changes for threads and feeds are required. See pages 4 to 11. Full quick change gear equipment is furnished for cutting screw threads and for friction longitudinal feeds and cross feeds. For further details see page 7.

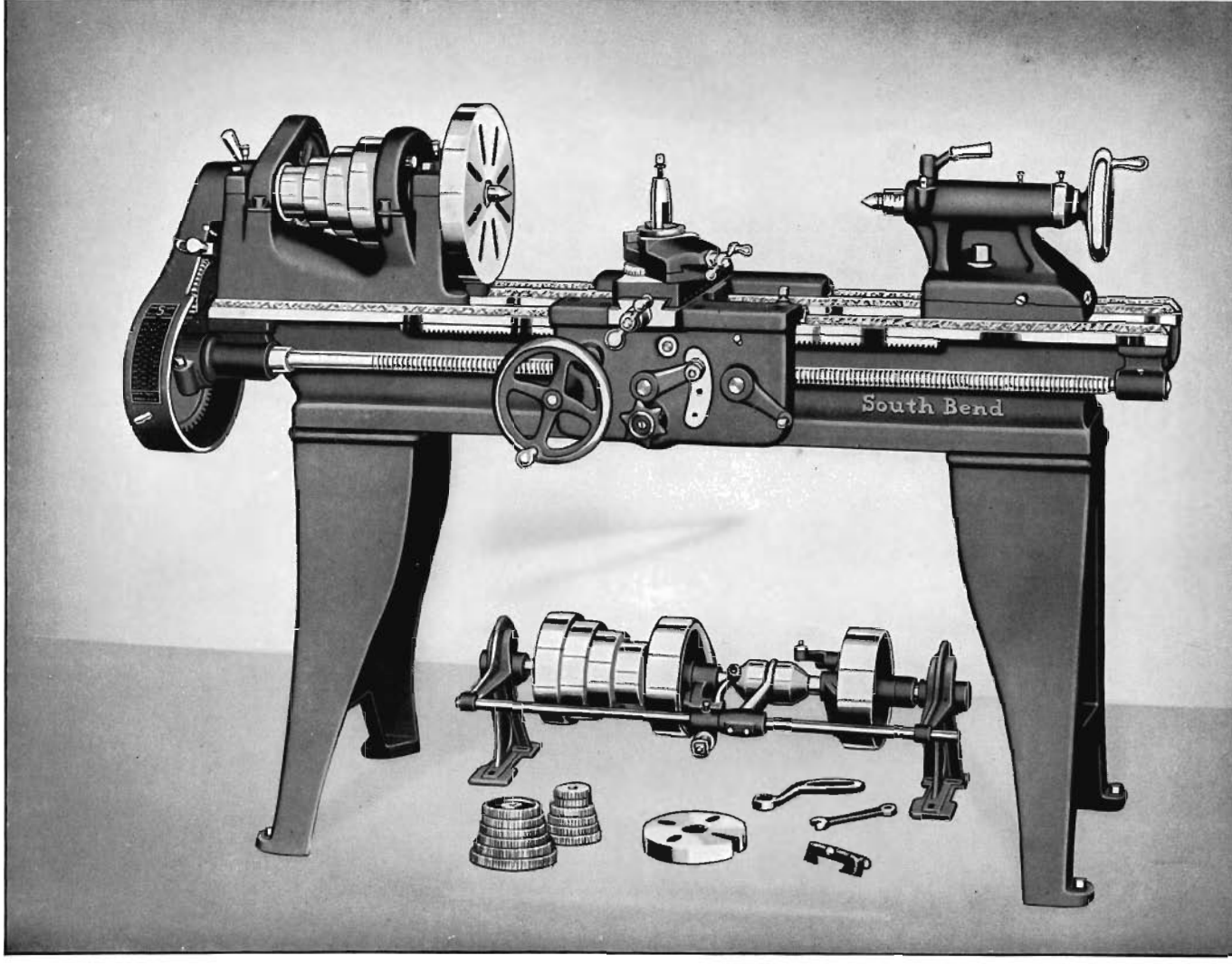
Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box, installation plan, and instruction book "How to Run a Lathe."

Specifications

Swing over lathe bed.....13¼ in.
Swing over saddle slide, Chip guard removed.....9¼ in.
Spindle nose, size.....1⅞ in. diam., 8 threads
Hole through spindle 1 in., Maximum collet capacity.....⅝ in.
Centers, head and tail spindle.....No. 3 Morse Taper
Cone pulley belt width.....1¾ in.
8 spindle speeds . . . 23, 36, 55, 86, 162, 253, 385, 605 R.P.M.
Thread cutting range (see page 7).....2 to 112 per in.
Compound rest top, angular feed.....3¼ in.
Tailstock top, set-over for taper turning.....15/16 in.
Tailstock spindle travel.....4¼ in.
Recommended countershaft speed.....250 R.P.M.
Countershaft friction pulley size.....8 in. x 2⅜ in.
For additional specifications.....see page 11

Net Factory Prices of 13-inch Countershaft Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Quick Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
13¼	4	16	1	9¼	1¾	250	¾	13-A	Altek	1060	$508.00
13¼	5	28	1	9¼	1¾	250	¾	13-B	Altil	1110	523.00
13¼	6	40	1	9¼	1¾	250	¾	13-C	Altom	1160	540.00
13¼	7	52	1	9¼	1¾	250	¾	13-D	Alvak	1215	559.00



13″ x 5′ Series "R" Countershaft Driven Standard Change Gear Lathe

13-inch Countershaft Driven Standard Change Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

13-inch Countershaft Driven Standard Change Gear Lathes are recommended for production operations and for general machine work of all kinds. See pages 4 to 11. Independent change gears are furnished for cutting right and left hand screw threads and for friction longitudinal feeds and cross feeds. See page 56 for further details.

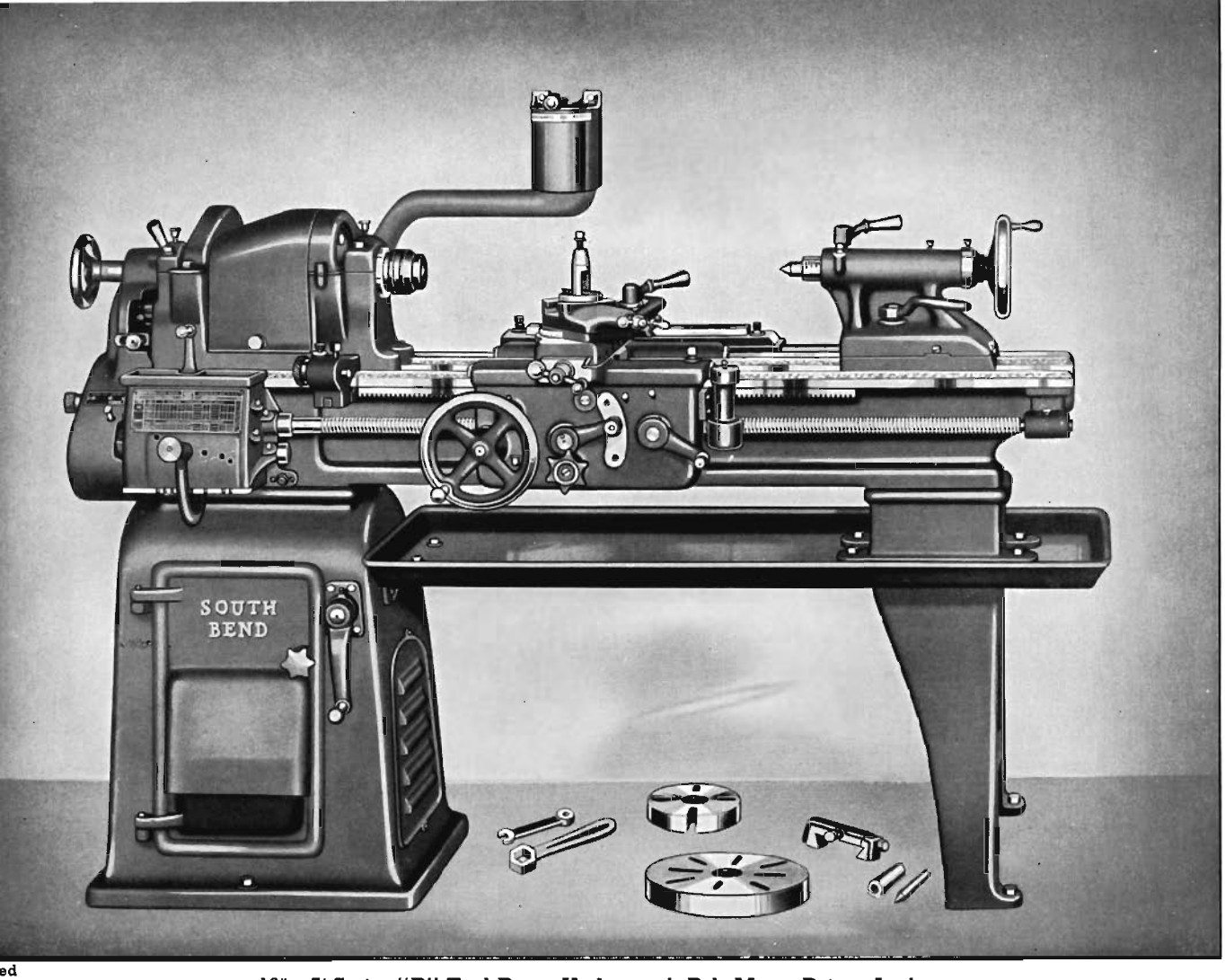
Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and instruction book "How to Run a Lathe."

Specifications

Swing over lathe bed	13¼ in
Swing over saddle slide, Chip guard removed	9¼ in.
Spindle nose, size	1⅞ in. diam., 8 threads
Hole through spindle 1 in., Maximum collet capacity	⅝ in.
Centers, head and tail spindle	No. 3 Morse Taper
Cone pulley belt width	1¾ in.
8 spindle speeds	23, 36, 55, 86, 162, 253, 385, 605 R.P.M.
Thread cutting range (incl. 11½ pipe thread)	2 to 112 per in.
Compound rest top, angular feed	3¼ in.
Tailstock top, set-over for taper turning	15/16 in.
Tailstock spindle travel	4¼ in.
Recommended countershaft speed	250 R.P.M.
Countershaft friction pulley size	8 in. x 2⅜ in.
For additional specifications	see page 11

Net Factory Prices of 13-inch Countershaft Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Standard Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
13¼	4	16	1	9¼	1¾	250	¾	12-A	Anvid	1040	$448.00
13¼	5	28	1	9¼	1¾	250	¾	12-B	Anwif	1090	463.00
13¼	6	40	1	9¼	1¾	250	¾	12-C	Anwog	1140	480.00
13¼	7	52	1	9¼	1¾	250	¾	12-D	Apcog	1195	499.00



13″ x 5′ Series "R" Tool Room Underneath Belt Motor Driven Lathe

13-inch Tool Room Underneath Belt Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

13-inch Tool Room Quick Change Gear Lathes have the precision and accuracy for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. See pages 4 to 11 for description and specifications.

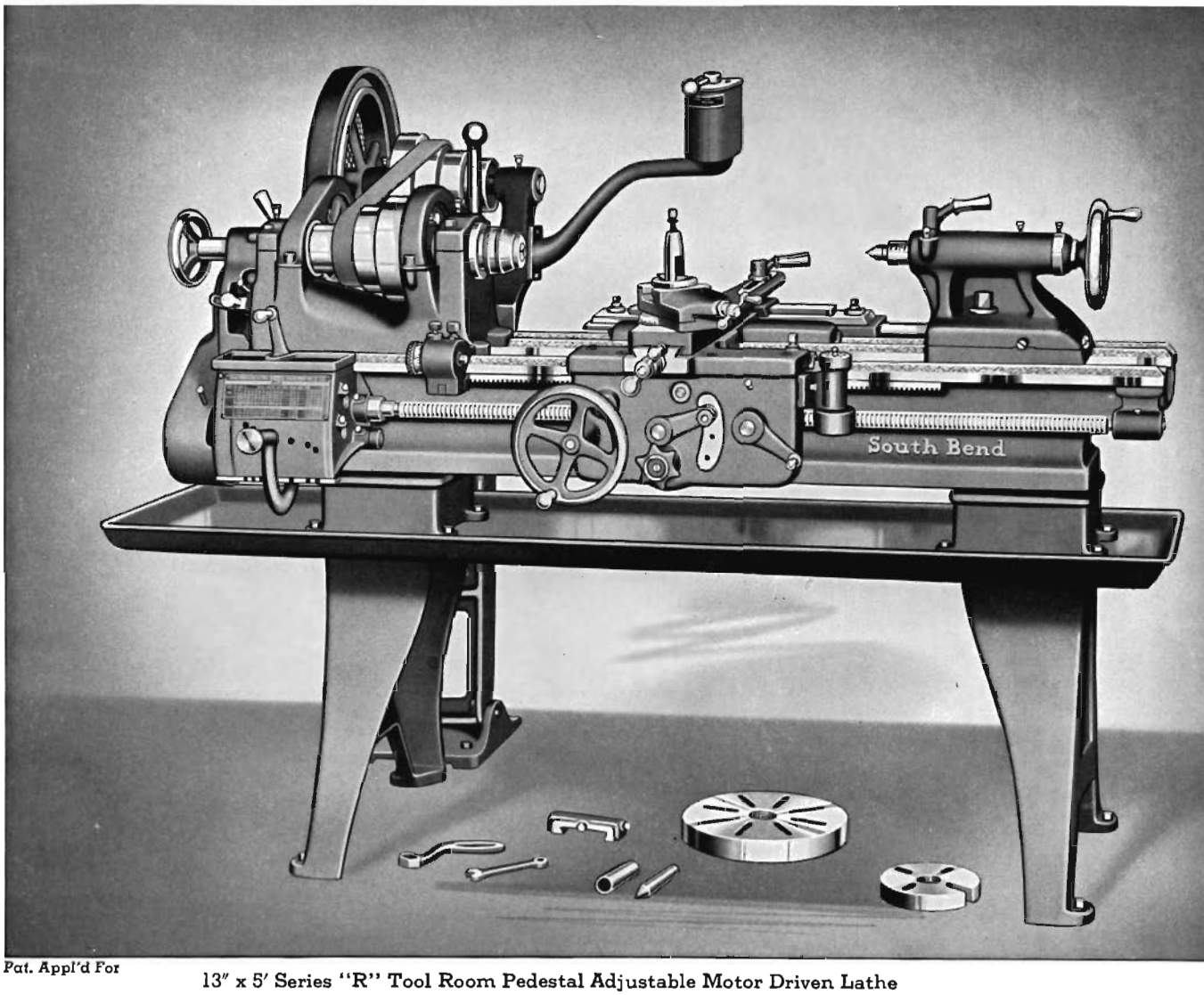
The underneath belt motor drive is especially desirable for tool room lathes as it permits placing the lathe in the most convenient location in the shop. The drive is fully enclosed and is silent, powerful and economical. For illustration and detailed description see page 54.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, chip pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of lathe consists of: ¾ H.P. instant reversing motor, reversing switch, wiring, 2 V-belts, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 13-inch Tool Room Precision Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Collet Capacity Inches 1/16" up by 64ths to	Size Motor Used H.P.	Underneath Belt Motor Driven Lathes					
							Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
										3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
13¼	5	28	9¼	1	⅝	¾	8113-B	1665	Balbu	$963.00	$975.00	$974.00
13¼	6	40	9¼	1	⅝	¾	8113-C	1715	Balex	983.00	995.00	994.00
13¼	7	52	9¼	1	⅝	¾	8113-D	1770	Bapid	1005.00	1017.00	1016.00



Pat. Appl'd For

13" x 5' Series "R" Tool Room Pedestal Adjustable Motor Driven Lathe

13-inch Tool Room Precision Lathes—Pedestal Motor Drive—C'shaft Drive

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

13-inch Tool Room Quick Change Gear Lathes have the precision and accuracy required for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. For detailed description of features and specifications see pages 4 to 11.

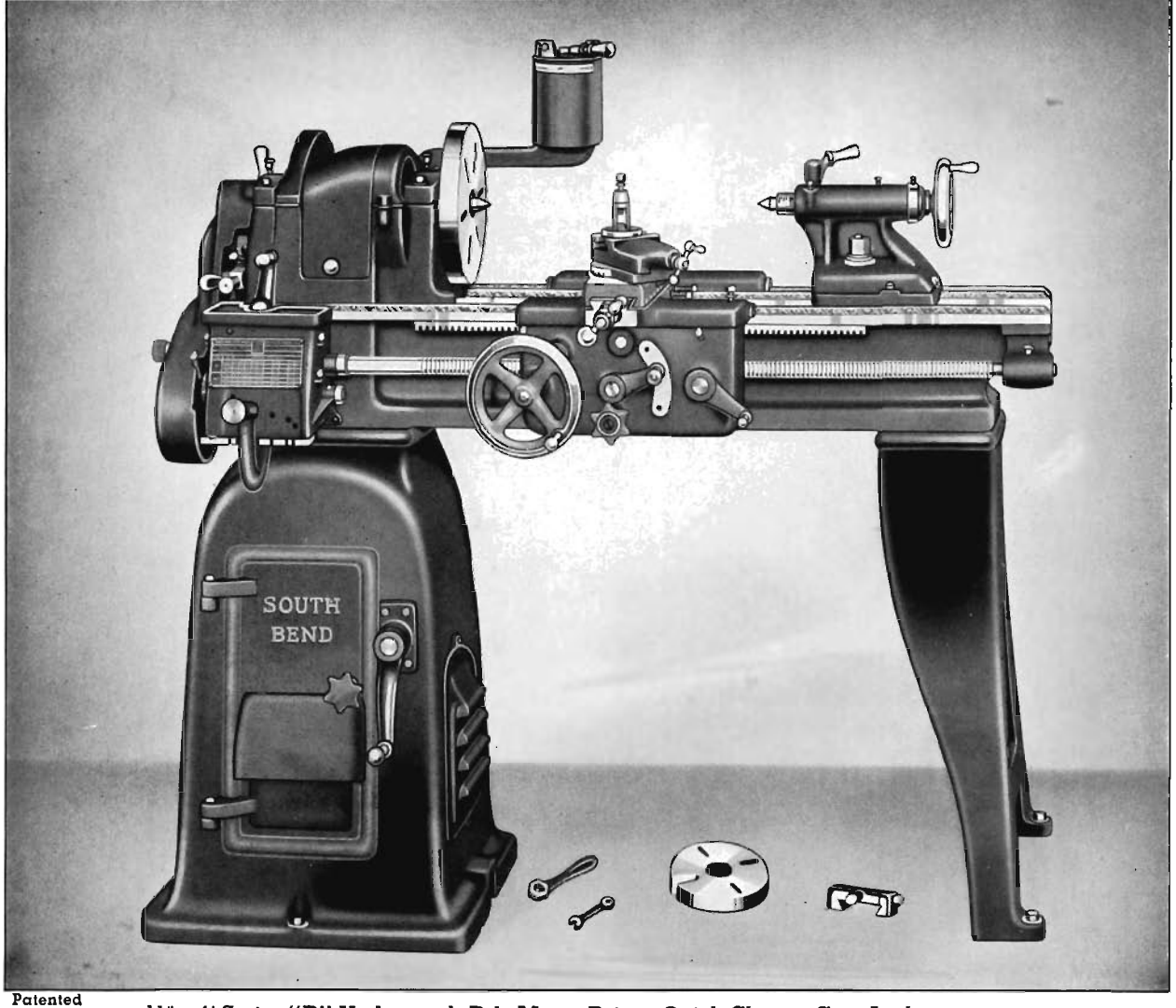
Countershaft driven and pedestal adjustable motor driven tool room lathes are priced in the tabulation below. Countershaft driven lathes are recommended for shops equipped with lineshafting. The pedestal adjustable motor driven lathe is recommended to those desiring an efficient motor driven lathe at a moderate price.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, oil pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of tool room lathe consists of: countershaft or pedestal motor drive with motor and switch as illustrated and described on pages 25 and 26 under 13-inch countershaft driven and pedestal motor driven lathes, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 13-inch Tool Room Precision Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Collet Capacity Inches 1/16" up by 64ths to	Power Required H.P.	Countershaft Driven Lathes				Pedestal Motor Driven Lathes					
					Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
												3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
13¼	5	28	5/8	3/4	8013-B	1290	Arnun	$765.00	8913-B	1435	Hehib	$889.00	$901.00	$900.00
13¼	6	40	5/8	3/4	8013-C	1340	Artut	785.00	8913-C	1485	Hehun	909.00	921.00	920.00
13¼	7	52	5/8	3/4	8013-D	1395	Asynh	807.00	8913-D	1540	Hejau	931.00	943.00	942.00



Patented

11" x 4' Series "R" Underneath Belt Motor Driven Quick Change Gear Lathe

11-inch Underneath Belt Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 11-inch Underneath Belt Motor Driven Lathes have the precision and accuracy for fine machine work and the power and rigidity for production operations. See pages 4 to 11. The underneath belt motor drive is fully enclosed and is silent, powerful and economical. See page 54.

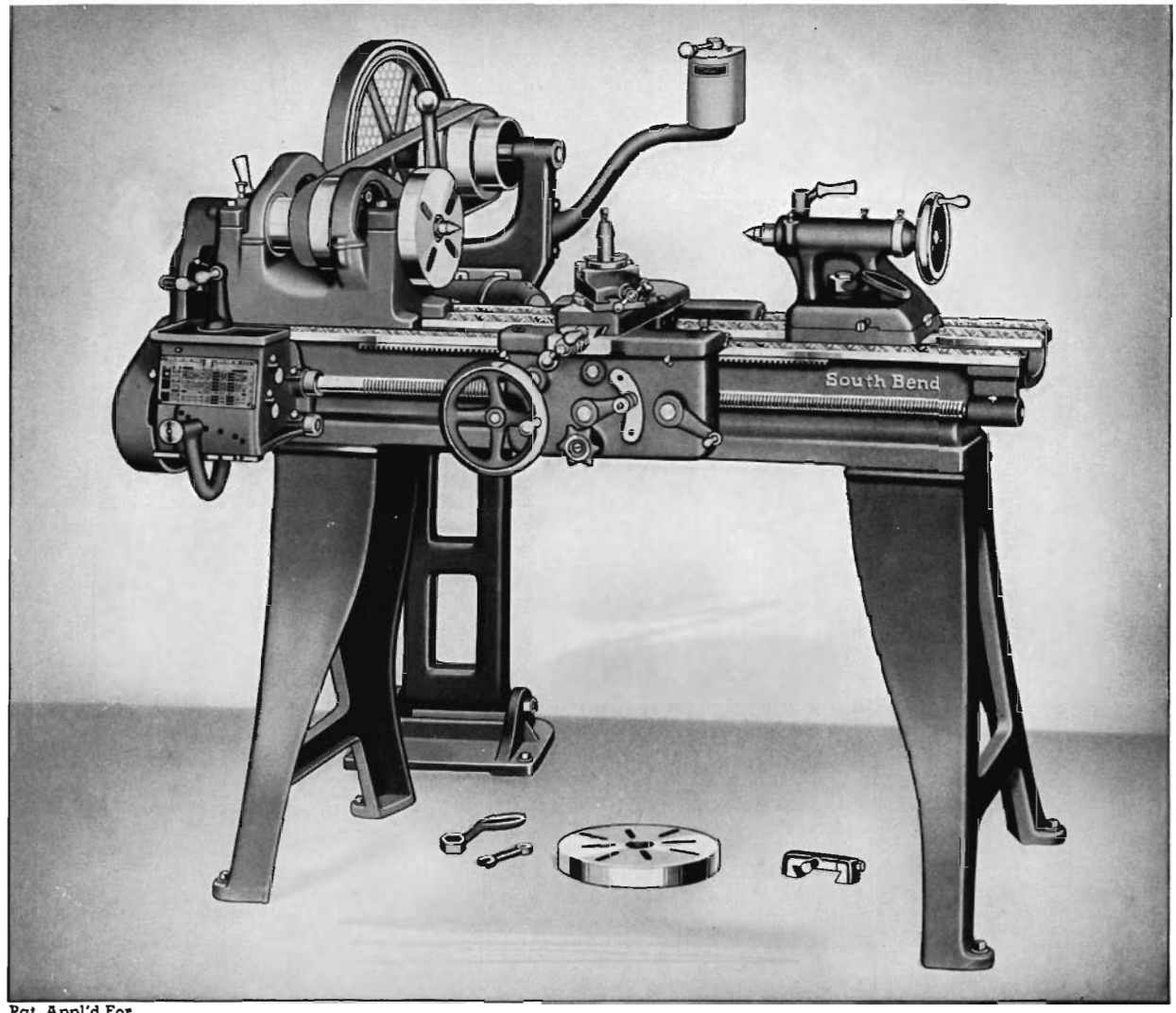
Equipment included in price of lathe consists of: ½ H.P. instant reversing motor, reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed	11⅛ in.
Swing over saddle slide	7 in.
Spindle nose, size	1⅝ in. diam., 8 threads
Hole through spindle ⅞ in., Maximum collet capacity	1 1/32 in.
Centers, head and tail spindle	No. 2 Morse Taper
Cone pulley belt width	1½ in.
V-belt for motor, width	21/32 in.
6 spindle speeds	40, 69, 118, 238, 377, 608 R.P.M.
Thread cutting range, quick change	2 to 112 per in.
Thread cutting range, standard change	4 to 112 per in.
Compound rest top, angular feed	2⅝ in.
Standard change gear lathe information	see page 56
Quick change gear box	see page 7
For additional specifications	see page 11

Net Factory Prices of 11-inch Underneath Belt Motor Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
11⅛	3½	18	½	935	110-Z	Badod	$529.00	$543.00	$537.00	111-Z	Bimeb	$579.00	$593.00	$587.00
11⅛	4	24	½	965	110-A	Badti	541.00	555.00	549.00	111-A	Bimuf	591.00	605.00	599.00
11⅛	5	36	½	1035	110-B	Badzo	565.00	579.00	573.00	111-B	Bimza	615.00	629.00	623.00
11⅛	5½	42	½	1070	110-S	Bafka	577.00	591.00	585.00	111-S	Binfo	627.00	641.00	635.00



Pat. Appl'd For

11" x 4' Series "R" Pedestal Adjustable Motor Driven Quick Change Gear Lathe

11-inch Pedestal Adjustable Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 11-inch Pedestal Adjustable Motor Driven Lathes have the power for taking heavy cuts and the accuracy required for the most exacting machine work. See pages 4 to 11. The pedestal adjustable motor drive is moderate in price, efficient and convenient. See page 55.

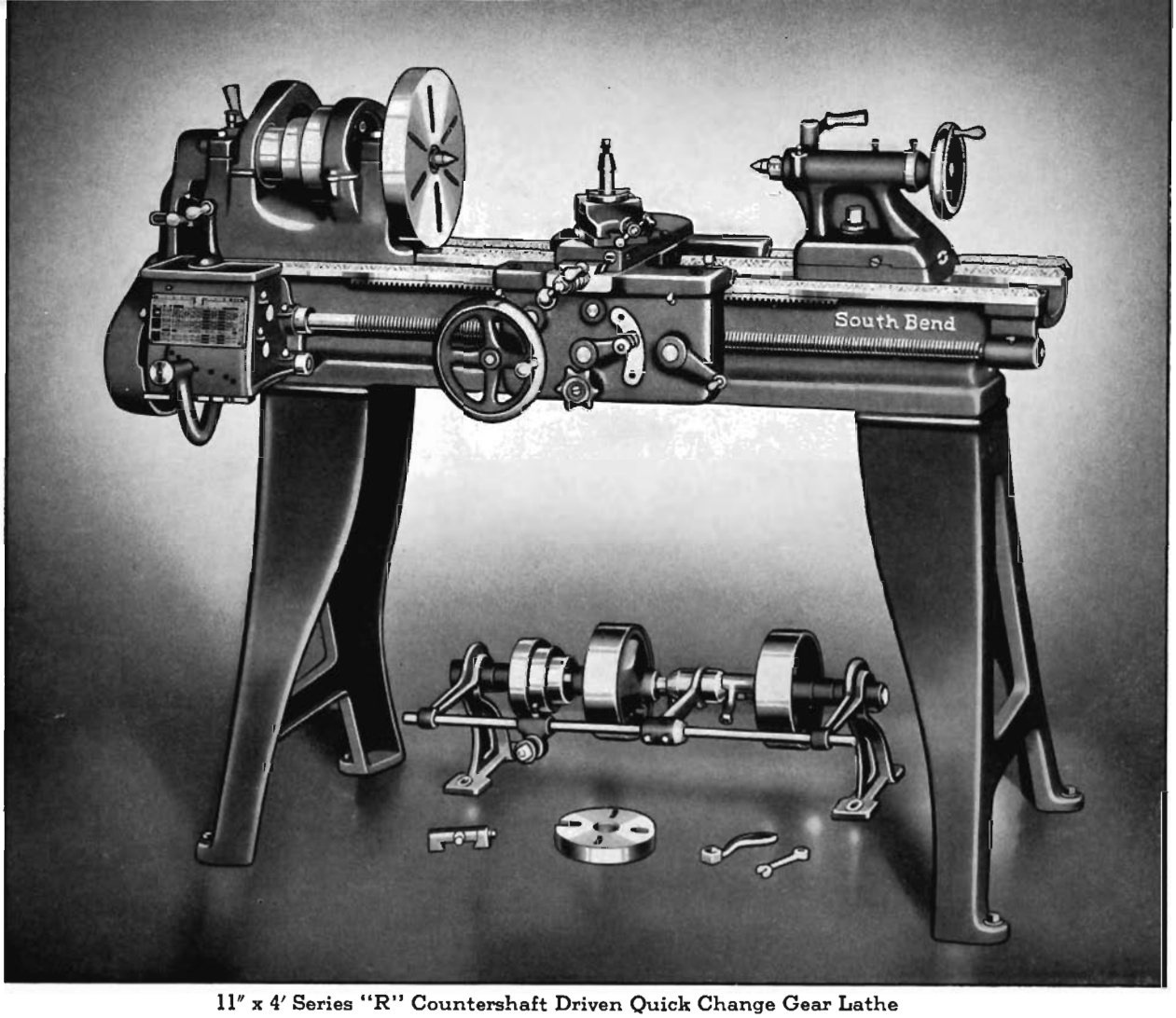
Equipment included in price of lathe consists of: ½ H.P. instant reversing motor, reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed.....11⅛ in.
Swing over saddle slide.....7 in.
Spindle nose, size.....1⅝ in. diam., 8 threads
Hole through spindle ⅞ in., Maximum collet capacity...17/32 in.
Centers, head and tail spindle.....No. 2 Morse Taper
Cone pulley belt width.....1½ in.
V-belt for motor, width.....21/32 in.
6 spindle speeds..... 40, 69, 118, 238, 377, 608 R.P.M.
Thread cutting range, quick change.....2 to 112 per in.
Thread cutting range, standard change.....4 to 112 per in.
Compound rest top, angular feed.....2⅝ in.
Standard change gear lathe information.....see page 56
Quick change gear box.....see page 7
For additional specifications.....see page 11

Net Factory Prices of 11-inch Pedestal Adjustable Motor Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
11⅛	3½	18	½	833	910-Z	Harik	$466.00	$480.00	$474.00	911-Z	Marah	$516.00	$530.00	$524.00
11⅛	4	24	½	863	910-A	Hebos	478.00	492.00	486.00	911-A	Melon	528.00	542.00	536.00
11⅛	5	36	½	933	910-B	Hiran	502.00	516.00	510.00	911-B	Mijem	552.00	566.00	560.00
11⅛	5½	42	½	968	910-S	Himot	514.00	528.00	522.00	911-S	Mofel	564.00	578.00	572.00



11″ x 4′ Series "R" Countershaft Driven Quick Change Gear Lathe

11-inch Countershaft Driven Quick Change Gear Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

11-inch Countershaft Driven Quick Change Gear Lathes are recommended for production operations, maintenance work and for general machine work where frequent changes for threads and feeds are required. See pages 4 to 11. Full quick change gear equipment is furnished for cutting screw threads and for friction longitudinal feeds and cross feeds. For further details see page 7.

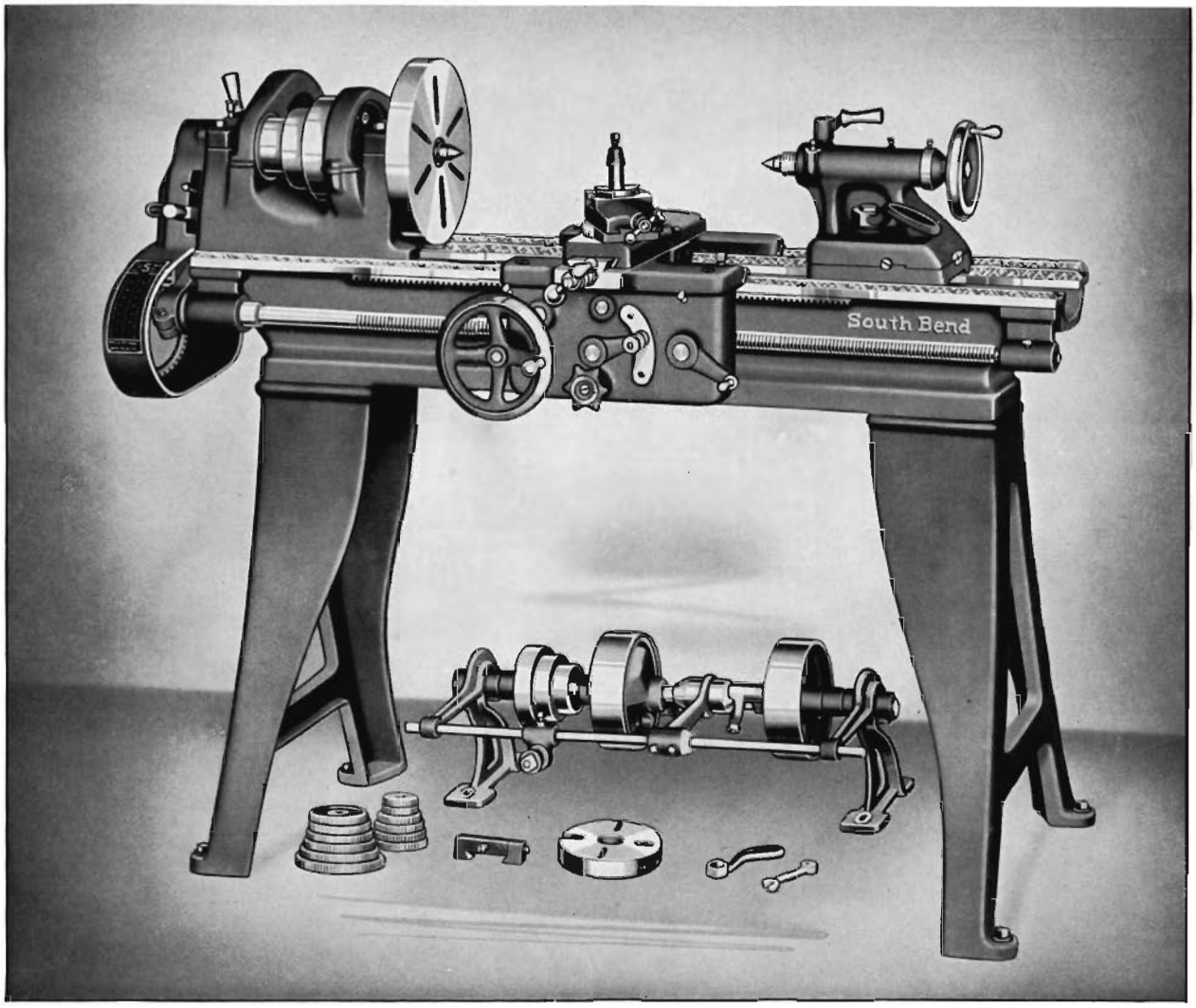
Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box, installation plan, and instruction book "How to Run a Lathe."

Specifications

Swing over lathe bed ..... 11⅛ in.
Swing over saddle slide ..... 7 in.
Spindle nose, size ..... 1⅝ in. diam., 8 threads
Hole through spindle ⅞ in., Maximum collet capacity ..... 17/32 in.
Centers, head and tail spindle ..... No. 2 Morse Taper
Cone pulley belt width ..... 1½ in.
6 spindle speeds ..... 40, 69, 118, 238, 377, 608 R.P.M.
Thread cutting range (see page 7) ..... 2 to 112 per in.
Compound rest top, angular feed ..... 2⅝ in.
Tailstock top, set-over for taper turning ..... ⅞ in.
Tailstock spindle travel ..... 3 in.
Recommended countershaft speed ..... 300 R.P.M.
Countershaft friction pulley size ..... 6⅞ in. x 2 3/16 in.
For additional specifications ..... see page 11

Net Factory Prices of 11-inch Countershaft Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Quick Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
11⅛	3½	18	⅞	7	1½	300	½	11-Z	Alvup	695	$421.00
11⅛	4	24	⅞	7	1½	300	½	11-A	Alwho	725	433.00
11⅛	5	36	⅞	7	1½	300	½	11-B	Alwin	795	457.00
11⅛	5½	42	⅞	7	1½	300	½	11-S	Alzan	830	469.00



11″ x 4′ Series "R" Countershaft Driven Standard Change Gear Lathe

11-inch Countershaft Driven Standard Change Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

11-inch Countershaft Driven Standard Change Gear Lathes are recommended for production operations and for general machine work of all kinds. See pages 4 to 11. Independent change gears are furnished for cutting right and left hand screw threads and for friction longitudinal feeds and cross feeds. See page 56 for further details.

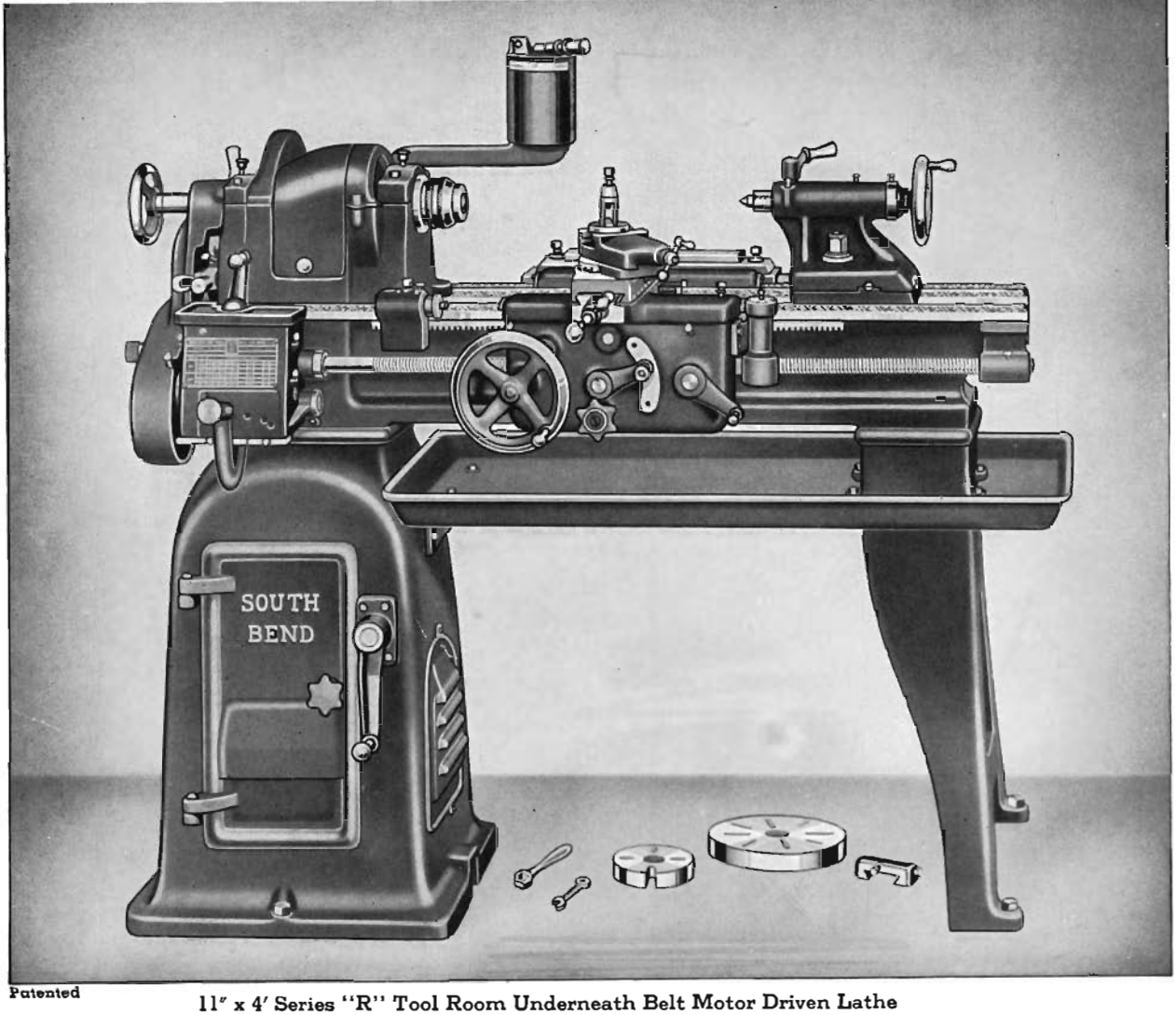
Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and instruction book "How to Run a Lathe."

Specifications

Swing over lathe bed.....11⅛ in.
Swing over saddle slide.....7 in.
Spindle nose, size.....1⅝ in. diam., 8 threads
Hole through spindle ⅞ in., Maximum collet capacity....17/32 in.
Centers, head and tail spindle.....No. 2 Morse Taper
Cone pulley belt width.....1½ in.
6 spindle speeds.....40, 69, 118, 238, 377, 608 R.P.M.
Thread cutting range (incl. 11½ pipe thread)..4 to 112 per in.
Compound rest top, angular feed.....2⅝ in.
Tailstock top, set-over for taper turning.....⅞ in.
Tailstock spindle travel.....3 in.
Recommended countershaft speed.....300 R.P.M.
Countershaft friction pulley size.....6⅞ in. x 2 3/16 in.
For additional specifications.....see page 11

Net Factory Prices of 11-inch Countershaft Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Cone Pulley Belt Inches	Counter-Shaft Speed R.P.M.	Power Required H.P.	Standard Change Gear Lathes			
								Catalog Number	Code Word for Lathe	Approx. Weight Crated Pounds	Net Factory Price
11⅛	3½	18	⅞	7	1½	300	½	10-Z	Apfeg	680	$371.00
11⅛	4	24	⅞	7	1½	300	½	10-A	Arbix	710	383.00
11⅛	5	36	⅞	7	1½	300	½	10-B	Arcob	780	407.00
11⅛	5½	42	⅞	7	1½	300	½	10-S	Ardoc	815	419.00



Patented

11" x 4' Series "R" Tool Room Underneath Belt Motor Driven Lathe

11-inch Tool Room Underneath Belt Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

11-inch Tool Room Quick Change Gear Lathes have the precision and accuracy for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. See pages 4 to 11 for description and specifications.

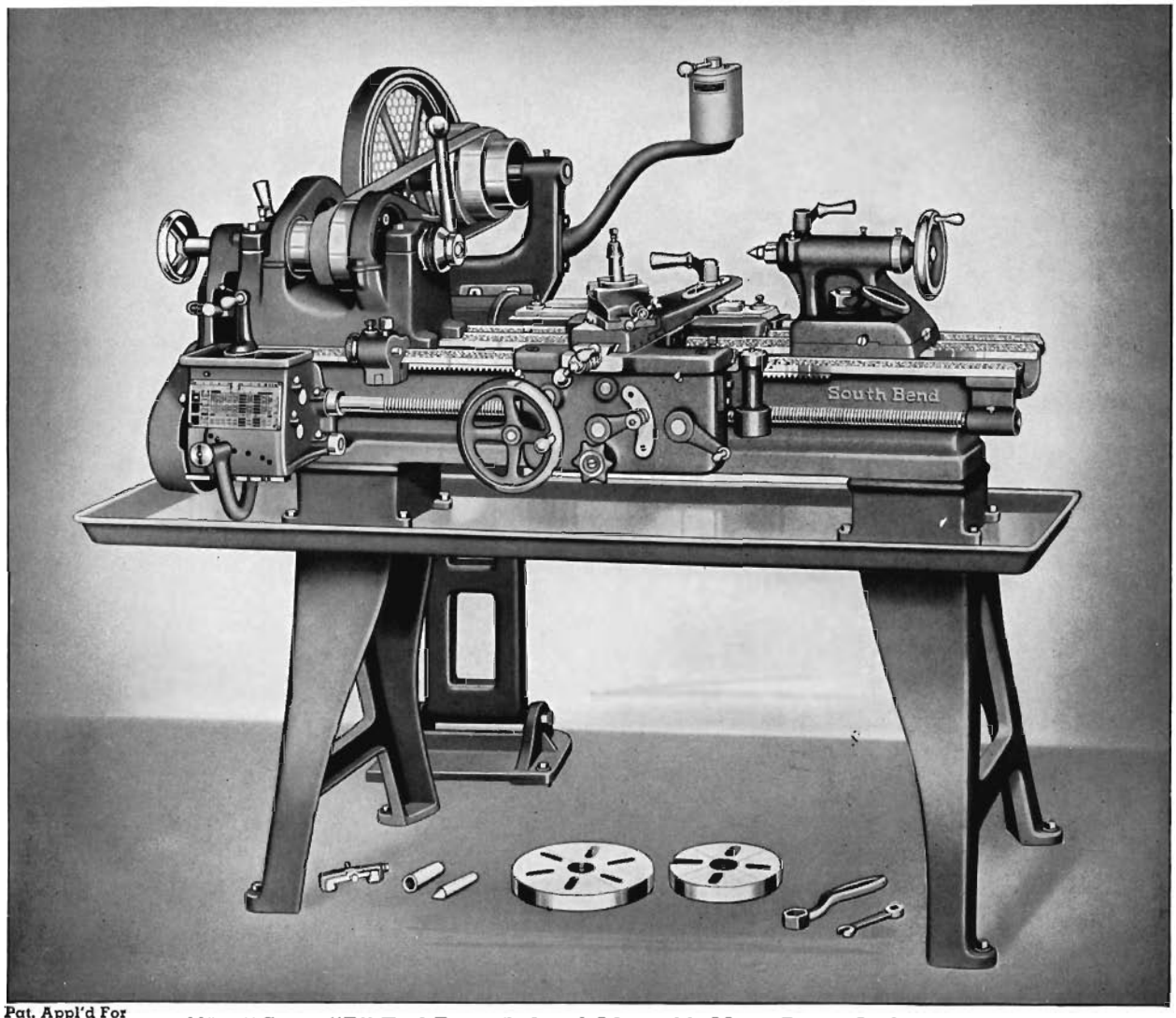
The underneath belt motor drive is especially desirable for tool room lathes as it permits placing the lathe in the most convenient location in the shop. The drive is fully enclosed and is silent, powerful and economical. For illustration and detailed description see page 54.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, chip pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of lathe consists of: ½ H.P. instant reversing motor, reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 11-inch Tool Room Precision Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Collet Capacity Inches 1/16" up by 64ths to	Size Motor Used H.P.	Underneath Belt Motor Driven Lathes					
							Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
										3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
11⅛	4	24	7	⅞	17/32	½	8111-A	1070	Bahof	$789.00	$803.00	$797.00
11⅛	5	36	7	⅞	17/32	½	8111-B	1140	Bahri	815.00	829.00	823.00
11⅛	5½	42	7	⅞	17/32	½	8111-S	1175	Bapez	828.00	842.00	836.00



Pat. Appl'd For

11" x 4' Series "R" Tool Room Pedestal Adjustable Motor Driven Lathe

11-inch Tool Room Precision Lathes—Pedestal Motor Drive—C'shaft Drive

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

11-inch Tool Room Quick Change Gear Lathes have the precision and accuracy required for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. For detailed description of features and specifications see pages 4 to 11.

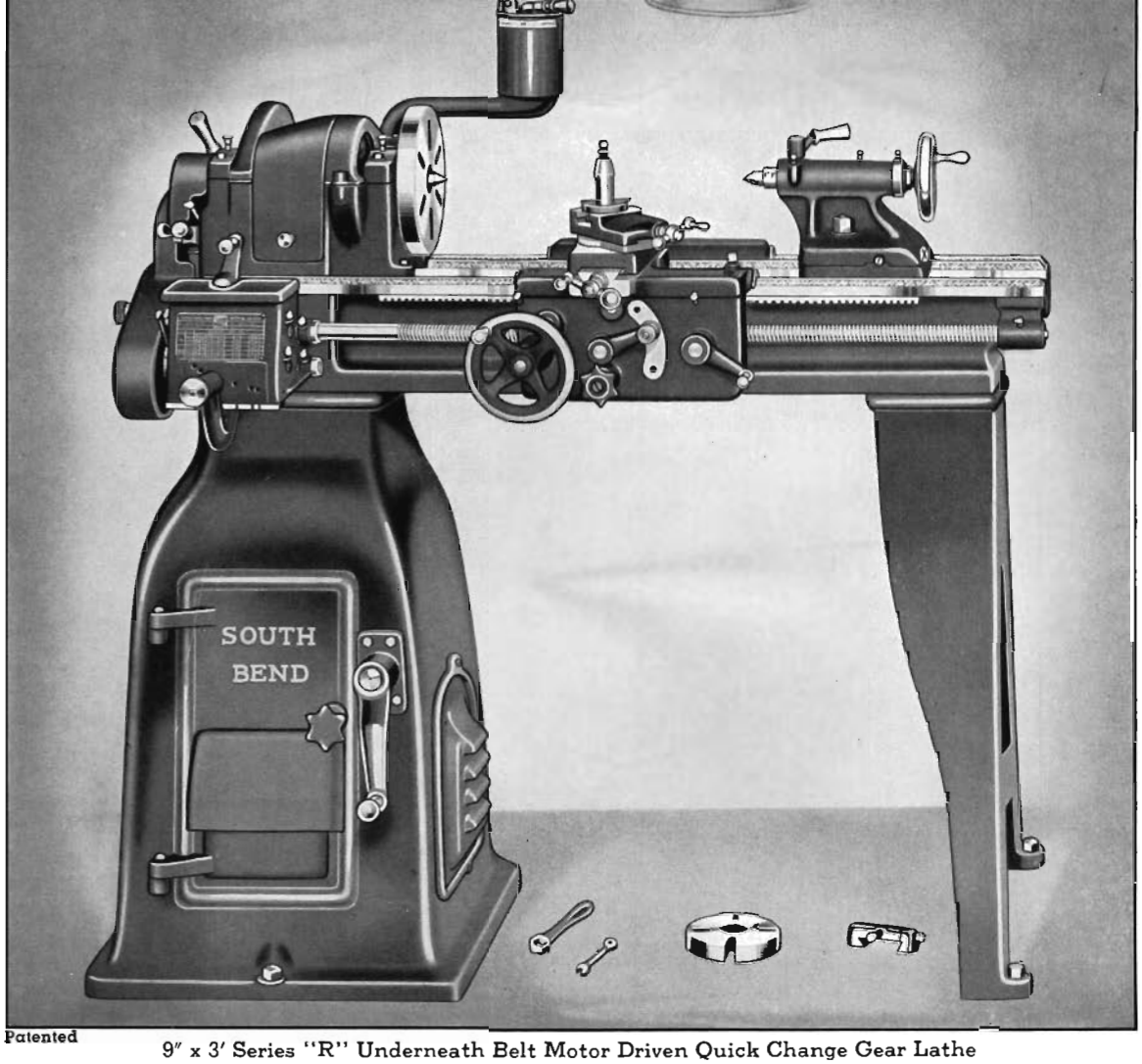
Countershaft driven and pedestal adjustable motor driven tool room lathes are priced in the tabulation below. Countershaft driven lathes are recommended for shops equipped with lineshafting. The pedestal adjustable motor driven lathe is recommended to those desiring an efficient motor driven lathe at a moderate price.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, oil pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of tool room lathe consists of: countershaft or pedestal motor drive with motor and switch as illustrated and described on pages 31 and 32 under 11-inch countershaft driven and pedestal motor driven lathes, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 11-inch Tool Room Precision Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Collet Capacity Inches 1/16" up by 64ths to	Power Required H.P.	Countershaft Driven Lathes				Pedestal Motor Driven Lathes					
					Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
												3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
11 1/8	4	24	17/32	1/2	8011-A	852	Arlok	$637.00	8911-A	990	Janik	$732.00	$746.00	$740.00
11 1/8	5	36	17/32	1/2	8011-B	922	Armum	663.00	8911-B	1060	Japad	758.00	772.00	766.00
11 1/8	5 1/2	42	17/32	1/2	8011-S	957	Asylf	676.00	8911-S	1095	Japeh	771.00	785.00	779.00



Patented

9″ x 3′ Series "R" Underneath Belt Motor Driven Quick Change Gear Lathe

9-inch Underneath Belt Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 9-inch Underneath Belt Motor Driven Lathes have the precision and accuracy for fine machine work and the power and rigidity for production operations. See pages 4 to 11. The underneath belt motor drive is fully enclosed and is silent, powerful and economical. See page 54.

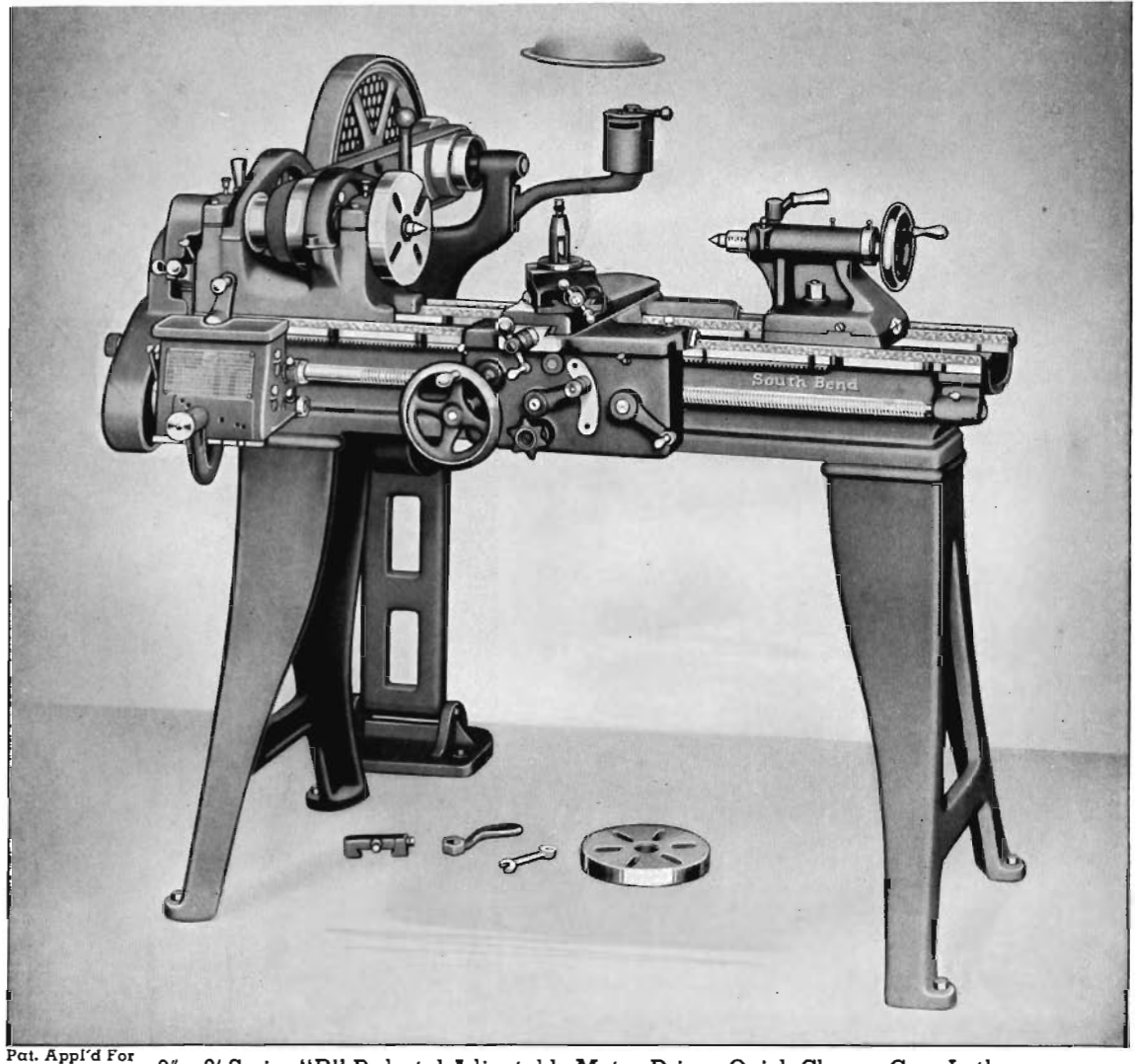
Equipment included in price of lathe consists of: ½ H.P. reversing motor, drum reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed ..... 9¼ in.
Swing over saddle slide, chip guard removed ..... 6⅜ in.
Spindle nose, size ..... 1½ in. diam., 8 threads
Hole through spindle ¾ in., Maximum collet capacity .... ½ in.
Centers, head and tail spindle ..... No. 2 Morse Taper
Cone pulley belt width ..... 1¼ in.
V-belt for motor, width ..... 21/32 in.
6 spindle speeds ..... 45, 75, 128, 246, 410, 700 R.P.M.
Thread cutting range, quick change ..... 2 to 112 per in.
Thread cutting range, standard change ..... 4 to 112 per in.
Compound rest top, angular feed ..... 2 in.
Standard change gear lathe information ..... see page 56
Quick change gear box ..... see page 7
For additional specifications ..... see page 11

Net Factory Prices of 9-inch Underneath Belt Motor Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes						Quick Change Gear Lathes					
					Catalog Number	Code Word for Lathe	Condenser Motor, Start-Stop Reversing, 1-Phase, 60-Cycle A.C.	Instant Reversing Motors: 3-Phase 60-Cycle A.C.	Instant Reversing Motors: 1-Phase 60-Cycle A.C.	Instant Reversing Motors: Direct Current	Catalog Number	Code Word for Lathe	Condenser Motor, Start-Stop Reversing, 1-Phase, 60-Cycle A.C.	Instant Reversing Motors: 3-Phase 60-Cycle A.C.	Instant Reversing Motors: 1-Phase 60-Cycle A.C.	Instant Reversing Motors: Direct Current
9¼	3	16⅜	½	815	107-Y	Bagim	$400.00	$408.00	$421.00	$415.00	109-Y	Binug	$445.00	$453.00	$466.00	$460.00
9¼	3½	21⅜	½	840	107-Z	Bagko	410.00	418.00	431.00	425.00	109-Z	Bipca	455.00	463.00	476.00	470.00
9¼	4	27⅜	½	865	107-A	Bagos	420.00	428.00	441.00	435.00	109-A	Bipgo	465.00	473.00	486.00	480.00
9¼	4½	34⅜	½	890	107-R	Bahar	430.00	438.00	451.00	445.00	109-R	Bireg	475.00	483.00	496.00	490.00



Pat. Appl'd For

9″ x 3′ Series "R" Pedestal Adjustable Motor Driven Quick Change Gear Lathe

9-inch Pedestal Adjustable Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 9-inch Pedestal Adjustable Motor Driven Lathes have the power for taking heavy cuts and the accuracy required for the most exacting machine work. See pages 4 to 11. The pedestal adjustable motor drive is moderate in price, efficient and convenient. See page 55.

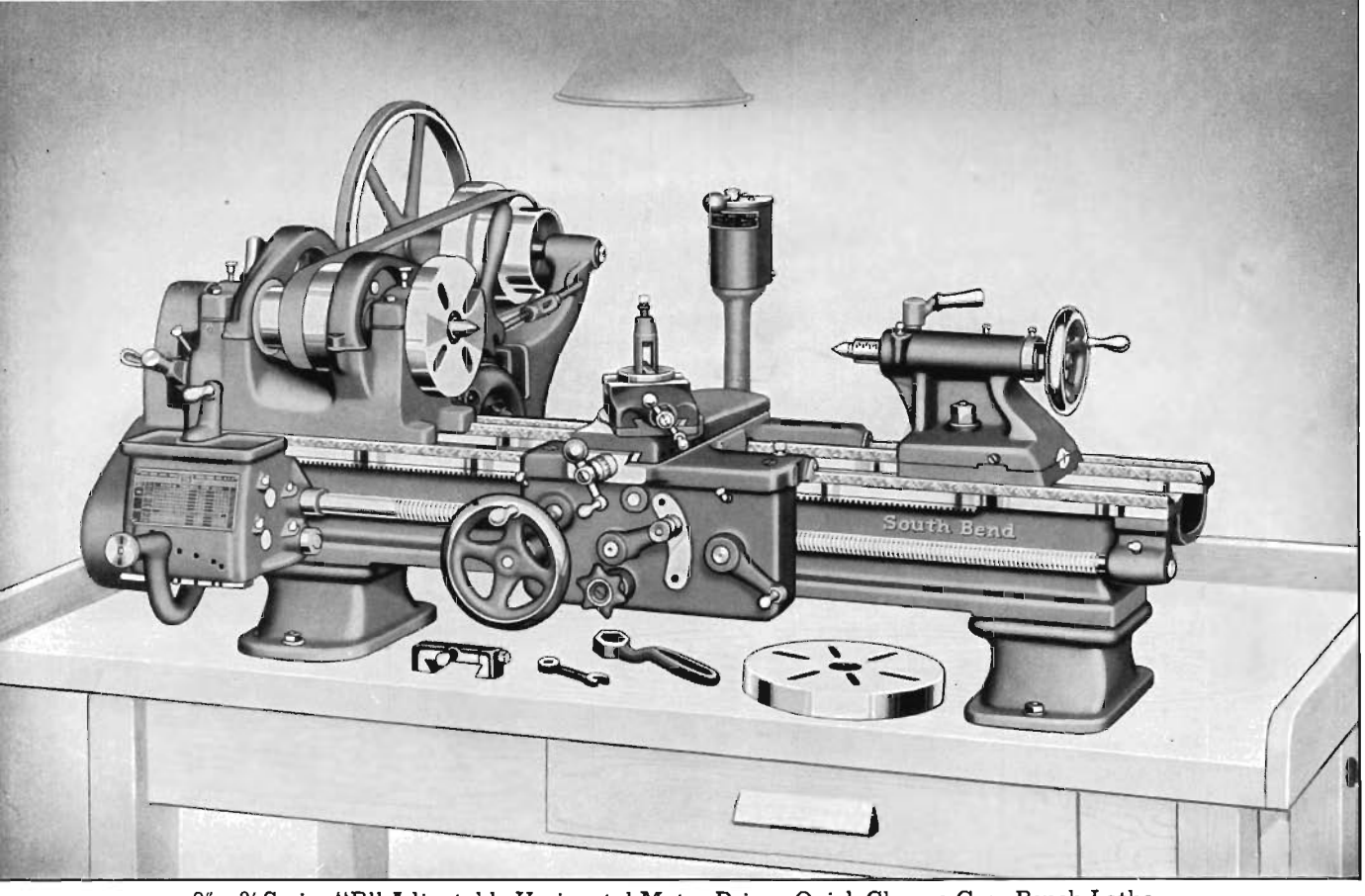
Equipment included in price of lathe consists of: ½ H.P. reversing motor, drum reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed	9¼ in.
Swing over saddle slide, chip guard removed	6⅜ in.
Spindle nose, size	1½ in. diam., 8 threads
Hole through spindle ¾ in., Maximum collet capacity	½ in.
Centers, head and tail spindle	No. 2 Morse Taper
Cone pulley belt width	1¼ in.
V-belt for motor, width	21/32 in.
6 spindle speeds	45, 75, 128, 246, 410, 700 R.P.M.
Thread cutting range, quick change	2 to 112 per in.
Thread cutting range, standard change	4 to 112 per in.
Compound rest top, angular feed	2 in.
Standard change gear lathe information	see page 56
Quick change gear box	see page 7
For additional specifications	see page 11

Net Factory Prices of 9-inch Pedestal Adjustable Motor Driven Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes						Quick Change Gear Lathes					
					Catalog Number	Code Word for Lathe	Condenser Motor, Start-Stop Reversing, 1-Phase, 60-Cycle A.C.	Instant Reversing Motors: 3-Phase 60-Cycle A.C.	Instant Reversing Motors: 1-Phase 60-Cycle A.C.	Instant Reversing Motors: Direct Current	Catalog Number	Code Word for Lathe	Condenser Motor, Start-Stop Reversing, 1-Phase, 60-Cycle A.C.	Instant Reversing Motors: 3-Phase 60-Cycle A.C.	Instant Reversing Motors: 1-Phase 60-Cycle A.C.	Instant Reversing Motors: Direct Current
9¼	3	16⅜	½	580	907-Y	Birol	$367.00	$371.00	$384.00	$378.00	909-Y	Cegek	$412.00	$416.00	$429.00	$423.00
9¼	3½	21⅜	½	605	907-Z	Bitol	377.00	381.00	394.00	388.00	909-Z	Ceken	422.00	426.00	439.00	433.00
9¼	4	27⅜	½	630	907-A	Bivil	387.00	391.00	404.00	398.00	909-A	Cerul	432.00	436.00	449.00	443.00
9¼	4½	34⅜	½	655	907-R	Biwar	397.00	401.00	414.00	408.00	909-R	Ceral	442.00	446.00	459.00	453.00



9″ x 3′ Series "R" Adjustable Horizontal Motor Driven Quick Change Gear Bench Lathe

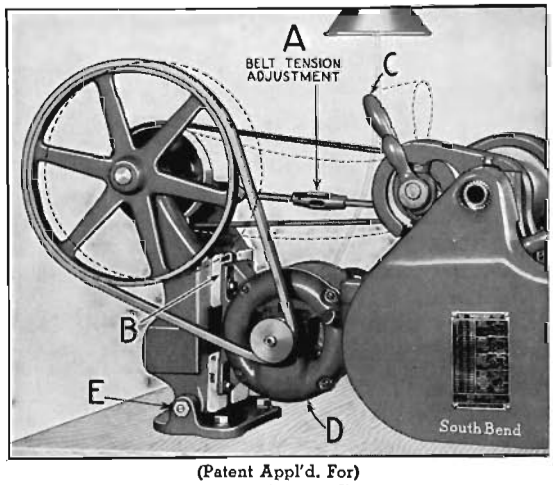
9-inch Horizontal Motor Driven Precision Bench Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

9-inch Adjustable Horizontal Motor Driven Bench Lathes are recommended for production operations and general machine work. Full quick change gear equipment or set of change gears are furnished for friction feeds, and for cutting screw threads. Specifications are the same as for the lathe listed on page 36. See pages 4 to 11 and 56.

The adjustable horizontal motor drive is powerful and efficient. Belt tension adjustment (A and B) is provided for both the cone pulley belt and motor belt. Belt tension release (C) permits easy shifting of cone pulley belt.

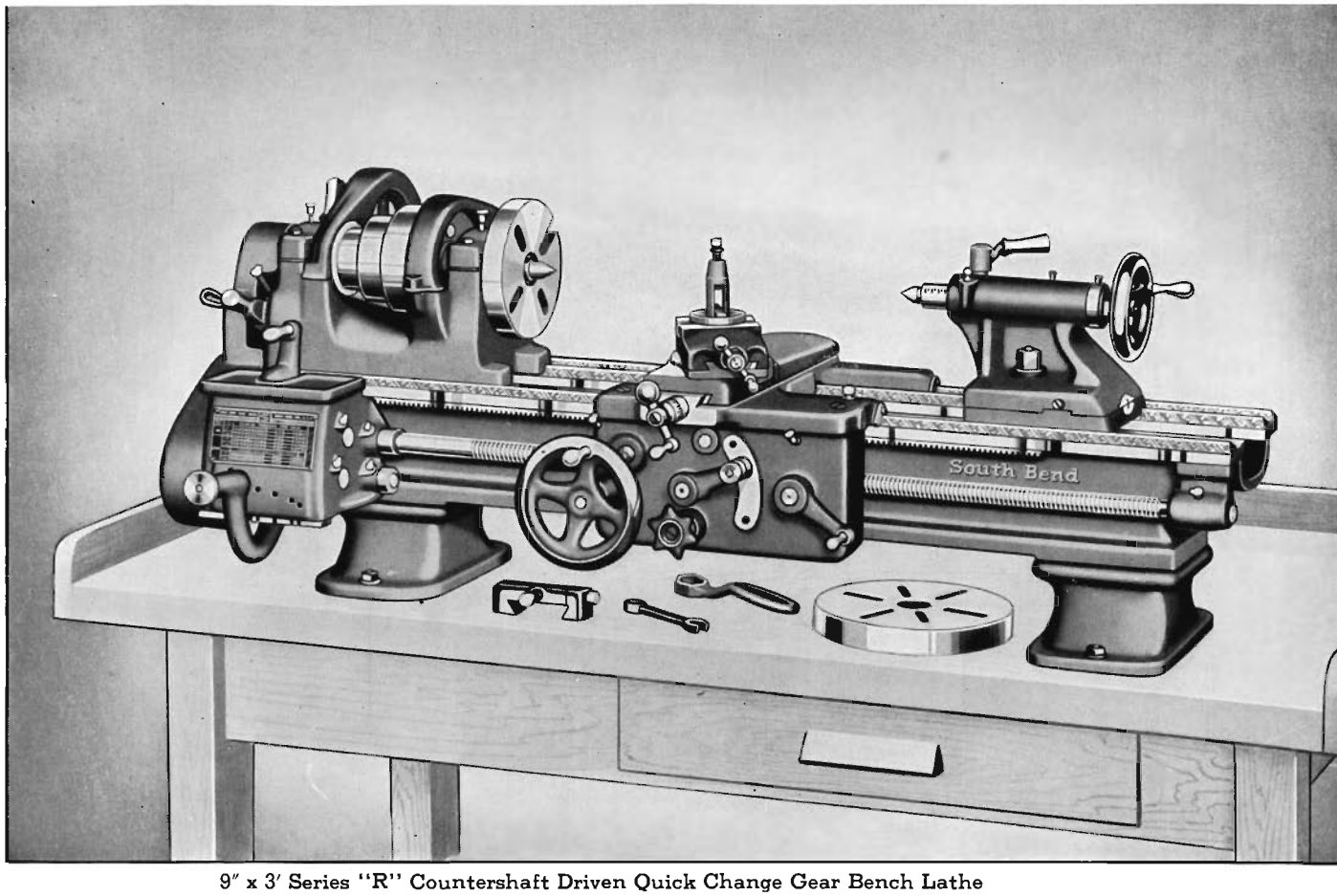
Equipment included in the price of lathe consists of: adjustable belt tension horizontal countershaft, ½ H.P. reversing motor, reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or set of change gears, installation plan, and book "How to Run a Lathe." Bench is not included in price, see page 68.



(Patent Appl'd. For)
End View of Lathe Showing Adjustable Horizontal Motor Drive.

Net Factory Prices of 9-inch Adjustable Horizontal Motor Driven Bench Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Approx. Weight Crated Pounds	Standard Change Gear Lathes						Quick Change Gear Lathes					
				Catalog Number	Code Word for Lathe	Condenser Motor, Start-Stop Reversing, 1-Phase, 60-Cycle A.C.	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Condenser Motor, Start-Stop Reversing, 1-Phase, 60-Cycle A.C.	Instant Reversing Motors		
							3-Phase 60-Cycle A. C.	1-Phase 60-Cycle A. C.	Direct Current				3-Phase 60-Cycle A. C.	1-Phase 60-Cycle A. C.	Direct Current
9¼	3	16⅜	491	407-YN	Bahok	$323.00	$327.00	$340.00	$334.00	409-YN	Dabux	$368.00	$372.00	$385.00	$379.00
9¼	3½	21⅜	516	407-ZN	Bamip	333.00	337.00	350.00	344.00	409-ZN	Dabwo	378.00	382.00	395.00	389.00
9¼	4	27⅜	541	407-AN	Bamso	343.00	347.00	360.00	354.00	409-AN	Dabzy	388.00	392.00	405.00	399.00
9¼	4½	34⅜	566	407-RN	Banre	353.00	357.00	370.00	364.00	409-RN	Dacta	398.00	402.00	415.00	409.00



9″ x 3′ Series "R" Countershaft Driven Quick Change Gear Bench Lathe

9-inch Countershaft Driven Precision Bench Lathes

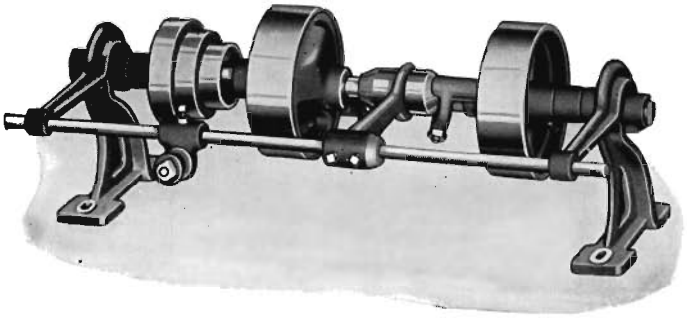
Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

9-inch Countershaft Driven Bench Lathes are recommended for production operations, maintenance work and for general machine work. Full quick change gear equipment or set of change gears are furnished for friction longitudinal feeds and cross feeds and for cutting screw threads. See pages 4 to 11 and 56 for further details.

Equipment included in price of lathe consists of: countershaft with two friction clutch pulleys, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and book "How to Run a Lathe." Bench is not included in price of lathe, see page 68.

Specifications

Swing over lathe bed ..... 9¼ in.
Swing over saddle slide (chip guard removed) ..... 6⅜ in.
Spindle nose, size ..... 1½ in. diam., 8 threads
Hole through spindle ¾ in., Maximum collet capacity .... ½ in.
Centers, head and tail spindle ..... No. 2 Morse Taper
6 spindle speeds ..... 45, 75, 128, 246, 410, 700 R.P.M.
Thread cutting range, quick change ..... 2 to 112 per in.
Thread cutting range, standard change ..... 4 to 112 per in.
Compound rest top, angular feed ..... 2 in.
Tailstock top, set-over for taper turning ..... ¾ in.
Tailstock spindle travel ..... 2⅛ in.
Countershaft friction pulley size .... 6⅞ in. diam., 2 3/16 in. wide
For additional specifications ..... see page 11

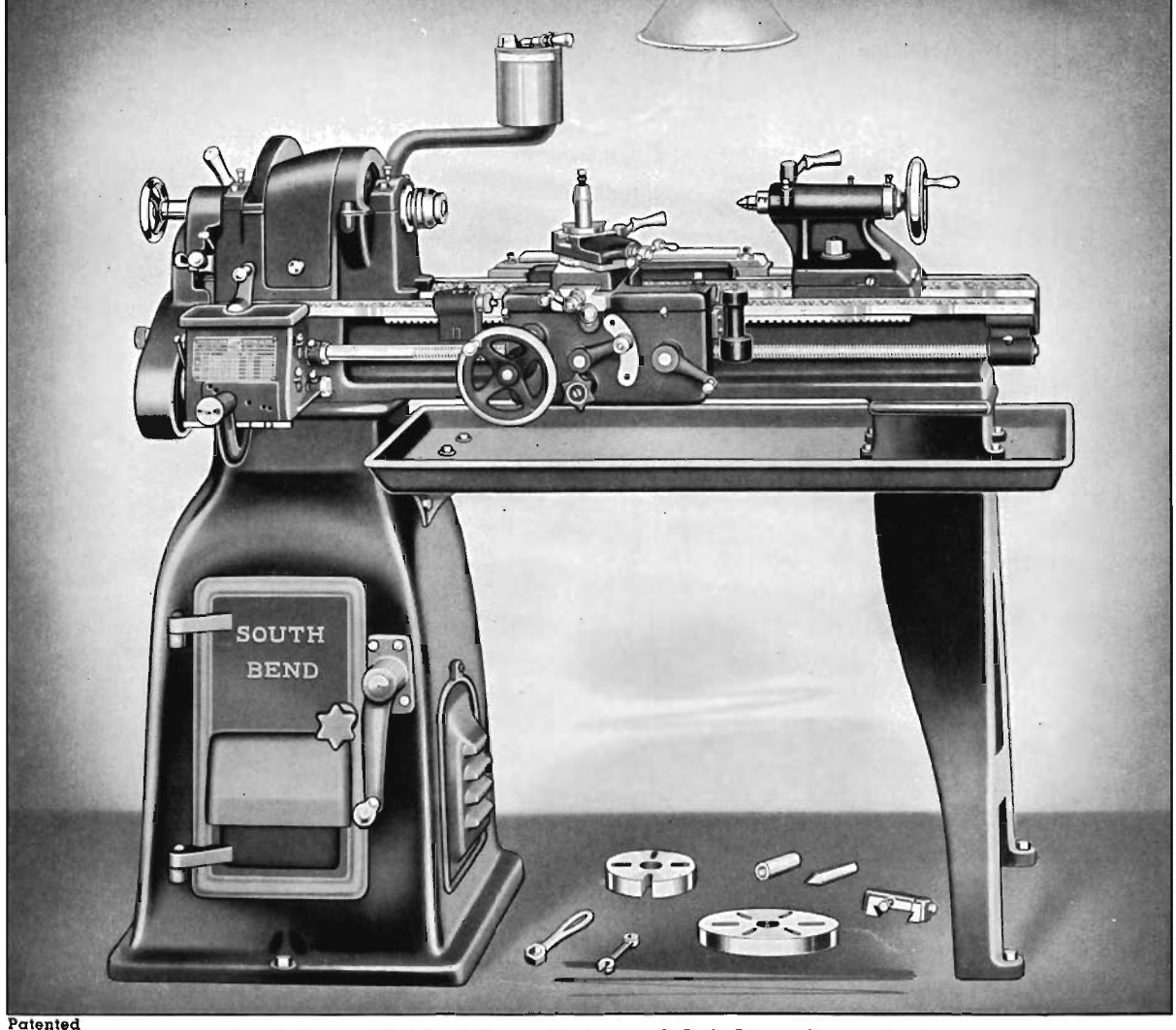


Double Friction Countershaft for Lathe

Net Factory Prices of 9-inch Countershaft Driven Bench Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Countershaft Speed R.P.M.	Power Required H.P.	Standard Change Gear Lathes				Quick Change Gear Lathes			
							Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price
9¼	3	16⅜	6⅜	¾	300	½	7-YB	420	Abede	$287.00	9-YB	430	Abafe	$332.00
9¼	3½	21⅜	6⅜	¾	300	½	7-ZB	445	Abeno	297.00	9-ZB	455	Abalk	342.00
9¼	4	27⅜	6⅜	¾	300	½	7-AB	470	Abers	307.00	9-AB	480	Abapo	352.00
9¼	4½	34⅜	6⅜	¾	300	½	7-RB	495	Abetu	317.00	9-RB	505	Abats	362.00

For floor legs instead of bench legs add $10.00 to above prices.



Patented

9″ x 3′ Series "R" Tool Room Underneath Belt Motor Driven Lathe

9-inch Tool Room Underneath Belt Motor Driven Precision Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

9-inch Tool Room Quick Change Gear Lathes have the precision and accuracy for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. See pages 4 to 11 for description of features and specifications.

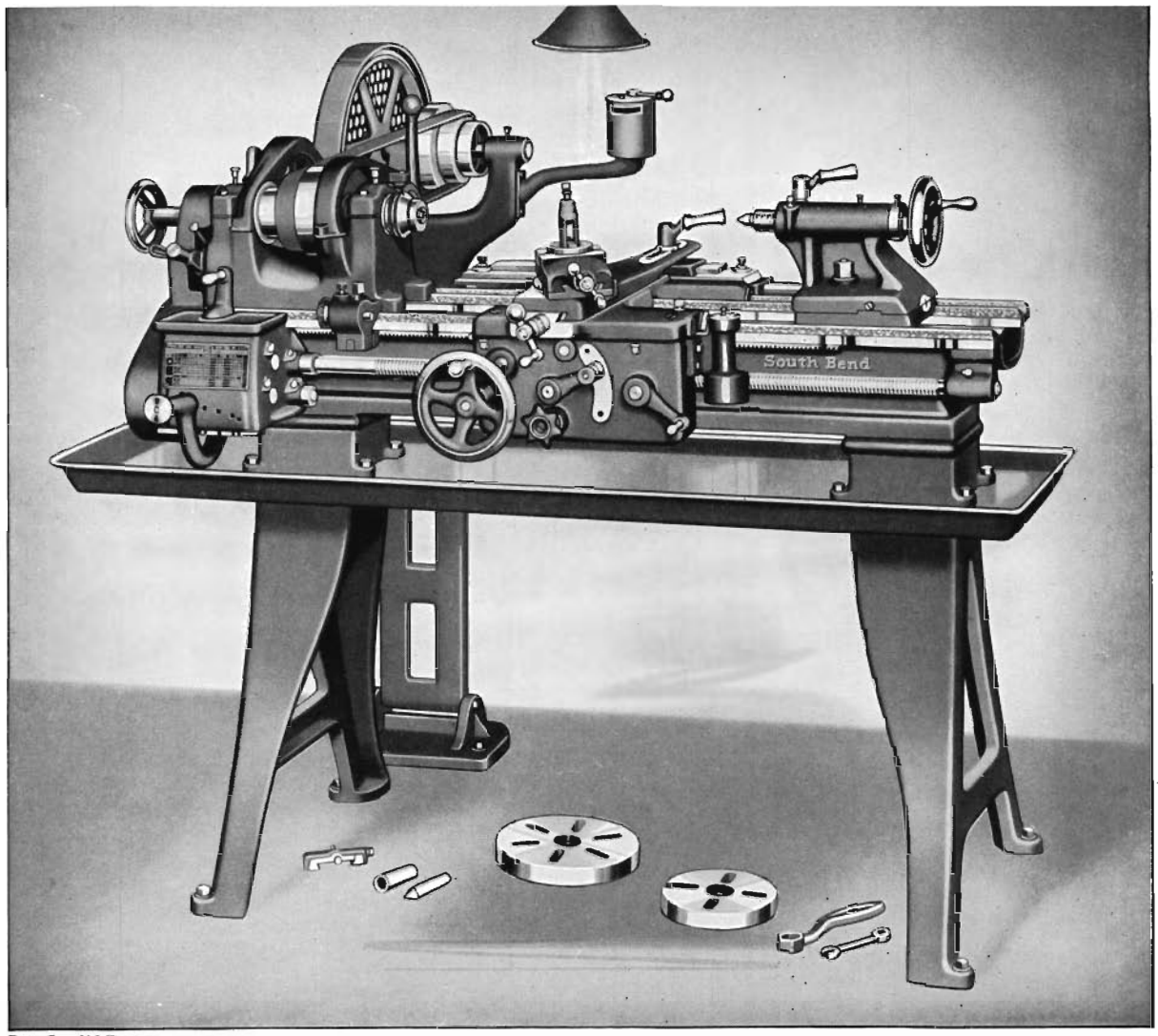
The underneath belt motor drive is especially desirable for tool room lathes as it permits placing the lathe in the most convenient location in the shop. The drive is fully enclosed and is silent, powerful and economical. For illustration and detailed description see page 54.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, chip pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of lathe consists of: ½ H.P. instant reversing motor, reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 9-inch Tool Room Precision Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Collet Capacity Inches 1/16″ up by 64ths to	Size Motor Used H.P.	Underneath Belt Motor Driven Lathes					
							Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
										3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
9¼	3	16⅜	6⅜	¾	½	½	8109-Y	905	Radet	$622.00	$635.00	$629.00
9¼	3½	21⅜	6⅜	¾	½	½	8109-Z	930	Ragat	633.00	646.00	640.00
9¼	4	27⅜	6⅜	¾	½	½	8109-A	955	Rasod	644.00	657.00	651.00



Pat. Appl'd For

9" x 3' Series "R" Tool Room Pedestal Adjustable Motor Driven Lathe

9-inch Tool Room Precision Lathes—Pedestal Motor Drive—C'shaft Drive

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Quick Change Gear

9-inch Tool Room Quick Change Gear Lathes have the precision and accuracy required for the most exacting tool and gauge work, and are built to retain their accuracy through years of service. For detailed description of features and specifications see pages 4 to 11.

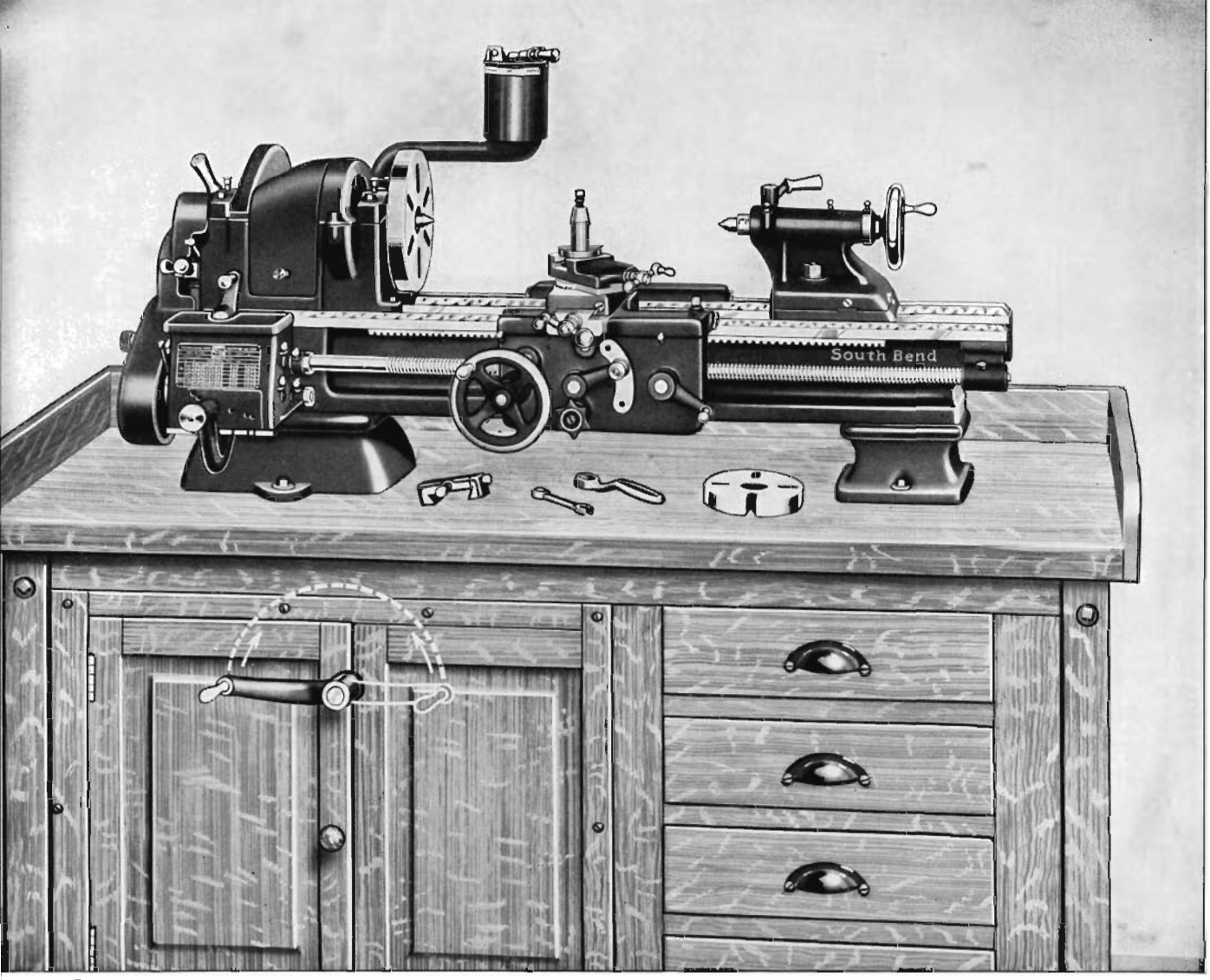
Countershaft driven and pedestal adjustable motor driven tool room lathes are priced in the tabulation below. Countershaft driven lathes are recommended for shops equipped with lineshafting. The pedestal adjustable motor driven lathe is recommended to those desiring an efficient motor driven lathe at a moderate price.

Attachments included in price of the tool room lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, oil pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of tool room lathe consists of: countershaft or pedestal motor drive with motor and switch as illustrated and described on pages 37 and 39 under 9-inch countershaft driven and pedestal motor driven lathes, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan, and book "How to Run a Lathe."

Net Factory Prices of 9-inch Tool Room Precision Lathes—Series "R"

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Collet Capacity Inches 1/16" up by 64ths to	Power Required H.P.	Countershaft Driven Lathes				Pedestal Motor Driven Lathes					
					Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
												3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
9¼	3	16⅜	½	½	8009-Y	582	Arkeg	$517.00	8909-Y	680	Kafut	$591.00	$604.00	$598.00
9¼	3½	21⅜	½	½	8009-Z	607	Arlag	528.00	8909-Z	705	Kagan	602.00	615.00	609.00
9¼	4	27⅜	½	½	8009-A	632	Asyhb	539.00	8909-A	730	Kager	613.00	626.00	620.00



(Patented)

9″ x 3′ Series "R" Underneath Belt Motor Driven Quick Change Gear Bench Lathe

9-inch Underneath Belt Motor Driven Precision Bench Lathes

Series "R"—Double Wall Apron—Hardened Headstock Spindle—Back-Geared

The 9-inch Underneath Belt Motor Driven Bench Lathes are exactly the same as the Underneath Motor Driven Floor Leg Lathes shown on page 36, except that they have bench legs instead of floor legs and the motor and driving mechanism are mounted underneath the bench top as shown above. See pages 4 to 11.

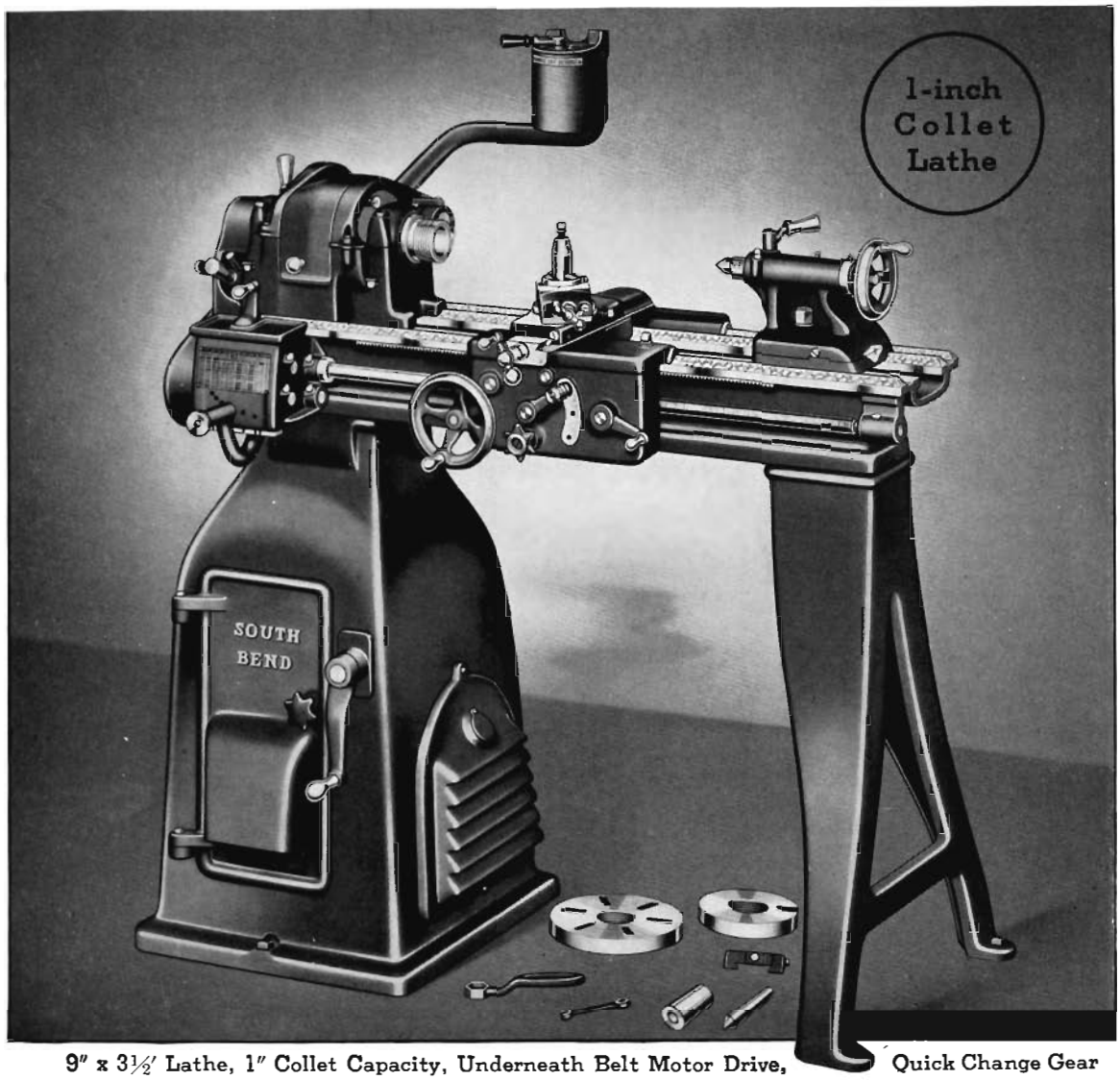
Belt tension adjustment is provided and belt tension release lever permits easy shifting of cone pulley belt. See page 54.

Equipment included in price of lathe consists of: ½ H.P. reversing motor, wiring, drum reversing switch, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan, and instruction book, "How to Run a Lathe."

The bench is not included in the price of the lathe. Quotations will be submitted on request. Blue print for building your own bench described on page 68.

Net Factory Prices of 9-inch Underneath Belt Motor Driven Bench Lathes—Series "R"

Swing Over Bed Inches	Lgth. of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes						Quick Change Gear Lathes					
					Catalog Number	Code Word for Lathe	Condenser Motor Start-Stop Rev'rs'ng 1-Phase 60-Cycle A.C.	Instant Reversing Motors 3-Phase 60-Cycle A.C.	Instant Reversing Motors 1-Phase 60-Cycle A.C.	Instant Reversing Motors Direct Current	Catalog Number	Code Word for Lathe	Condenser Motor Start-Stop Rev'rs'ng 1-Phase 60-Cycle A.C.	Instant Reversing Motors 3-Phase 60-Cycle A.C.	Instant Reversing Motors 1-Phase 60-Cycle A.C.	Instant Reversing Motors Direct Current
9¼	3	16⅜	½	615	107-YB	Cafiz	$390.00	$398.00	$411.00	$405.00	109-YB	Cegop	$435.00	$443.00	$456.00	$450.00
9¼	3½	21⅜	½	640	107-ZB	Cahog	400.00	408.00	421.00	415.00	109-ZB	Cehes	445.00	453.00	466.00	460.00
9¼	4	27⅜	½	665	107-AB	Cecon	410.00	418.00	431.00	425.00	109-AB	Cerex	455.00	463.00	476.00	470.00
9¼	4½	34⅜	½	690	107-RB	Cedam	420.00	428.00	441.00	435.00	109-RB	Cesip	465.00	473.00	486.00	480.00



9″ x 3½′ Lathe, 1″ Collet Capacity, Underneath Belt Motor Drive, Quick Change Gear

1″ Collet Capacity Lathe

9-inch Underneath Belt Motor Driven Precision Lathe

1⅜″ Hole Through Spindle—12 Spindle Speeds—Hardened Spindle
Back-Geared—Steel Gears in Double Wall Apron

The 9-inch 1″ Collet Capacity Underneath Belt Motor Driven Lathe is exactly the same as the lathes shown on page 36, except that it has a special headstock with 1⅜″ hole through the spindle which takes collets up to 1″ capacity. Headstock spindle has ball thrust bearing. See pages 4 to 11.

A two-speed motor drive provides twelve spindle speeds ranging from 50 to 1400 R.P.M. The hardened headstock spindle runs in integral cast iron bearings which are adjustable for wear and have an efficient capillary oiling system.

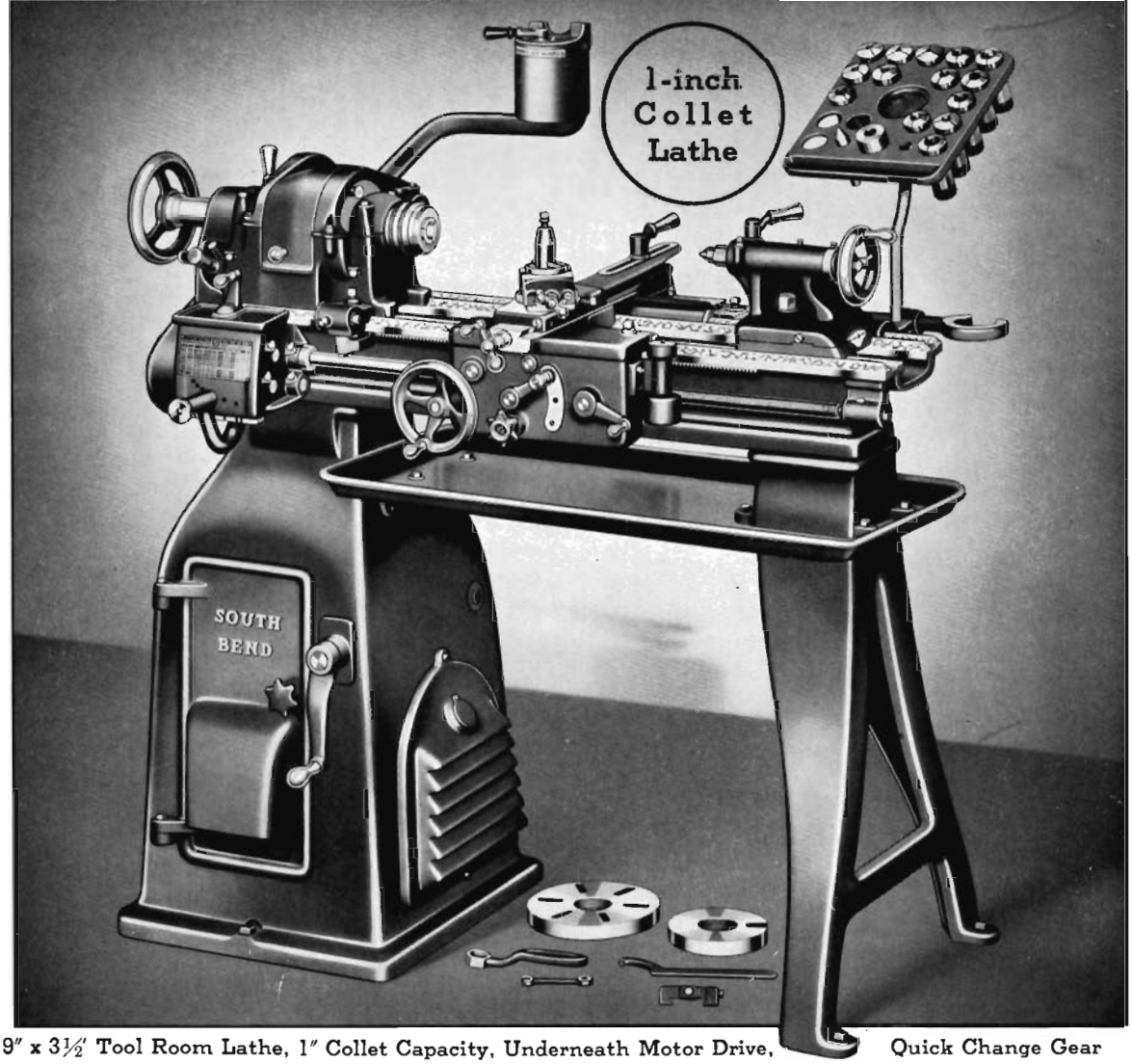
Draw-in Collet Chuck Attachment and collets up to 1″ capacity, and other attachments, chucks, tools and accessories for the lathe are listed and priced on pages 57 to 69.

Equipment included in price of lathe consists of: ¾ H.P. reversing motor, drum reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan and book, "How to Run a Lathe."

Net Factory Prices of 9-inch Lathes, 1″ Collet Capacity—Underneath Belt Motor Drive

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes*				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors			Catalog Number	Code Word for Lathe	Instant Reversing Motors		
							3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current			3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
9¼	3	16⅜	¾	835	156-Y	Bupop	$525.00	$539.00	$533.00	159-Y	Bujig	$570.00	$584.00	$578.00
9¼	3½	21⅜	¾	860	156-Z	Buqap	535.00	549.00	543.00	159-Z	Bujom	580.00	594.00	588.00
9¼	4	27⅜	¾	885	156-A	Buqet	545.00	559.00	553.00	159-A	Bulon	590.00	604.00	598.00
9¼	4½	34⅜	¾	910	156-R	Buqix	555.00	569.00	563.00	159-R	Bumiv	600.00	614.00	608.00

*Cuts Screw Threads 4 to 224 per inch. Longitudinal Feeds .0015″ to .020″. Cross Feeds .0005″ to .008″.



9″ x 3½′ Tool Room Lathe, 1″ Collet Capacity, Underneath Motor Drive, Quick Change Gear

1″ Collet Capacity Lathe

9-inch Underneath Motor Driven Tool Room Precision Lathe

1⅜″ Hole Through Spindle—12 Spindle Speeds—Hardened Spindle
Back-Geared—Quick Change—Steel Gears in Double Wall Apron

9-inch 1″ Collet Capacity Tool Room Quick Change Gear Lathes† are very practical for tool and gauge work because of the large capacity through the spindle and collet. See pages 4 to 11 for description of features and specifications.

A two-speed motor drive provides twelve spindle speeds ranging from 50 to 1400 R.P.M. Motor and driving mechanism are fully enclosed in cabinet leg. The hardened headstock spindle runs in integral cast iron bearings which are adjustable for wear and have an efficient capillary oiling system.

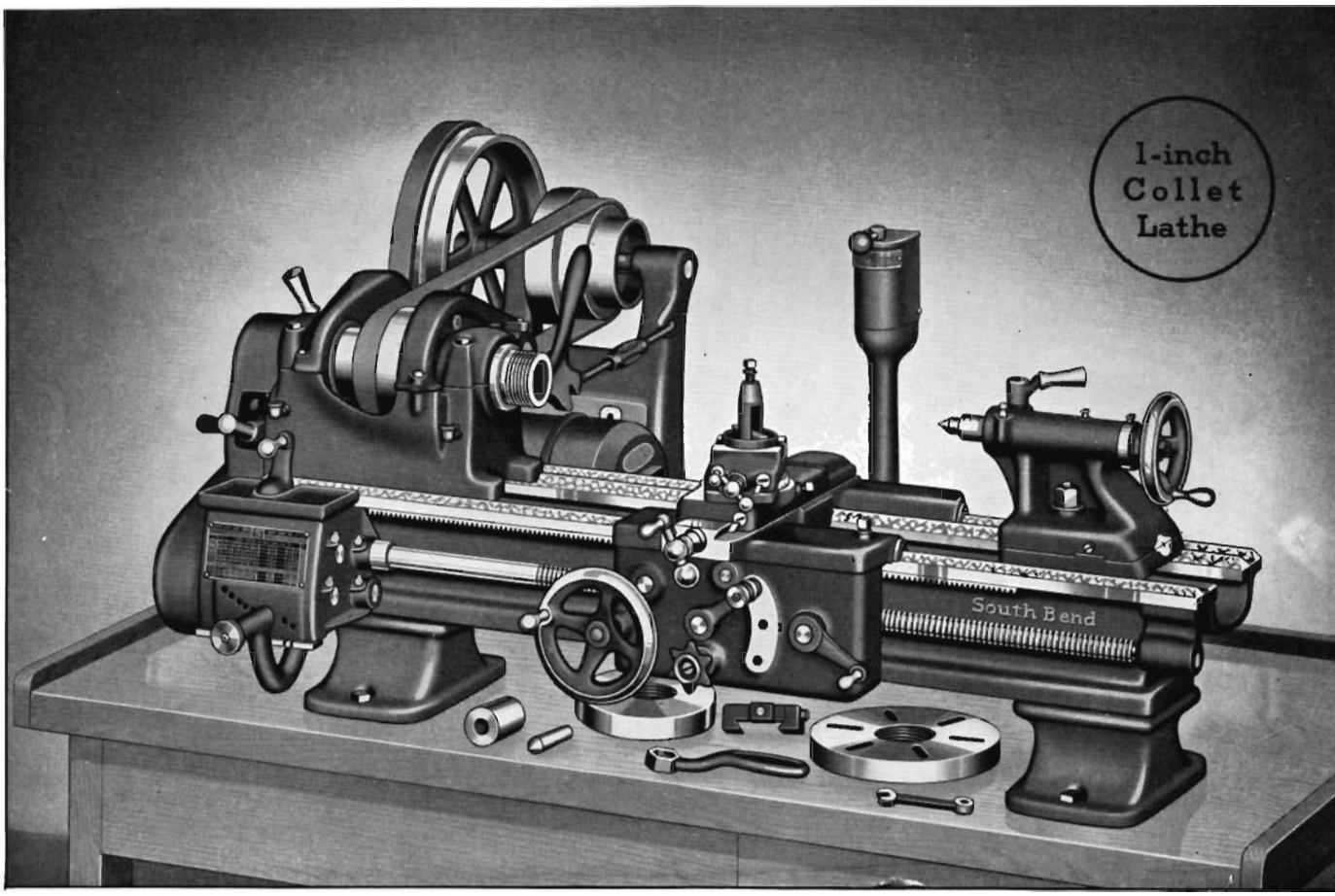
Attachments included in price of lathe consist of: hand wheel type draw-in collet chuck with one collet, graduated taper attachment, thread dial indicator, collet rack*, chip pan, and micrometer carriage stop. See pages 57 to 59.

Equipment included in price of lathe consists of: ¾ H.P. instant reversing motor, reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box, installation plan and book "How to Run a Lathe."

Net Factory Prices of 9-inch Tool Room Lathes, 1″ Collet Capacity—Underneath Belt Motor Drive

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Collet Capacity Inches 1/16″ up by 64ths to	Size Motor Used H.P.	Underneath Belt Motor Driven Lathes					
							Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Instant Reversing Motors		
										3-Phase 60-Cycle A.C.	1-Phase 60-Cycle A.C.	Direct Current
9¼	3	16⅜	6⅜	1⅜	1″	¾	8159-Y	940	Bulaz	$772 00	$786.00	$780.00
9¼	3½	21⅜	6⅜	1⅜	1″	¾	8159-Z	965	Buled	783.00	797.00	791.00
9¼	4	27⅜	6⅜	1⅜	1″	¾	8159-A	990	Bulih	794.00	808.00	802 00

*Collets shown in collet rack are not included in price of lathe. For collet prices see page 57.
†Cuts Screw Threads 4 to 224 per inch. Longitudinal Feeds .0015″ to .020″. Cross Feeds .0005″ to .008″.



9″ x 3½′ Bench Lathe, 1″ Collet Capacity, Horizontal Motor Drive, Quick Change Gear

1″ Collet Capacity Lathe

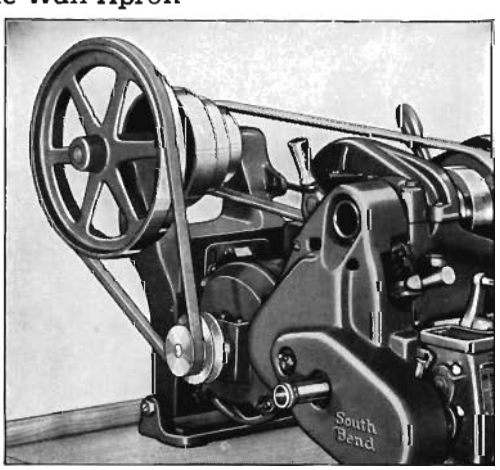
9-inch Horizontal Motor Driven Precision Bench Lathe

1⅜″ Hole Through Spindle—12 Spindle Speeds—Hardened Spindle
Back-Geared—Steel Gears in Double Wall Apron

The 9-inch 1″ Collet Capacity Horizontal Motor Driven Bench Lathe is exactly the same as the lathe shown on page 38 except that it has a special headstock with 1⅜″ hole through the spindle which takes collets up to 1″ capacity. A two-speed motor drive provides twelve spindle speeds, 50 to 1400 R.P.M. A belt tension release permits easy shifting of cone pulley belt. See pages 4 to 11 for features and specifications.

Draw-in Collet Chuck Attachment and collets up to 1″ capacty, and other attachments, chucks, tools and accessories for the lathe are listed and priced on pages 57 to 69.

Equipment included in price of lathe consists of: adjustable belt tension horizontal countershaft, ¾ H.P. reversing motor, reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or change gears, installation plan and book "How to Run a Lathe." Bench is not included in price, see page 68.

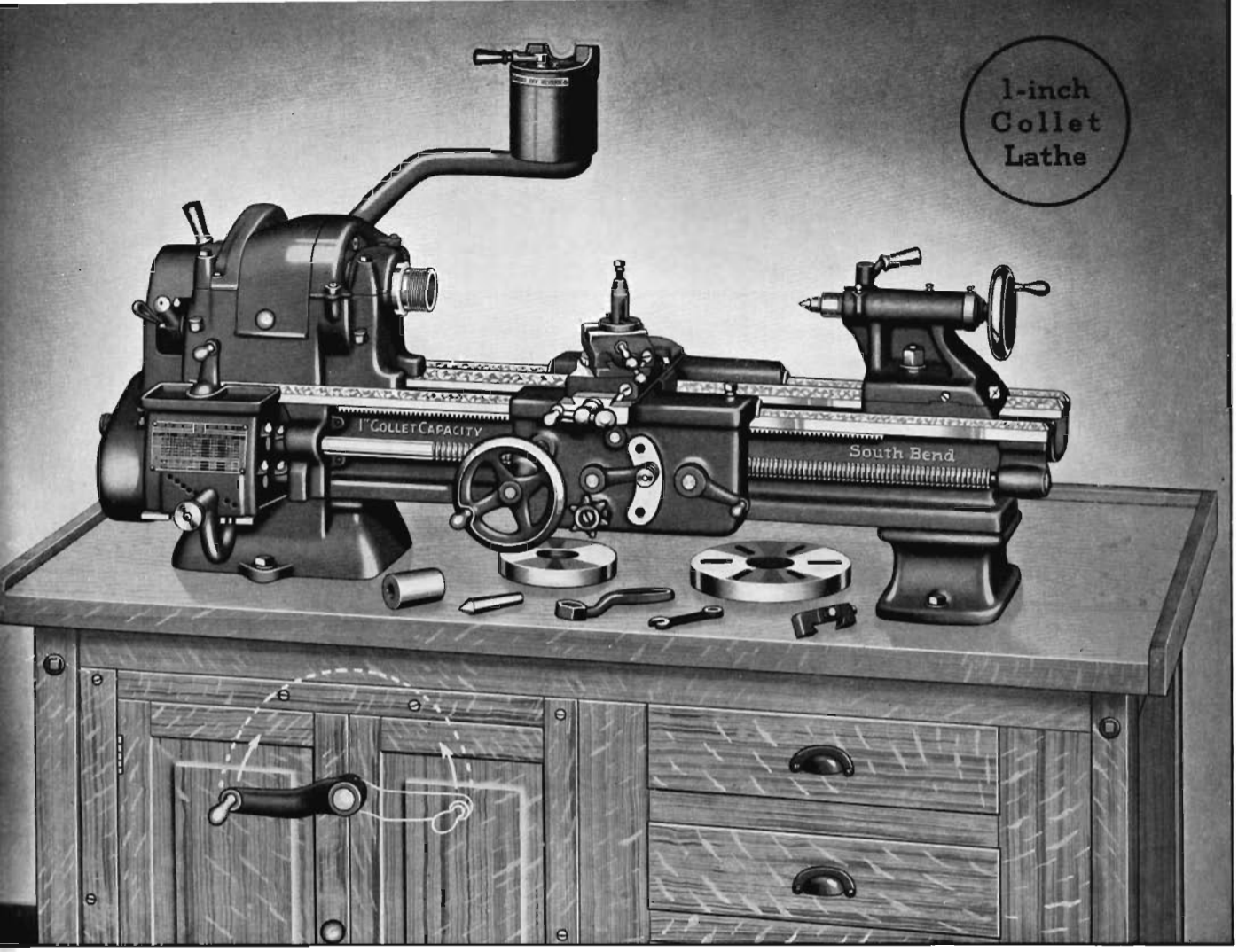


(Patent Applied for)
End View of Lathe Showing Adjustable Horizontal Motor Drive.

Net Factory Prices of 9-inch Bench Lathes, 1″ Collet Capacity—Adjustable Horizontal Motor Drive

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes*				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors 3-Phase 60-Cycle A.C.	Instant Reversing Motors 1-Phase 60-Cycle A.C.	Direct Current	Catalog Number	Code Word for Lathe	Instant Reversing Motors 3-Phase 60-Cycle A.C.	Instant Reversing Motors 1-Phase 60-Cycle A.C.	Direct Current
9¼	3	16⅜	¾	511	456-Y	Dofim	$444.00	$458.00	$452.00	459-Y	Didud	$489.00	$503.00	$497.00
9¼	3½	21⅜	¾	536	456-Z	Dogum	454.00	468.00	462.00	459-Z	Digig	499.00	513.00	507.00
9¼	4	27⅜	¾	561	456-A	Dotoz	464.00	478.00	472.00	459-A	Dodor	509.00	523.00	517.00
9¼	4½	34⅜	¾	586	456-R	Doxun	474.00	488.00	482.00	459-R	Dodux	519.00	533.00	527.00

*Cuts Screw Threads 4 to 224 per inch. Longitudinal Feeds .0015″ to .020″. Cross Feeds .0005″ to .008″.



9" x 3½' Bench Lathe, 1" Collet Capacity, Underneath Belt Motor Drive, Quick Change Gear

1" Collet Capacity Lathe

9-inch Underneath Motor Driven Precision Bench Lathe

1⅜" Hole Through Spindle—12 Spindle Speeds—Hardened Spindle Back-Geared—Steel Gears in Double Wall Apron

The 9-inch 1" Collet Capacity Underneath Motor Driven Bench Lathe is exactly the same as the lathe shown on page 42, except that it has a special headstock with 1⅜" hole through the spindle which takes collets up to 1" capacity. See page 11 for specifications. Features are described on pages 4 to 10.

A two-speed motor drive provides twelve spindle speeds ranging from 50 to 1400 R.P.M. The hardened headstock spindle runs in integral cast iron bearings which are adjustable for wear and have an efficient capillary oiling system.

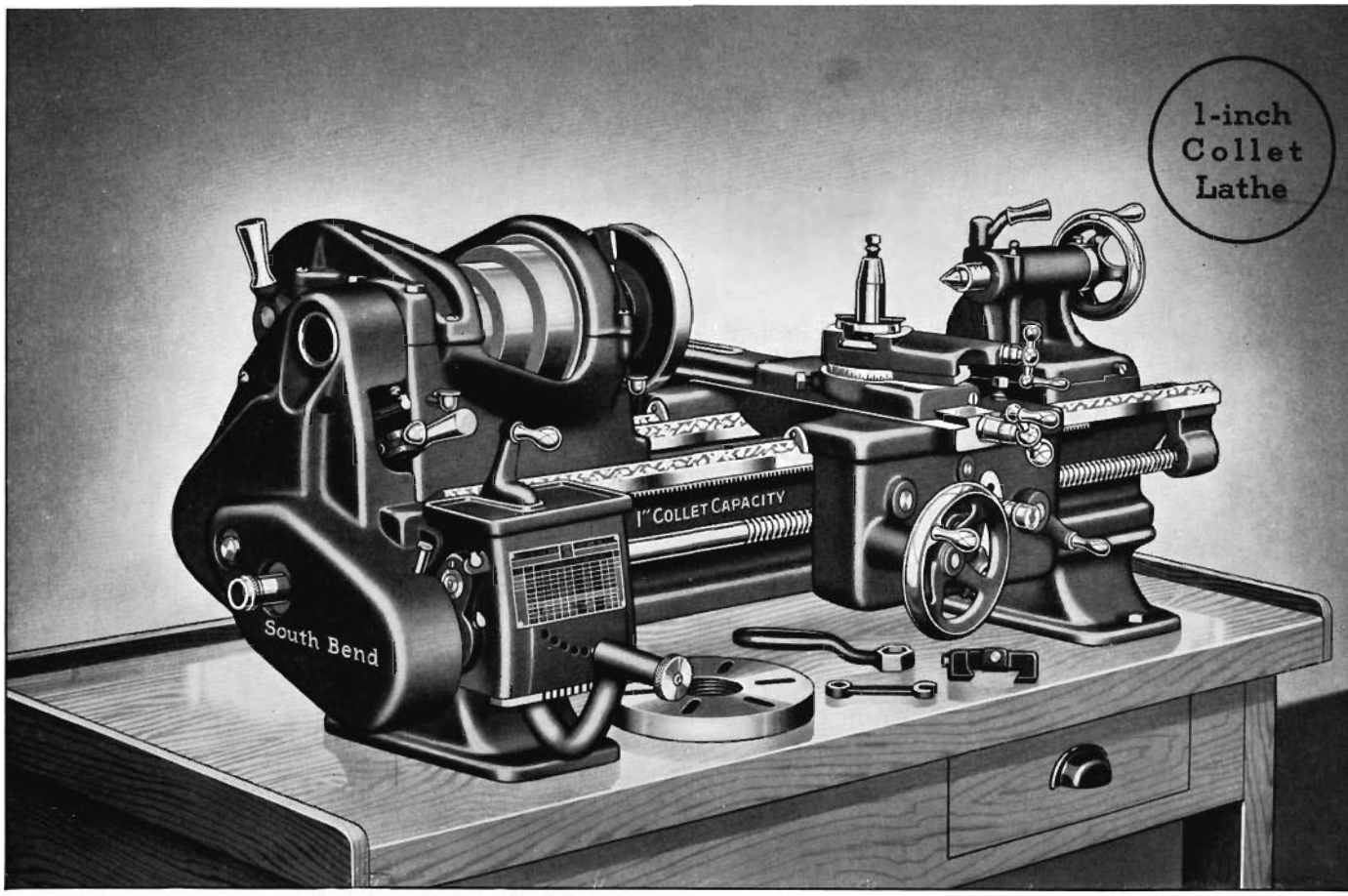
Draw-in Collet Chuck Attachment and collets up to 1" capacity, and other attachments, chucks, and tools are priced on pages 57 to 69.

Equipment included in price of lathe consists of: ¾ H.P. reversing motor, drum reversing switch, wiring, V-belt, flat leather belt, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, quick change gear box or independent change gears, installation plan and book, "How to Run a Lathe." Bench is not included in price, see page 68.

Net Factory Prices of 9-inch Bench Lathes, 1" Collet Capacity—Underneath Belt Motor Drive

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Standard Change Gear Lathes					Quick Change Gear Lathes*				
					Catalog Number	Code Word for Lathe	Instant Reversing Motors 3-Phase 60-Cycle A.C.	Instant Reversing Motors 1-Phase 60-Cycle A.C.	Instant Reversing Motors Direct Current	Catalog Number	Code Word for Lathe	Instant Reversing Motors 3-Phase 60-Cycle A.C.	Instant Reversing Motors 1-Phase 60-Cycle A.C.	Instant Reversing Motors Direct Current
9¼	3	16⅜	¾	635	156-YB	Bijoy	$515.00	$529.00	$523.00	159-YB	Bavec	$560.00	$574.00	$568.00
9¼	3½	21⅜	¾	660	156-ZB	Bikay	525.00	539.00	533.00	159-ZB	Bayiv	570.00	584.00	578.00
9¼	4	27⅜	¾	685	156-AB	Bikec	535.00	549.00	543.00	159-AB	Bikom	580.00	594.00	588.00
9¼	4½	34⅜	¾	710	156-RB	Bikig	545.00	559.00	553.00	159-RB	Becig	590.00	604.00	598.00

*Cuts Screw Threads 4 to 224 per inch. Longitudinal Feeds .0015" to .020". Cross Feeds .0005" to .008".



9" x 3½' Bench Lathe, 1" Collet Capacity, Countershaft Drive, Quick Change Gear

1" Collet Capacity Lathe

9-inch Countershaft Driven Precision Bench Lathe

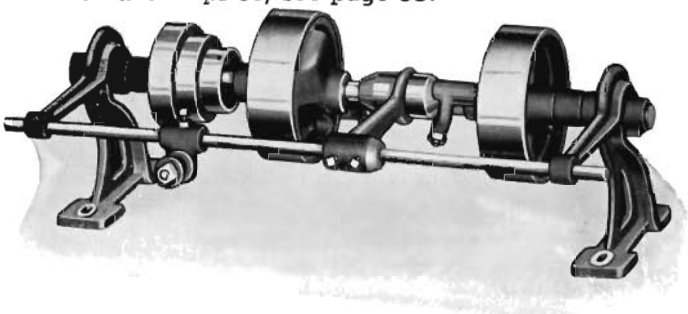
1⅜" Hole Through Spindle—6 Spindle Speeds—Hardened Spindle Back-Geared—Steel Gears in Double Wall Apron

The 9-inch 1" Collet Capacity Countershaft Driven Bench Lathe is exactly the same as the 9-inch Lathe shown on page 39 except that it has a special headstock with 1⅜" hole through the spindle which takes collets up to 1" capacity. See pages 4 to 11 for features and specifications.

Draw-in Collet Chuck Attachment and collets up to 1" capacity, and other attachments, chucks, and tools are priced on pages 57 to 69.

Countershaft has two friction clutch pulleys, providing six spindle speeds forward and reverse, or twelve forward spindle speeds.

Equipment included in price of lathe consists of: countershaft, large and small face plates, tool post, thread cutting stop, spindle centers, spindle sleeve, wrenches, gear box or change gears, installation plan and book "How to Run a Lathe." Bench is not included in price, see page 68.

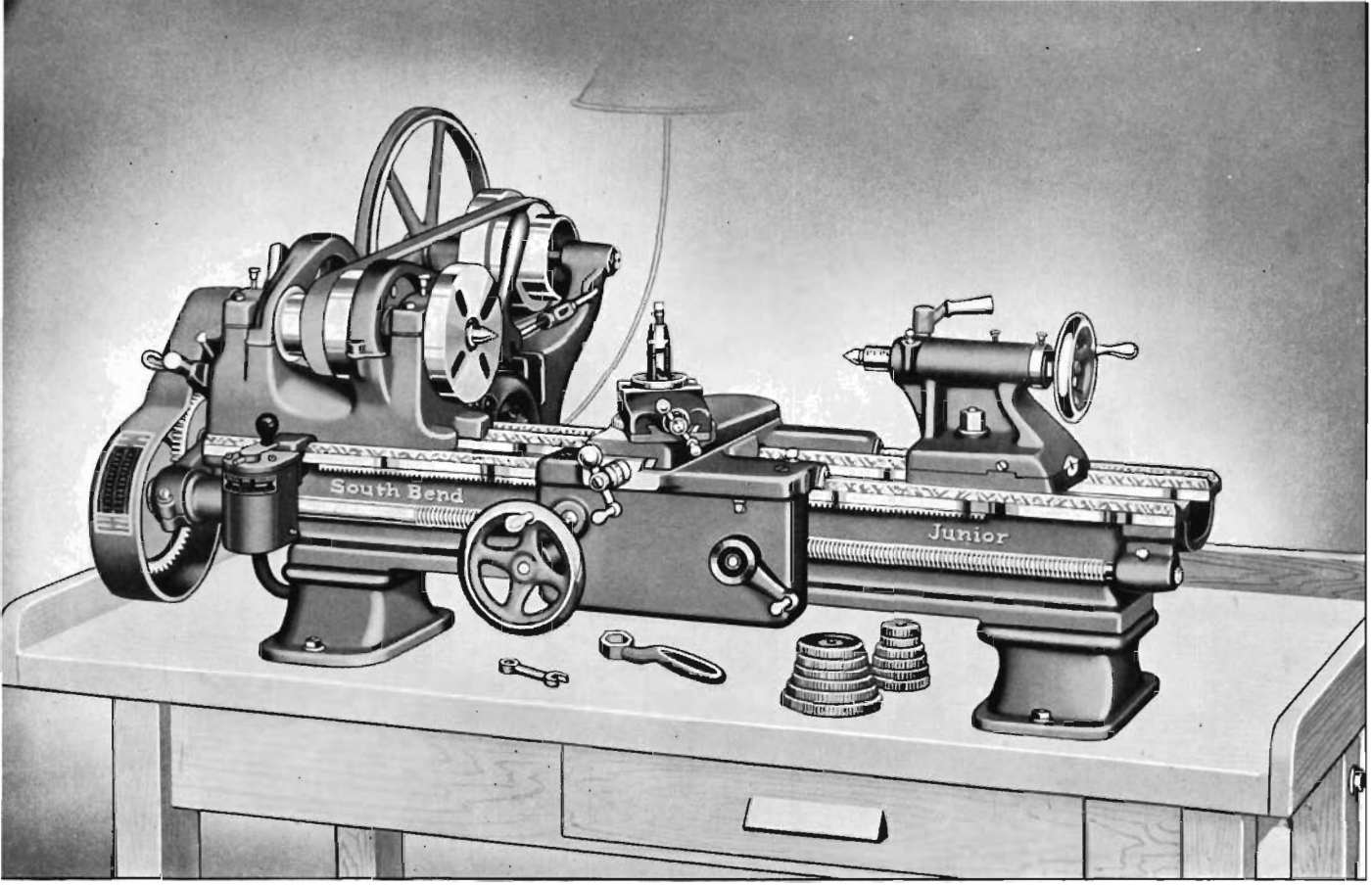


Double Friction Countershaft for Lathe.

Net Factory Prices of 9-inch Bench Lathes, 1" Collet Capacity—Countershaft Drive

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Hole Through Spindle Inches	Power Required H.P.	Standard Change Gear Lathes				Quick Change Gear Lathes*			
						Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price
9¼	3	16⅜	6⅜	1⅜	¾	56-YB	430	Timoh	$387.00	59-YB	440	Tikec	$432.00
9¼	3½	21⅜	6⅜	1⅜	¾	56-ZB	455	Tinoj	397.00	59-ZB	465	Tikid	442.00
9¼	4	27⅜	6⅜	1⅜	¾	56-AB	480	Tiril	407.00	59-AB	490	Tikof	452.00
9¼	4½	34⅜	6⅜	1⅜	¾	56-RB	505	Tiwep	417.00	59-RB	515	Tiluh	462.00

For floor legs instead of bench legs add $10.00.
*Cuts Screw Threads 4 to 224 per inch. Longitudinal Feeds .0015" to .020". Cross Feeds .0005" to .008".



9″ x 3′ "Junior" Horizontal Motor Driven Bench Lathe

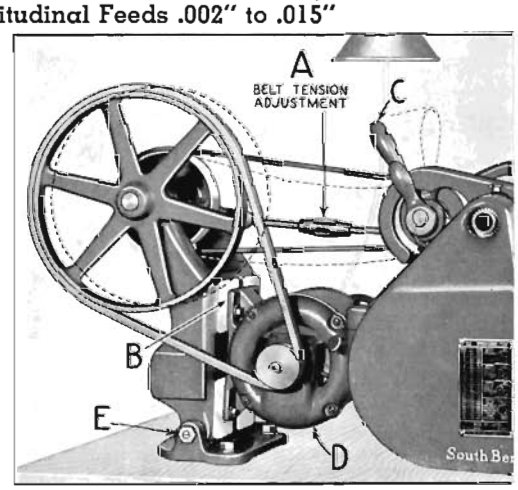
9-inch "Junior" Horizontal Motor Driven Precision Bench Lathes

Geared Screw Feed—Hardened Headstock Spindle—Bronze Spindle Bearings
Cuts Screw Threads 4 to 112 Per Inch—Power Longitudinal Feeds .002" to .015"

The 9-inch "Junior" Horizontal Adjustable Motor Driven Bench Lathes have the same accuracy as the Series "R" 9-inch Lathes. The "Junior" and the Series "R" 9-inch Lathes are built from identical units except for the apron. 9-inch "Junior" Lathes have automatic longitudinal geared screw feeds which are obtained by engaging the half-nuts with the lead screw. Cross feed is hand operated.

The horizontal motor drive is powerful and efficient. Belt tension adjustment (A and B) is provided for both the cone pulley belt and motor belt. A belt tension release (C) permits easy shifting of the cone pulley belt.

Equipment included in the price of lathe consists of: ¼ H.P. reversing motor, drum reversing switch, wiring, V-belt, flat leather belt, face plate, tool post, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and book "How to Run a Lathe." The large face plate and thread cutting stop are omitted from the equipment of the "Junior" Lathe. Bench is not included in price, see page 68.



(Patent Appl'd For)

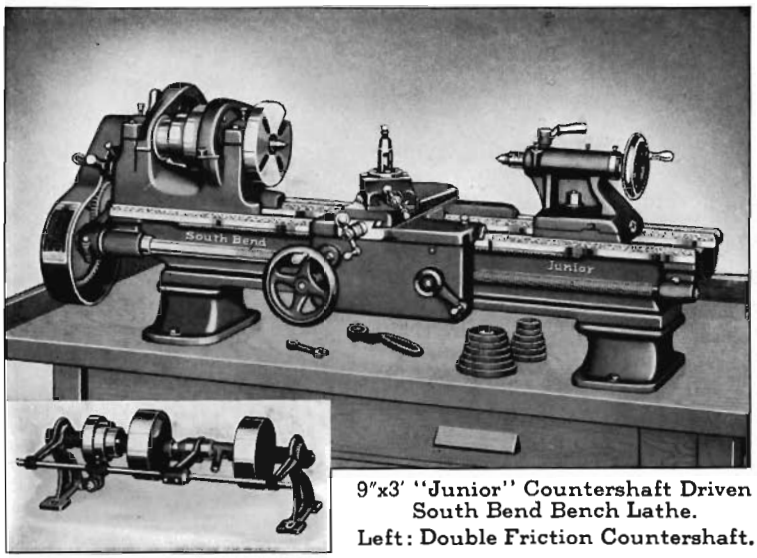
End View of Lathe Showing Adjustable Horizontal Motor Drive.

Net Factory Prices of 9-inch "Junior" Horizontal Adjustable Motor Driven Bench Lathes

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Catalog Number	Code Word for Lathe	Start-Stop Reversing 1-Ph., 60-Cy. A.C. Motor	Instant Reversing Motors		
										3-Phase 60-Cycle A.C. Motor	1-Phase 60-Cycle A.C. Motor	Direct Current Motor
9¼	3	16⅜	¾	6⅜	¼	416	422-YN	Enkoy	$256.00	$270.00	$283.00	$277.00
9¼	3½	21⅜	¾	6⅜	¼	441	422-ZN	Enlav	266.00	280.00	293.00	287.00
9¼	4	27⅜	¾	6⅜	¼	466	422-AN	Enlix	276.00	290.00	303.00	297.00
9¼	4½	34⅜	¾	6⅜	¼	491	422-RN	Enloz	286.00	300.00	313.00	307.00

9-inch "Junior" Countershaft Driven Precision Bench Lathes

Geared Screw Feed—Hardened Headstock Spindle—Bronze Spindle Bearings
Cuts Screw Threads 4 to 112 Per Inch—Power Longitudinal Feeds .002" to .015"



9"x3' "Junior" Countershaft Driven South Bend Bench Lathe.
Left: Double Friction Countershaft.

Back-Geared Screw Cutting

The 9-inch "Junior" Bench Lathe shown at left is exactly the same as the "Junior" lathe shown on page 48, except that it is driven by an overhead double friction countershaft instead of horizontal motor drive. See page 11 for specifications.

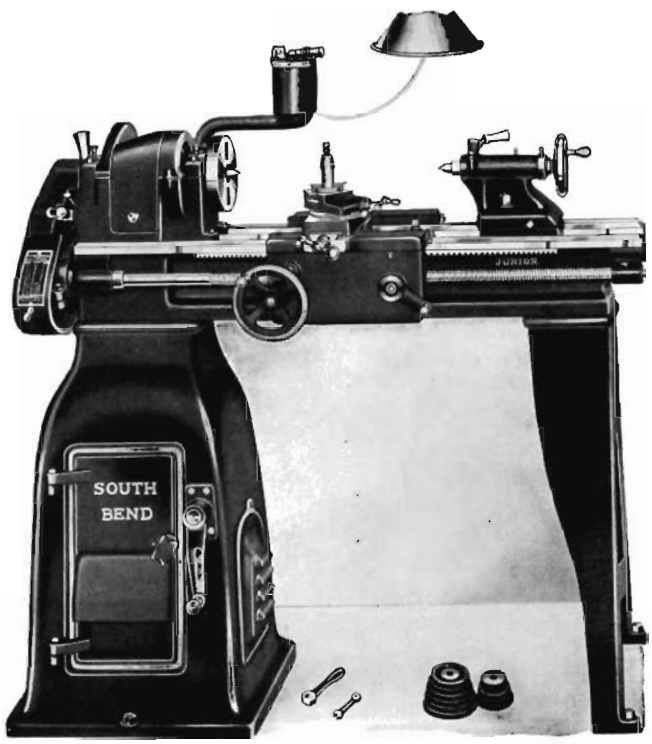
Equipment consists of: double friction countershaft; face plate; tool post; two 60-degree lathe centers; spindle sleeve; wrenches; change gears; installation plan and book, "How to Run a Lathe."

Bench is not included in price, see page 68.

9-inch "Junior" Countershaft Driven Bench Lathes

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Approx. Weight Crated Pounds	Catalog Number	Code Word for Lathe	Net Factory Price
9¼	3	16⅜	375	22-YB	Babig	$230.00
9¼	3½	21⅜	400	22-ZB	Bacaf	240.00
9¼	4	27⅜	425	22-AB	Baceg	250.00
9¼	4½	34⅜	450	22-RB	Bacoj	260.00

For floor legs add $10.00 to above prices.



9" x 3' "Junior" Underneath Belt Motor Driven Precision Floor Leg Lathe. (Patented)

9-inch "Junior" Motor Driven Lathes

Underneath Motor Drive—Pedestal Motor Drive
Cuts Screw Threads 4 to 112 Per Inch
Power Longitudinal Feeds .002" to .015"

The 9-inch "Junior" Underneath Motor Driven Lathe shown at the left is exactly the same as the "Junior" Lathes shown above and on page 48, except that this lathe is equipped with underneath belt motor drive. See page 54 for description of the underneath motor drive.

The 9-inch "Junior" Lathe is also made in the Pedestal Motor Drive type, which is priced in the tabulation below. See page 55 for description of the Pedestal Motor Drive.

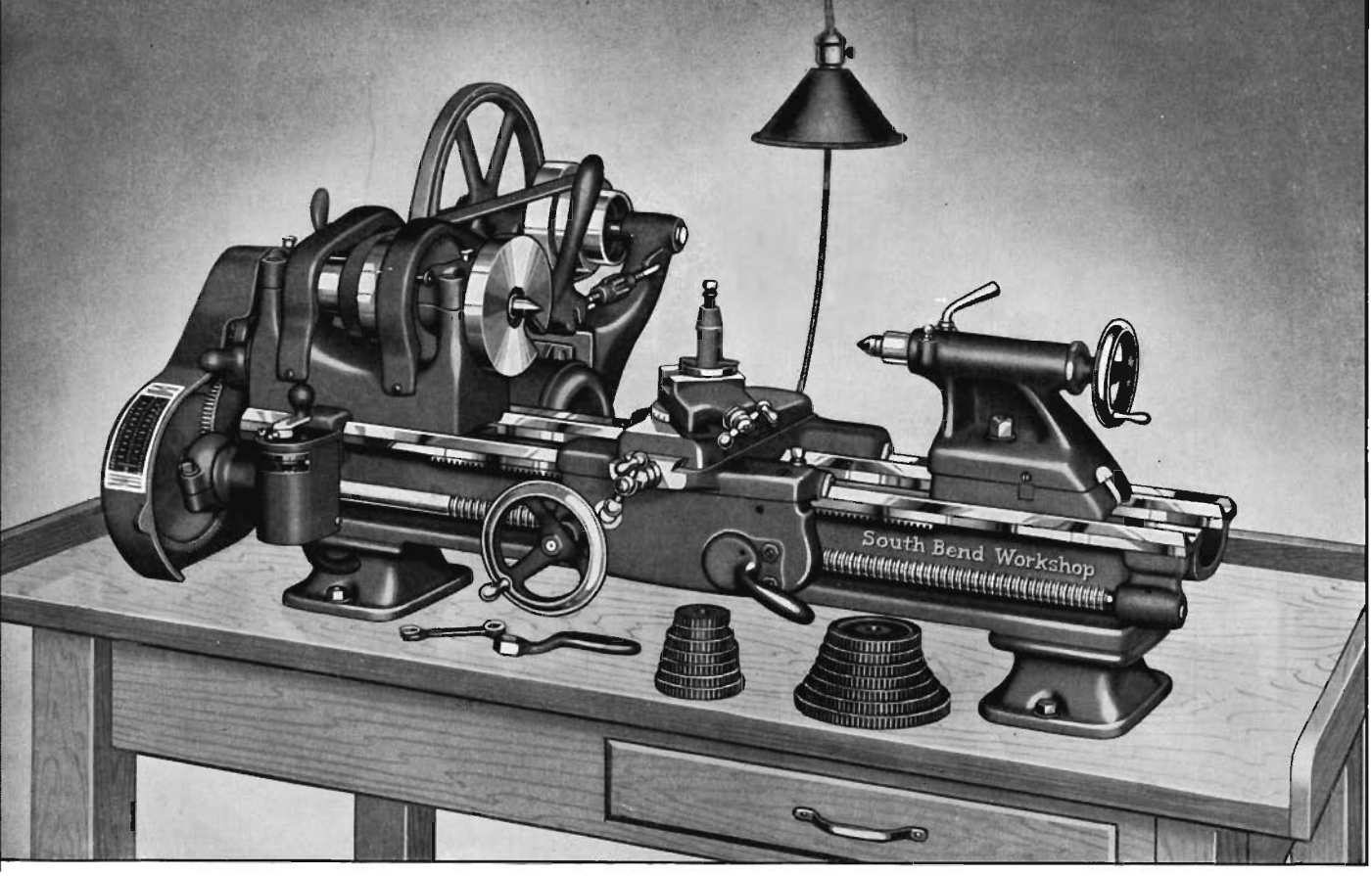
Specifications and features of the lathe are illustrated and described on pages 4 to 11 inclusive.

Equipment included in price of either the Pedestal Motor Drive Lathe or the Underneath Motor Drive Lathe consists of: ¼ H.P. reversing motor, wiring, drum reversing switch, V-belt, flat leather belt, face plate, tool post, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and book, "How to Run a Lathe." The large face plate and thread cutting stop are omitted from the equipment.

Prices of 9-inch "Junior" Underneath Motor Driven and Pedestal Motor Driven Floor Leg Lathes

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Size Motor Used H.P.	Approx. Weight Crated Pounds	Underneath Belt Motor Driven Lathes						Pedestal Motor Driven Lathes					
					Catalog Number	Code Word for Lathe	Start-Stop Reversing 1-Ph., 60-Cy. A.C. Motor	Instant Reversing Motors: 3-Phase 60-Cycle A.C. Motor	Instant Reversing Motors: 1-Phase 60-Cycle A.C. Motor	Instant Reversing Motors: Direct Current Motor	Catalog Number	Code Word for Lathe	Start-Stop Reversing 1-Ph., 60-Cy. A.C. Motor	Instant Reversing Motors: 3-Phase 60-Cycle A.C. Motor	Instant Reversing Motors: 1-Phase 60-Cycle A.C. Motor	Instant Reversing Motors: Direct Current Motor
9¼	3	16⅜	¼	740	122-Y	Facir	$333.00	$351.00	$364.00	$358.00	922-Y	Mahac	$300.00	$314.00	$327.00	$321.00
9¼	3½	21⅜	¼	765	122-Z	Facos	343.00	361.00	374.00	368.00	922-Z	Maheg	310.00	324.00	337.00	331.00
9¼	4	27⅜	¼	790	122-A	Facut	353.00	371.00	384.00	378.00	922-A	Majad	320.00	334.00	347.00	341.00
9¼	4½	34⅜	¼	815	122-R	Fader	363.00	381.00	394.00	388.00	922-R	Majeh	330.00	344.00	357.00	351.00

Weights listed are for Underneath Driven Lathes, for Weights of Pedestal Driven Lathes deduct 235 lbs.



9″ x 3′ "Workshop" Adjustable Horizontal Motor Driven Bench Lathe, less bench

9-in. "Workshop" Horizontal Motor Driven Precision Bench Lathes

Geared Screw Feed—Back-Geared—Cuts Screw Threads 4 to 112 Per Inch
Power Longitudinal Feeds .002″ to .015″

9-inch "Workshop" Adjustable Horizontal Motor Driven Bench Lathes are recommended for use in machine shops, repair shops, manufacturing plants, garages, laboratories, home workshops, and experimental shops where the finest type of back-geared, screw cutting precision lathe is required. Operates from electric lamp socket. See pages 11 and 52.

The adjustable horizontal motor drive is practical, convenient and efficient. The countershaft has belt tension adjustment (A and B) for both the cone pulley belt and motor V-belt. Belt tension release (C) permits easy shifting of the cone pulley belt.

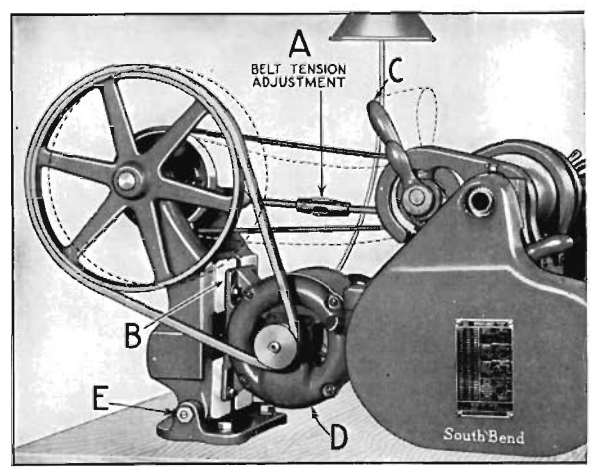
"Workshop" Lathes have automatic longitudinal feeds obtained by engaging half-nuts with lead screw. Cross feed is hand operated. Dovetails have adjustable straight gibs. Headstock spindle runs in integral cast iron bearings.

Equipment included in price of lathe consists of: graduated compound rest, face plate 5 inches diameter, tool post, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and book "How to Run a Lathe."

Prices 9-inch "Workshop" Adjustable Horizontal Motor Driven Lathes

9-inch "Workshop" South Bend Precision Bench Lathe, Complete with Graduated Compound Rest and Regular Lathe Equipment, but without Motor Drive Equipment and less Bench	Lathes With Horizontal Countershaft Adjustable Type			
	9″ x 3′	9″ x 3½′	9″ x 4′	9″ x 4½′
	$85.00	$97.00	$109.00	$126.00
MOTOR DRIVE EQUIPMENT Motor Drive Equipment consists of: Adjustable Type Horizontal Countershaft ¼ H.P. Start-Stop Reversing Split-Phase Motor, 1725 R.P.M. (1-ph. 60 Cy. A.C. 110-V); V-Groove Pulley for Motor; Drum Reversing Switch; Rubber Covered Cable to connect Motor to Switch; 6-ft. Extension Cable and Plug; Bracket for attaching Switch to Lathe; V-Belt, Motor to Drive Unit; Flat Leather Belt and Lacing	32.00	32.00	32.00	32.00
Total Price Lathe with Motor Drive Equipment	$117.00	$129.00	$141.00	$158.00
Catalog Number, Lathe with Motor Drive Equipment	No. 415-YA	No. 415-ZA	No. 415-AA	No. 415-RA
Code Word, Lathe with Motor Drive Equipment	Magla	Mahik	Manaf	Mandi
Distance Between Spindle Centers of Lathe	17 in.	23 in.	29 in.	35 in.
Shipping Weight, Lathe and Motor Drive Complete	320 lbs.	345 lbs.	370 lbs.	420 lbs.
Collet Capacity, 1/16″ up by 64ths to	½ in.	½ in.	½ in.	½ in.

Bench is not included in price of lathe; for information see page 68. If hardened headstock spindle is wanted instead of regular spindle add $6.00 to above prices.



(Patent Appl'd For)
End View of Lathe Showing Adjustable Horizontal Motor Drive.

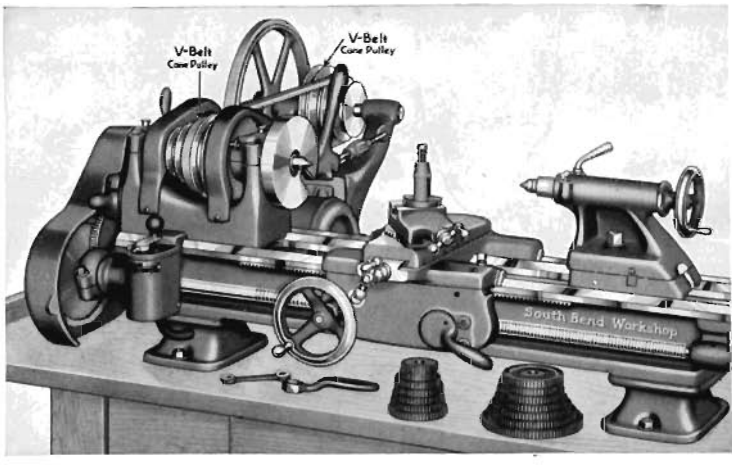
9-inch "Workshop" V-Belt Horizontal Motor Driven Bench Lathes

Cuts Screw Threads 4 to 112 Per Inch—Power Longitudinal Feeds .002" to .015"

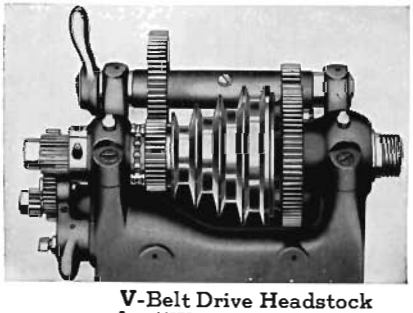
Geared Screw Feed—Back-Geared

This lathe is exactly the same as the lathe shown on page 50, except that it is equipped with V-belt cone pulleys instead of flat belt cone pulleys and has a hardened headstock spindle. Eight spindle speeds are provided: 44, 60, 82, 113, 230, 313, 424, and 585. R.P.M.

Equipment included in price consists of: V-belt adjustable horizontal motor drive; ¼ H.P. start-stop type reversing motor (1-ph. 60-cy. A.C., 110-V.), wire to connect motor and switch; 6 ft. extension cord and plug; reversing switch; V-belts; motor pulley; and lathe equipment, as listed on page 50. Bench is not included in price, see page 68.



9" x 3' "Workshop" South Bend V-Belt Adjustable Horizontal Motor Driven Precision Bench Lathe. Bench is extra.



V-Belt Drive Headstock for "Workshop" Lathe.

Prices of 9-inch "Workshop" V-Belt Adjustable Horizontal Motor Driven Bench Lathes

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Swing Over Carriage Inches	Approx. Weight Crated Pounds	Catalog Number	Code Word for Lathe	Net Factory Price
9¼	3	17	5½	320	415-YV	Kabli	$137.00
9¼	3½	23	5½	345	415-ZV	Kabol	149.00
9¼	4	29	5½	370	415-AV	Kabro	161.00
9¼	4½	35	5½	420	415-RV	Kacal	178.00

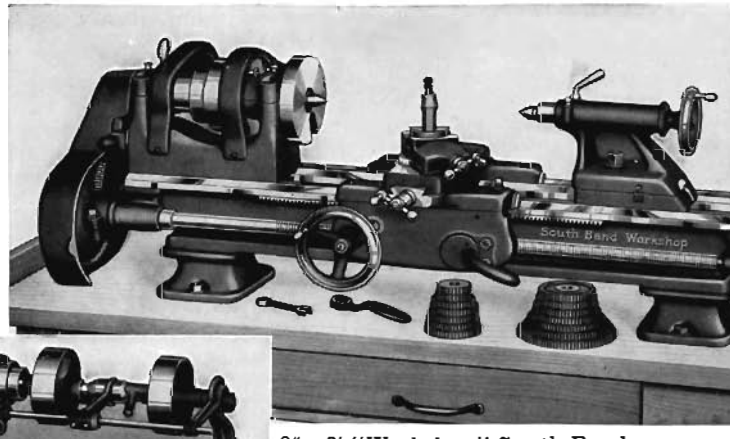
9-inch "Workshop" Countershaft Driven Precision Bench Lathes

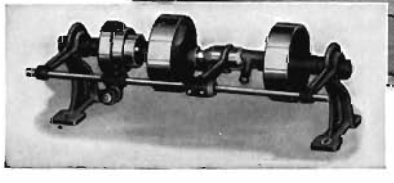
Geared Screw Feed—Back-Geared—Cuts Screw Threads 4 to 112 Per Inch
Power Longitudinal Feeds .002" to .015"

The 9-inch "Workshop" bench lathes with countershaft drive are exactly the same as the lathes shown on the preceding page except for the type of drive.

Countershaft has two friction clutch pulleys, one of which may be driven with an open belt and the other with a crossed belt, which permits the lathe to be operated forward and reverse.

Equipment included in price of lathe consists of: graduated compound rest; face plate 5 inches diameter, tool post, spindle centers, spindle sleeve, wrenches, installation blueprint and book, "How to Run a Lathe." Bench is not included in price, see page 68.



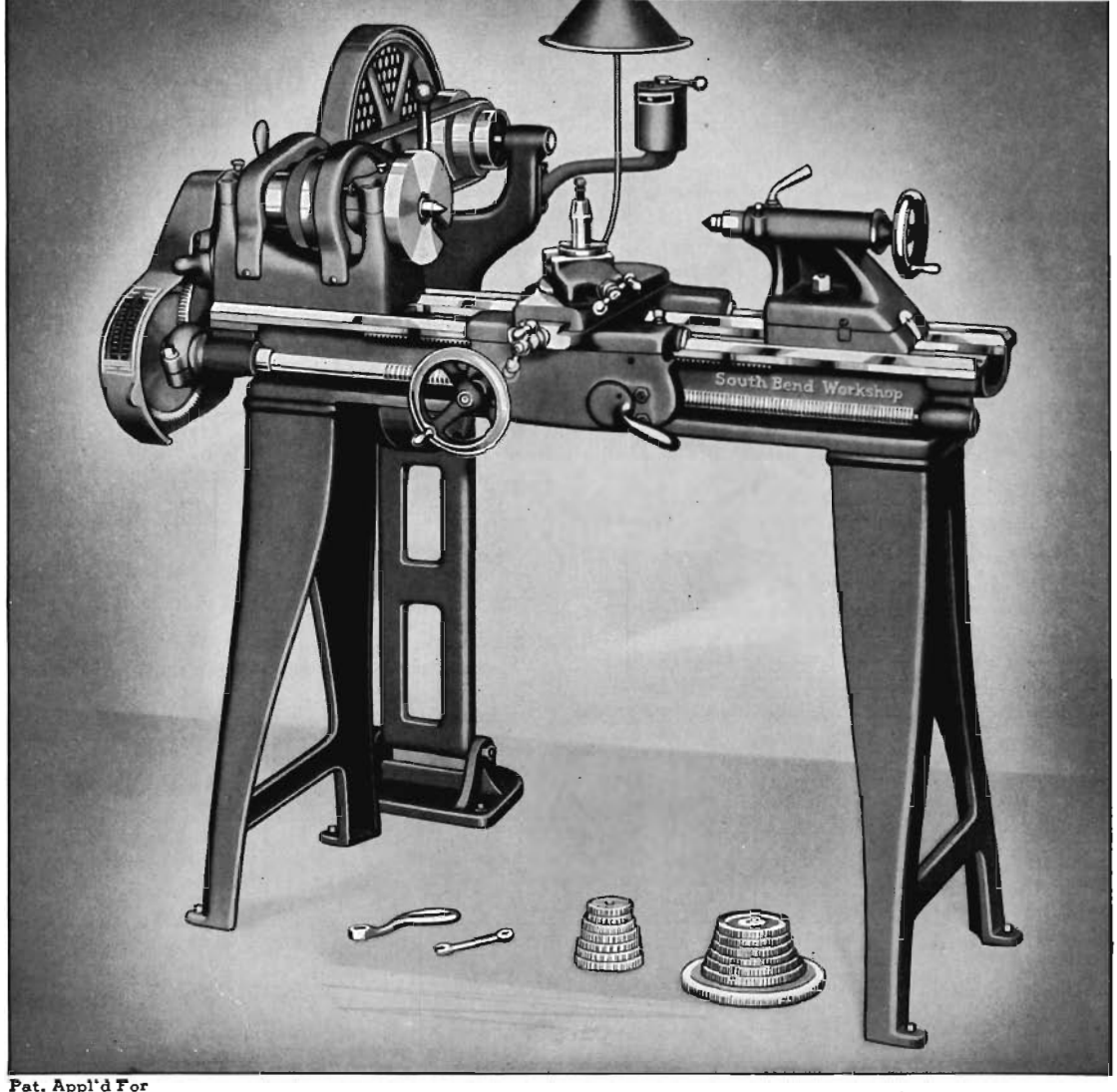


9" x 3' "Workshop" South Bend Countershaft Driven Bench Lathe. Left: Double Friction Countershaft.

Net Factory Prices of 9-inch "Workshop" Countershaft Driven Bench Lathes

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Power Required Horse Power	Approx. Weight Crated Pounds	Catalog Number	Code Word for Lathe	Net Factory Price*
9¼	3	17	¾	5½	¼	300	15-YBW	Makiz	$102.00
9¼	3½	23	¾	5½	¼	325	15-ZBW	Makar	114.00
9¼	4	29	¾	5½	¼	350	15-ABW	Makel	126.00
9¼	4½	35	¾	5½	¼	400	15-RBW	Makof	143.00

*If hardened headstock spindle is wanted instead of regular spindle add $6.00 to above prices. If floor legs are wanted instead of bench legs add $10.00 to above prices.



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9″ x 3′ "Workshop" Pedestal Adjustable Motor Driven Floor Leg Lathe

9-inch "Workshop" Pedestal Motor Driven Precision Lathes

Geared Screw Feed—Back-Geared—Cuts Screw Threads 4 to 112 Per Inch
Power Longitudinal Feeds .002″ to .015″

9-inch "Workshop" Pedestal Adjustable Motor Driven Lathes are recommended for shops requiring an efficient motor driven floor leg lathe. Except for the drive, this lathe is the same as lathe on page 50.

The pedestal motor drive is very practical as it permits placing the lathe in any position in the shop. Drive has adjustment for taking up belt stretch, and belt tension release. See page 55.

Equipment included in price of lathe consists of: ¼ H.P. start-stop type reversing motor (1 ph. 60 cy. A.C., 110-v.), reversing switch, wiring, 6-ft. extension cable and plug, V-belt, flat leather belt, graduated compound rest, face plate 5 inches diameter, tool post, spindle centers, spindle sleeve, wrenches, independent change gears, installation plan, and book "How to Run a Lathe."

Specifications

Swing over lathe bed	9¼ in.
Swing over saddle slide, chip guard attached	5½ in.
Spindle nose, size	1½ in. diam. 8 threads
Hole through spindle ¾ in., Maximum collet capacity	½ in.
Centers, head and tail spindle	No. 2 Morse Taper
Cone pulley belt width	1 in.
6 spindle speeds	40, 68, 122, 202, 353, 630 R.P.M.
Thread cutting range	4 to 112 per in.
Compound rest top, angular feed	2⅛ in.
For information on threads and feeds	See page 56

Net Factory Prices of 9-inch "Workshop" Pedestal Adjustable Motor Driven Lathes

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Size Motor Used H.P.	Catalog Number	Approx. Weight Crated Pounds	Code Word for Lathe	Net Factory Price
9¼	3	17	¾	5½	¼	915-Y	440	Harob	$142.00
9¼	3½	23	¾	5½	¼	915-Z	465	Haret	154.00
9¼	4	29	¾	5½	¼	915-A	490	Hemir	166.00
9¼	4½	35	¾	5½	¼	915-R	540	Hemar	183.00

If hardened headstock spindle is wanted instead of regular spindle add $6.00 to above prices.

9-inch "Workshop" Countershaft Driven Precision Oil Pan Lathes

Cuts Screw Threads 4 to 112 Per Inch
Power Longitudinal Feeds .002" to .015"
Geared Screw Feed—Back-Geared

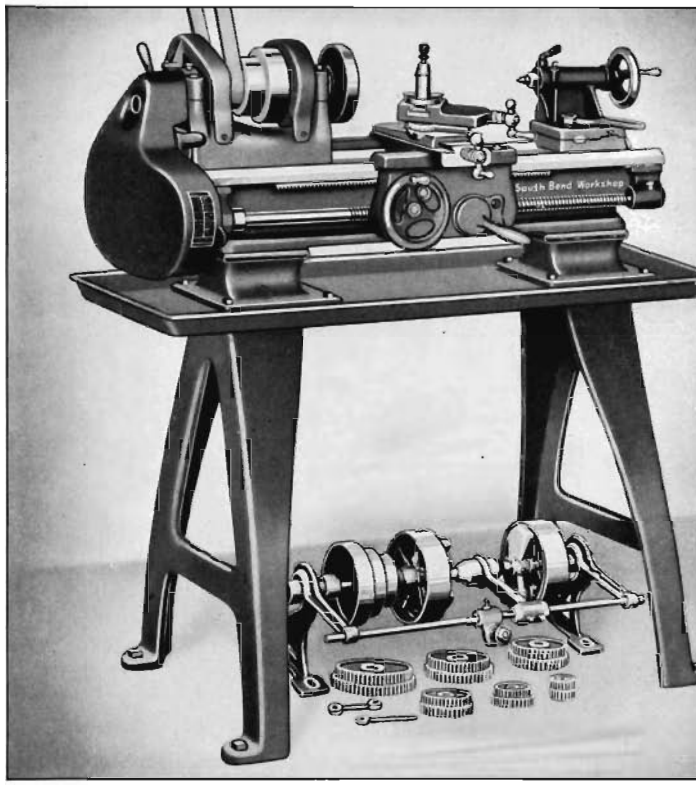
The 9-inch "Workshop" Oil Pan Lathe shown at the right is the same as the Countershaft Driven Bench Lathes illustrated and described on page 51, except that this lathe has floor legs and is equipped with a steel pan to catch oil and chips. Specifications are listed on page 11.

Equipment included in price of lathe consists of: double friction countershaft; graduated compound rest; face plate 5-inches diameter; forged steel tool post; two 60-degree tool steel lathe centers; No. 2 Morse Taper; headstock spindle sleeve; wrenches; set of independent change gears for screw thread cutting; compound gearing for automatic longitudinal power feeds; installation plan and book, "How to Run a Lathe."

Prices of 9-inch "Workshop" Oil Pan Lathes

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Approx. Weight Crated Pounds	Catalog Number	Code Word for Lathe	Net Factory Price*
9¼	3	17	410	215-YW	Marel	$133.00
9¼	3½	23	435	215-ZW	Marho	146.00
9¼	4	29	460	215-AW	Marta	159.00
9¼	4½	35	510	215-RW	Marub	177.00

*If hardened headstock spindle is wanted instead of regular spindle add $6.00 to above prices.



9" x 3' "Workshop" Countershaft Driven Oil Pan Lathe.

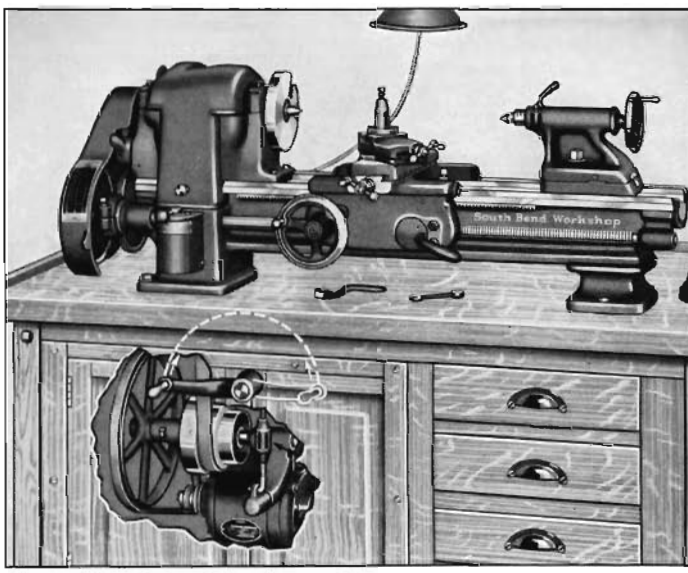
9-inch "Workshop" Underneath Motor Driven Bench Lathes

Geared Screw Feed—Back-Geared—Hardened Headstock Spindle

Cuts Screw Threads 4 to 112 Per Inch
Power Longitudinal Feeds .002" to .015"

This lathe is the same as the lathes shown on page 50, except for necessary alterations in the headstock and bed to accommodate the underneath motor drive. The hinged cone pulley cover may be raised for belt shifting. Bed and legs are cast integral. Hardened headstock spindle is included as regular equipment on all underneath motor driven lathes.

Equipment included in price of lathe consists of: hardened headstock spindle; underneath motor drive unit; ¼ H.P. 1725 R.P.M., A.C., 1-phase, 110-volt, 60-cycle, start-stop reversing motor; wire to connect motor and switch; 6-ft. extension cord and plug; reversing switch; V-belts; motor pulley; graduated compound rest; face plate; tool post; two 60-degree centers; spindle sleeve; wrenches; change gears; installation plan and book, "How to Run a Lathe." Bench is not included in price, see page 68.



9" x 3' "Workshop" Underneath Motor Driven Bench Lathe.

Prices of 9-inch "Workshop" Underneath Belt Motor Driven Bench Lathes—Less Bench

Swing Over Bed Inches	Length of Bed Feet	Distance Between Centers Inches	Hole Through Spindle Inches	Swing Over Carriage Inches	Size of Motor H.P.	Approx. Weight Crated Pounds	Catalog No.	Code Word for Lathe	Net Factory Price
9¼	3	17	¾	5½	¼	340	115-YB	Edhar	$156.00
9¼	3½	23	¾	5½	¼	365	115-ZB	Edhiz	168.00
9¼	4	29	¾	5½	¼	390	115-AB	Edhof	180.00

Patented

Fig. 16. Quick Change Gear Underneath Belt Motor Driven South Bend Lathe.

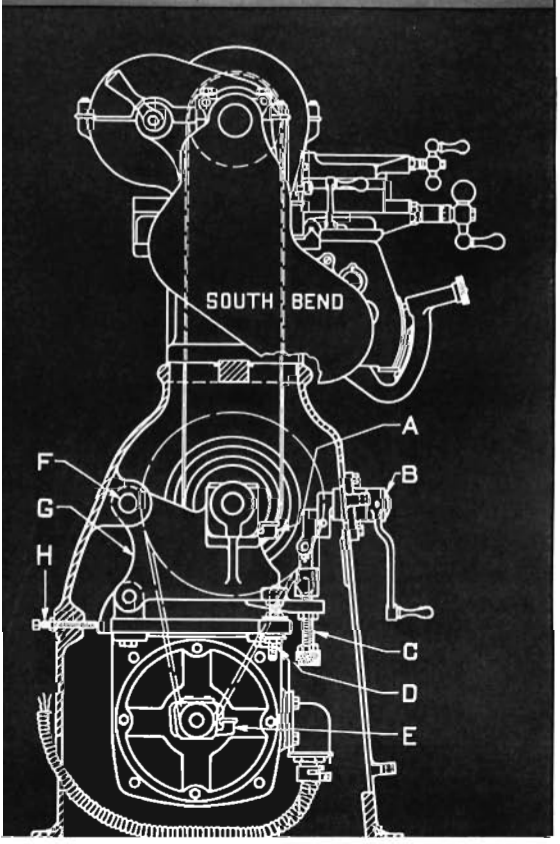


Fig. 17. End View of Underneath Belt Motor Drive Showing Principal Parts.

Underneath Belt Motor Drive

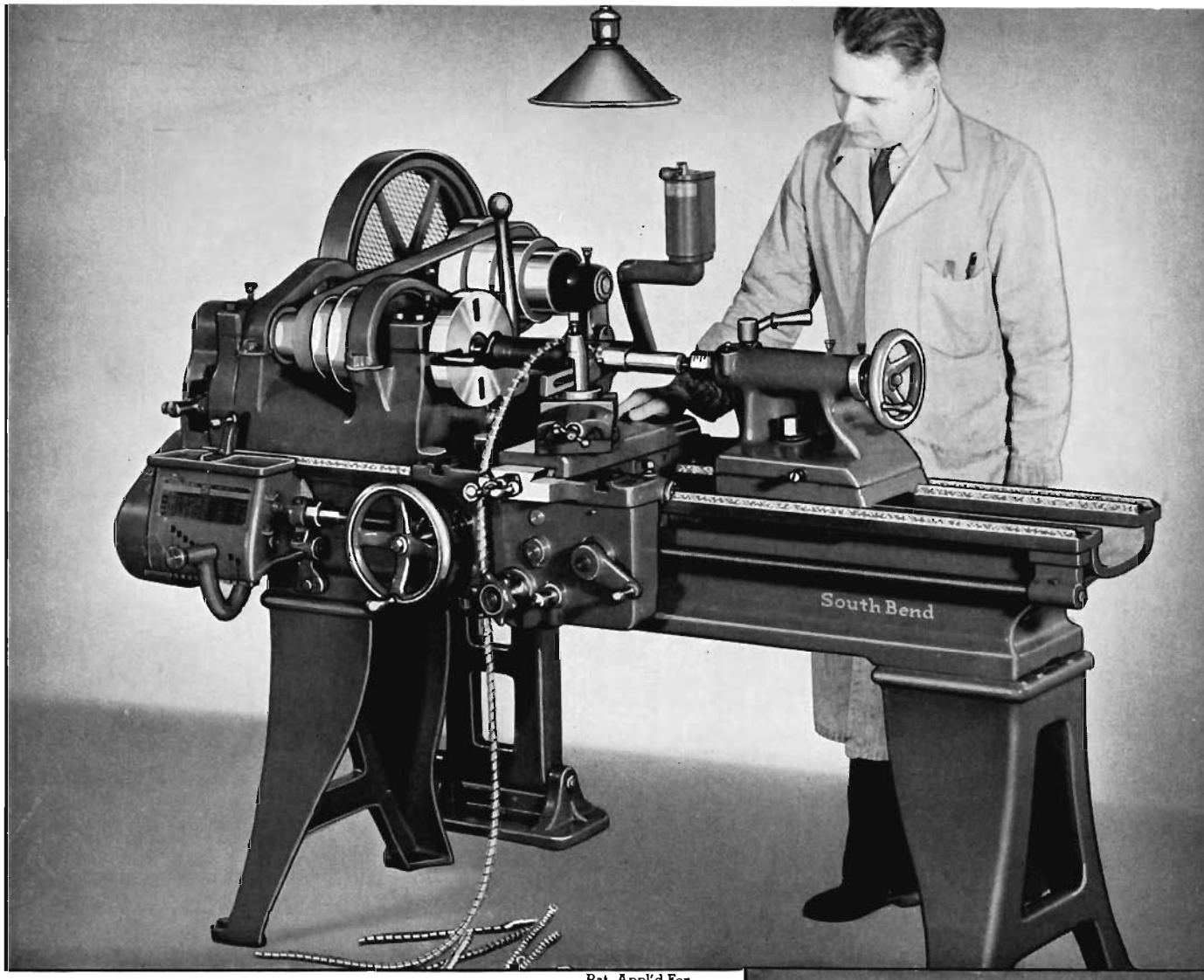
For New Model South Bend Precision Lathes

The South Bend patented underneath belt motor drive is the most efficient and practical direct drive equipment ever designed for a back-geared screw cutting lathe. This drive is unusually compact and is silent, powerful and economical in operation.

A drum reversing switch is conveniently located and permits the operator to start, stop or reverse the rotation of the lathe spindle from an easy working position.

The belt drive is silent in operation and provides a smooth, steady pull free from vibration and chatter. Power is transmitted from the motor to the countershaft by V-belt and from the countershaft up through the lathe bed to the headstock cone pulley by a flat leather belt.

Adjustments "C" and "D" Fig. 17 provide for taking up belt stretch and for obtaining any desired tension on both the motor belt and cone pulley belt. A belt tension release lever "B" permits easy shifting of the cone pulley belt. Screw "H" is an adjustable stop which prevents the weight of the motor and cradle assembly from hanging on the belt.



Pat. Appl'd For

Fig. 18. Quick Change Gear Pedestal Adjustable Motor Driven South Bend Lathe

Pedestal Adjustable Motor Drive

For New Model South Bend Precision Lathes

The new South Bend pedestal adjustable motor drive is convenient, efficient and reasonable in price. Power is transmitted from motor to countershaft by V-belts and from countershaft to the lathe spindle by a flat leather belt. This provides a smooth, steady pull, free from vibration and chatter.

Reversing switch "C" is conveniently located near the lathe spindle and permits the operator to start, stop or reverse the rotation of the lathe from an easy working position. The lathe is relieved of all strain as the motor and driving mechanism are supported by an adjustable pedestal as shown in Fig. 19. The adjustable tension brace "A" between the countershaft and lathe equalizes the pull of the belt.

Turnbuckle adjustment "A" permits adjusting cone pulley belt for any desired pulling power and for taking up belt stretch. Lever "B" permits releasing the cone pulley belt tension instantly for easy shifting. Motor belt tension adjustment "D" is also provided to compensate for stretch of the V-belts used between the motor and countershaft. V-belts are enclosed in a substantial guard.

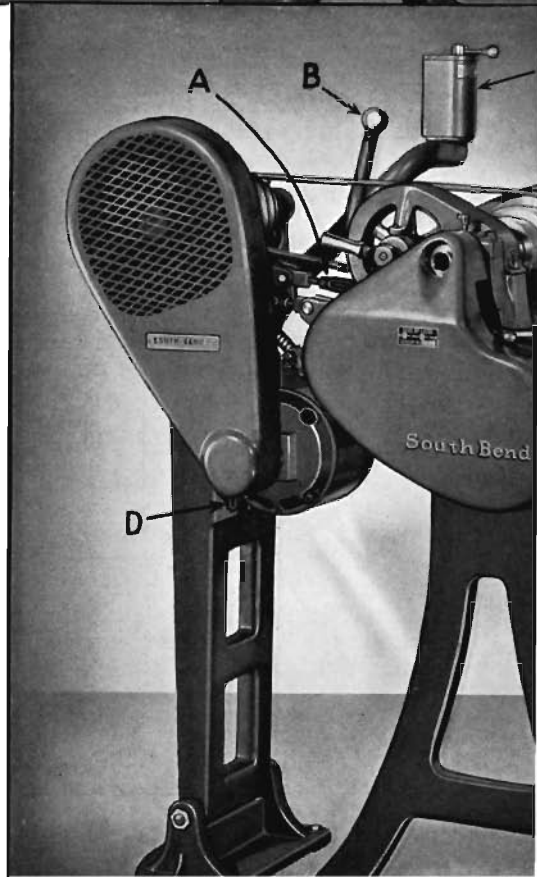


Fig. 19. Pedestal Adjustable Motor Drive used on Standard and Quick Change Gear Lathes.

Standard Change Gear Lathes

Cut Screw Threads 4 to 112 Per Inch

The illustration at the right shows the standard change gear mechanism which is used to connect the headstock spindle with the lead screw for cutting screw threads on Standard Change Gear South Bend Lathes. Gears usually changed for cutting various pitches of screw threads are the stud gear on the headstock, the screw gear on the lead screw and the compound idler gear. This gearing takes the place of the gear box; otherwise there is no difference between the Standard Change Gear and Quick Change Gear Lathes shown in this catalog.

9-inch and 11-inch Lathe Equipment

All 9-inch and 11-inch Standard Change Gear Lathes have complete change gear equipment for cutting right and left hand screw threads from 4 to 112 per inch, including 11½ and 27 pipe threads as listed on the screw thread cutting chart. (Fig. 21.)

13, 15, and 16-inch Lathe Equipment

All 13-inch, 15-inch, and 16-inch South Bend Standard Change Gear Lathes will cut right and left hand threads from 2 to 112 per inch, including 11½ and 27 pipe threads. The threads cut are the same as those listed for 9-inch lathes on the index chart (Fig 21), and, in addition, there are four coarser threads, 2, 2½, 3, and 3½ per inch.

Power Turning Feeds

The standard change gear equipment is also used for obtaining a wide range of automatic power longitudinal feeds and power cross feeds for turning and facing. The feeds are varied by changing the gears, the same as when cutting screw threads.

The power longitudinal turning feeds on the 9-inch and 11-inch Standard Change Gear Lathes range from .002" to .015", and on the 13-inch, 15-inch, and 16-inch lathes the range is from .002" to .020".

Lead Screw Threads Used Only for Cutting Screw Threads

The threads of the lead screw are not used for the turning feeds on the Standard Change Gear Lathes as the power feeds are operated by a worm which is driven by a spline in the lead screw. The threads of the lead screw and the half nuts are used for thread cutting only.

9-inch "Junior" and "Workshop" Lathes

Change gear equipment for cutting screw threads on the 9-inch "Junior" and 9-inch "Workshop" Lathes is similar to that for the 9-inch Standard Change Gear Lathes and will cut threads from 4 to 112 per inch, as listed in Fig. 21. Power longitudinal turning feeds .002" to .015" are also available through the lead screw and half nut. Cross feed is hand operated only on the 9-inch "Workshop" and 9-inch "Junior" Lathes.

Metric Screw Threads

Special equipment for cutting metric screw threads can be supplied at extra cost and is listed on page 69.

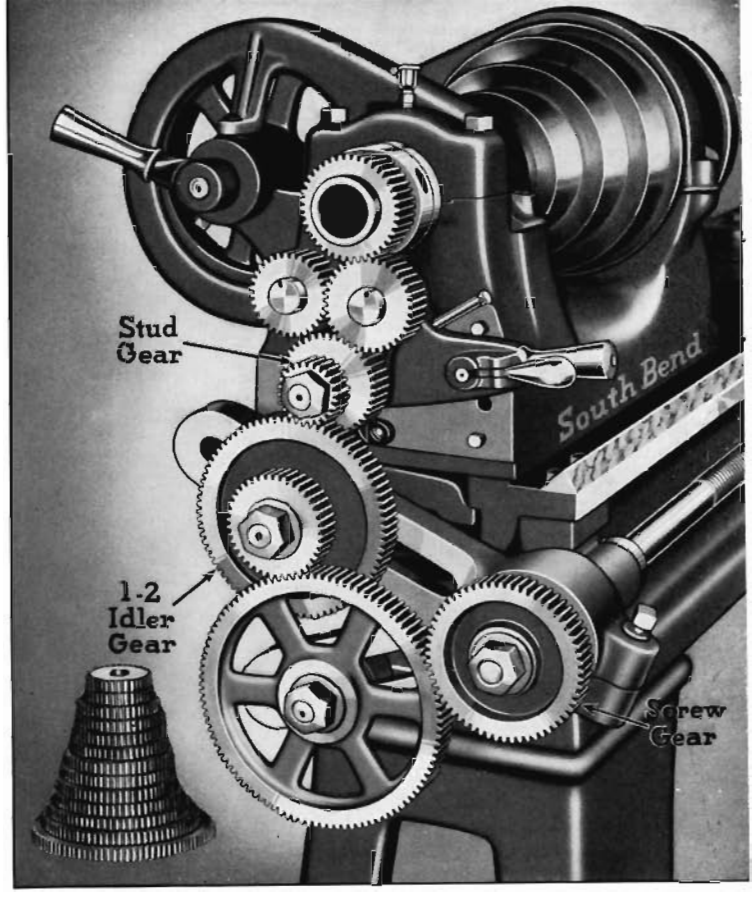


Fig. 20. Standard Change Gear Lathe with gear guard removed to show change gears.

CHART FOR THREADS AND FEEDS

9-inch SOUTH BEND LATHE

THREADS PER INCH	STUD GEAR	IDLER GEAR	SCREW GEAR	AUTO. FEEDS
4	24	FIG. 1	48	
4½	24	FIG. 1	54	
5	16	FIG. 1	40	
5½	16	FIG. 1	44	
6	16	FIG. 1	48	
6½	16	FIG. 1	52	
7	32	FIG. 2	28	
8	32	FIG. 2	32	
9	32	FIG. 2	36	
10	32	FIG. 2	40	
11	32	FIG. 2	44	
11½	32	FIG. 2	46	
12	32	FIG. 2	48	
13	32	FIG. 2	52	
14	32	FIG. 2	66	
16	24	FIG. 2	48	
18	24	FIG. 2	54	
20	16	FIG. 2	40	AUTOMATIC FEEDS THROUGH FRICTION CLUTCH
22	16	FIG. 2	44	.0156
24	16	FIG. 2	48	.0144
26	16	FIG. 2	52	.0133
27	16	FIG. 2	54	.0128
28	16	FIG. 2	56	.0123
30	16	FIG. 2	60	.0115
32	32	FIG. 3	32	.0108
36	32	FIG. 3	36	.0096
40	32	FIG. 3	40	.0086
44	32	FIG. 3	44	.0078
46	32	FIG. 3	46	.0076
48	32	FIG. 3	48	.0072
52	32	FIG. 3	52	.0066
54	32	FIG. 3	54	.0064
56	32	FIG. 3	56	.0062
60	32	FIG. 3	60	.0057
64	16	FIG. 3	32	.0054
72	16	FIG. 3	36	.0047
80	16	FIG. 3	40	.0043
88	16	FIG. 3	44	.0039
92	16	FIG. 3	46	.0037
96	16	FIG. 3	48	.0036
104	16	FIG. 3	52	.0033
112	16	FIG. 3	56	.0030
	16	FIG. 3	60	.0028
	16	FIG. 3	80	.0021

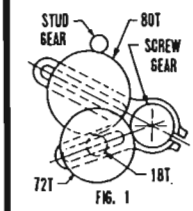


FIG. 1

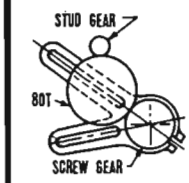


FIG. 2

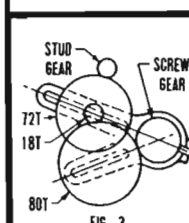


FIG. 3

AUTOMATIC CROSS FEED = .375 X LONGITUDINAL FEED

Fig. 21. Chart for 9" Standard Change Gear Lathes showing gearing for screw threads and power feeds.

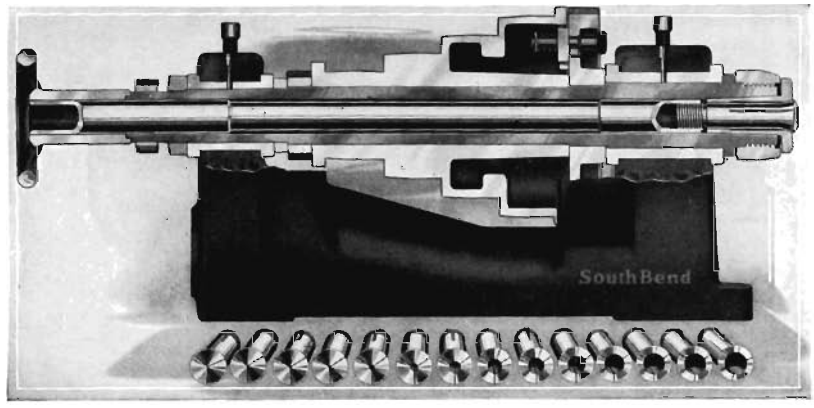
Draw-in Collet Chuck Attachments for South Bend Lathes

For Accurately Chucking Small Diameter Work

The Draw-in Collet Chuck is used on the lathe in the tool room for making small accurate tools and in the manufacturing plant for making small parts for watches, typewriters, sewing machines, radios, etc. It is the most accurate type of chuck made and will center any small work instantly. The hollow draw bar permits bars and rods to be passed through the lathe spindle and held in the collet for machining.

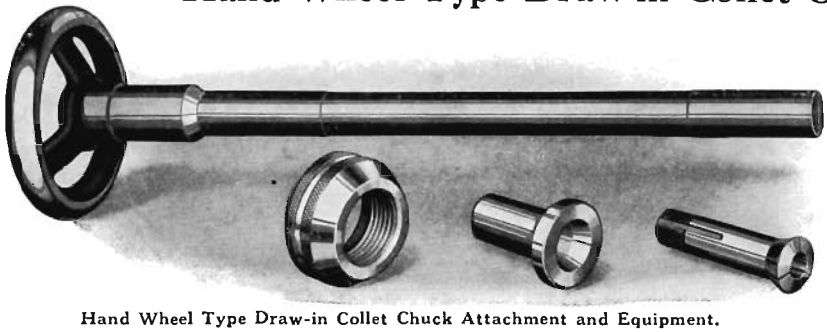
How the Collet Chuck Operates

The hollow draw bar extending through the lathe spindle is threaded on the right end to fit the collet. When the hand wheel on the left end of the draw bar is turned, the spring collet is drawn into the taper closing sleeve, causing it to tighten on the work.



A Cross Section of the Lathe Headstock Showing Hand Wheel Draw-in Collet Chuck

Hand Wheel Type Draw-in Collet Chuck Attachment



Hand Wheel Type Draw-in Collet Chuck Attachment and Equipment.

The Hand Wheel Type Draw-in Collet Chuck attachment is used to great advantage in the tool room in making small tools and parts where accuracy is essential. It is also suitable for small lot production work in the manufacturing plant. The work is held in the collet chuck by turning the hand wheel to the right and released by turning it to the left. It is necessary to stop the lathe spindle in order to open or close the chuck.

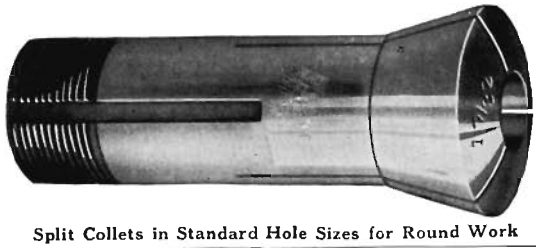
The capacity of the draw-in collet chuck is limited by the size of the hole in the spindle of the lathe on which it is used.

Prices of Hand Wheel Draw-in Collet Chuck with One Round Split Collet

Size of Lathe	Catalog No.	Hole in Lathe Spindle	Collet Capacity in Sixty-Fourths (for Round Work)	Code Word	Price Each
9 in. "Workshop"	4306W	¾ in.	1/16 in. up to ½ in.	Acrut	$25.00
9 in.	4309	¾ in.	1/16 in. up to ½ in.	Aaron	32.00
9 in. (1" collet lathe)	2609	1⅜ in.	1/16 in. up to 1 in.	Cinas	50.00
11 in.	4311	⅞ in.	1/16 in. up to 17/32 in.	Abode	35.00
13 in.	4313	1 in.	1/16 in. up to 5/8 in.	About	40.00
15 in.	4315	1⅛ in.	1/16 in. up to ¾ in.	Above	45.00
16 in.	4316	1⅜ in.	1/16 in. up to ⅞ in.	Adore	50.00

Equipment Included In Price

The price of the Hand Wheel Draw-in Collet Chuck Attachment includes hand wheel and hollow draw bar, spindle nose cap, spanner wrench for nose cap, tapered steel closing sleeve, and one round, split collet of any size desired up to the maximum capacity of lathe. The tapered closing sleeve is made of tool steel, hardened and ground, to minimize wear and to insure accuracy.



Split Collets in Standard Hole Sizes for Round Work

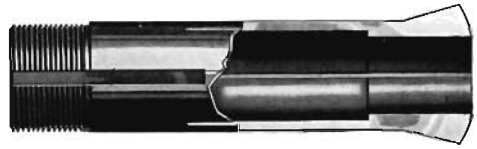
Size of Lathe	Catalog No.	Hole in Spindle	Collet Capacity in Sixty-Fourths	Code Word	Price Each
Workshop	609-W	¾ in.	1/16 in. up to ½ in.	Catra	$3.75*
9 in.	609	¾ in.	1/16 in. up to ½ in.	Cabot	3.75*
9 in. (1"collet lathe)	1709	1⅜ in.	1/16 in. up to 1 in.	Cevoj	4.75*
11 in.	611	⅞ in.	1/16 in. up to 17/32 in.	Cello	3.75*
13 in.	613	1 in.	1/16 in. up to 5/8 in.	Chose	4.00*
15 in.	615	1⅛ in.	1/16 in. up to ¾ in.	Civit	4.25*
16 in.	616	1⅜ in.	1/16 in. up to ⅞ in.	Clear	4.75*

*Price of Split Collets 1/64", 1/32", and 3/64" capacity, $0.50 extra.
No. 609½—Special Collet for 9-inch lathes, has 1/8-inch hole in front end for holding Jewelers' Plunger Blanks.....$4.25
No. 611½—Special Collet for 11-inch lathes, 1/2" capacity... 4.25
No. 613½—Special Collet for 13-inch lathes, 1/16" capacity... 4.50

Split Collets for Round Work

Used in Draw-in Collet Chuck Attachments

Split Collets for round work, as illustrated at left, are widely used for manufacturing and in the tool room. Collets for draw-in collet chuck attachments used on all South Bend lathes are made of tool steel, hardened and tempered. They are ground both outside and inside to insure accuracy. The left end is threaded for the hollow draw bar of the draw-in chuck and has a keyway to prevent the collet from turning while holding the work. The other end is tapered to conform to the tapered closing sleeve of the attachment. Three slots divide the tapered end of the collet into segments. This permits the collet to grip or release the work as it is drawn into or released from the tapered closing sleeve in the lathe spindle.



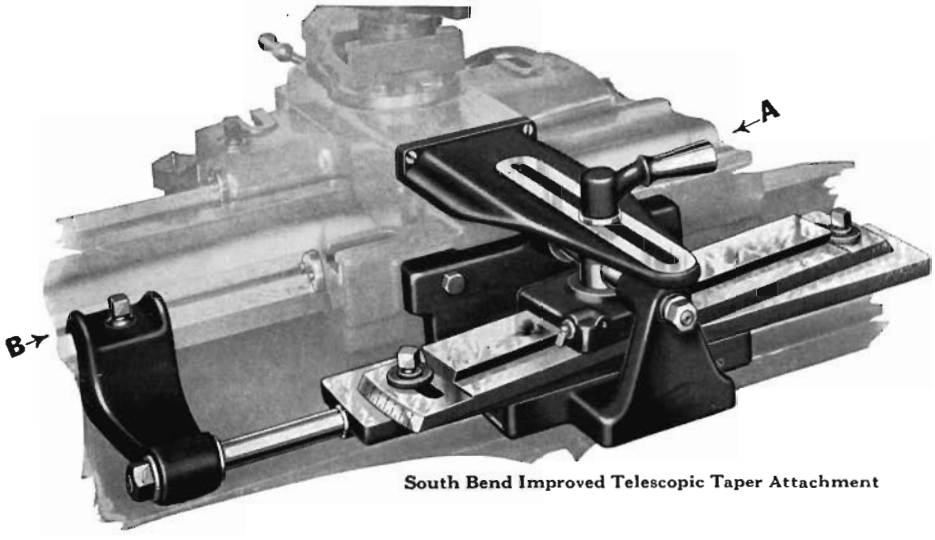
Cross Section View of Split Collet showing its accurate construction

Round Split Collets with Hole Sizes Ranging from 1/64" up by Steps of 64ths of an Inch.

Special Collets

Collets for odd diameter round work measured in thousandths of an inch or in millimeters, also collets for odd diameter drills and wire gauges, can be supplied for each size South Bend Lathe at an additional charge of $0.25 each.

Prices of special split collets for holding round, square, and hexagonal stock quoted on request.



South Bend Improved Telescopic Taper Attachment

Close-up of Taper Attachment Swivel Bar showing Graduations in Inches per Foot of Taper.

Taper Attachment with Telescopic Cross Feed Screw

For Turning and Boring All Classes of Tapers.

(Must be fitted to Lathe at Factory)

Tapers up to three inches per foot may be turned and bored with the aid of this attachment. The ease with which tapers may be produced on lathes equipped with this taper attachment makes it especially popular for tool room work and for production operations involving taper turning and boring.

The attachment is permanently mounted on the lathe carriage and is always ready for use in any position along the entire length of the lathe bed. It does not in any way interfere with straight turning and boring, and only a few seconds are required to change over from straight to taper work.

Telescopic Cross Feed Screw.

The telescopic cross feed screw supplied with the taper attachment, permits using the cross feed screw to adjust the cross slide for taper turning, as well as for straight turning. It is not necessary to disengage the cross feed nut for taper work.

To set up the lathe for taper turning, the swivel bar, which is graduated in both degrees and taper per foot, is first set to the required angle. The cross feed screw is then used to adjust the lathe tool for the required diameter, and binding screws "A" and "B" are locked. The lathe is now set for taper turning and either hand or power longitudinal feed may be used.

When binding lever "A" is tightened the cross slide of the lathe carriage is rigidly locked to the taper attachment swivel slide, and the thrust is removed from the cross feed screw.

Adjustable Taper Gibs.

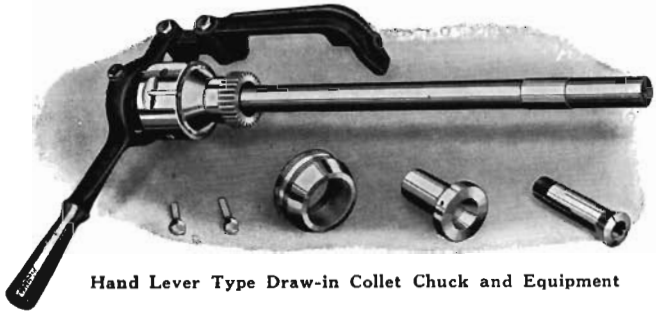
Both the top and bottom slides of the taper attachment are dovetailed and have adjustable tapered gibs. The entire attachment is excellently designed and substantially constructed.

Telescopic Graduated Taper Attachment Must Be Ordered with Lathe

Size of Lathe	Catalog No.	Maximum Taper			Approx. Shipping Weight	Code Word	Price Attachment
		At One Setting	Per Foot	In Degrees			
9" W.S.	428-W	7 in.	3 in.	14	351 lbs.	Hapwo	$ 55.00*
9 in.	377	9 in.	3 in.	14	40 lbs.	Mereh	75.00
11 in.	378	9 in.	3 in.	14	50 lbs.	Mokad	85.00
13 in.	379	10 in.	3 in.	14	65 lbs.	Mokil	100.00
15 in.	380	10 in.	3 in.	14	80 lbs.	Mokar	115.00
16 in.	381	12 in.	3 in.	14	100 lbs.	Munar	125.00

*Taper attachment of 9" Workshop Lathe does not have Telescopic Cross Feed Screw.

Hand Lever Type Draw-in Collet Chuck Attachment



Hand Lever Type Draw-in Collet Chuck and Equipment

Equipment Included in Price

The price of the Hand Lever Draw-in Collet Chuck Attachment includes adjustable chuck closing mechanism and hollow draw bar, spindle nose cap, spanner wrench for nose cap, tapered steel closing sleeve, and one round split collet of any size desired up to the maximum capacity of the lathe. The tapered closing sleeve is made of tool steel, hardened and ground to minimize wear and to insure accuracy.

For Rapid Production Work

The Hand Lever Type Draw-in Collet Chuck permits releasing and feeding bar stock through the collet, without stopping the lathe. The gripping action of the collet can be adjusted to any desired tension by regulating the cylinder of the adjustable chuck closer.

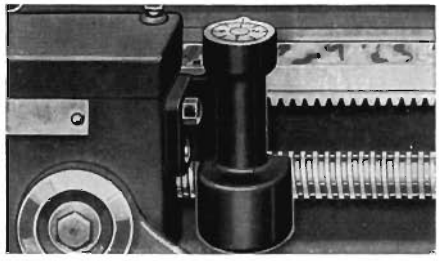
The rapid production and accuracy of the Hand Lever Draw-in Collet Chuck attachment makes it a very economical tool for use in manufacturing small interchangeable parts where accuracy and precision are required.

Net Factory Prices of Hand Lever Draw-in Collet Chuck Attachment with One Round Split Collet*

Size of Lathe	Catalog No.	Hole in Lathe Spindle	Collet Capacity in 64ths (for Round Work)	Code Word	Price Each
Workshop	5206W	¾ in.	1/16 in. up to ½ in.	Abpat	$ 85.00
9 in.	5209	¾ in.	1/16 in. up to ½ in.	Allen	95.00
9 in. (1" collet lathe)	3609	1⅜ in.	1/16 in. up to 1 in.	Cinir	150.00
11 in.	5211	⅞ in.	1/16 in. up to 1⅛ in.	Among	105.00
13 in.	5213	1 in.	1/16 in. up to ⅝ in.	Andes	120.00
15 in.	5215	1⅛ in.	1/16 in. up to ¾ in.	Askew	140.00
16 in.	5216	1⅛ in.	1/16 in. up to ⅞ in.	Aster	150.00

*Should be fitted at factory. For prices of extra collets see page 57.

Tools, Attachments and Accessories for South Bend Lathes



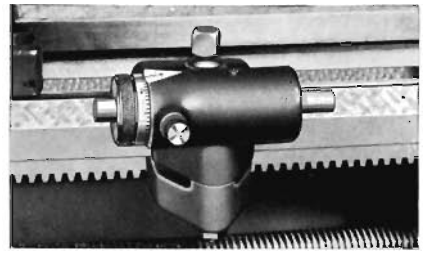
Thread Dial Indicator

This attachment eliminates the necessity of reversing the lathe to return the carriage to the starting point to catch the thread at the beginning of each successive cut that is taken. The dial is numbered and graduated to show when to clamp the half-nuts on the lead screw for the next cut.

Prices of Thread Dial Indicator

Size Lathe	Cat. No.	Code	Price	Size Lathe	Cat. No.	Code	Price
				13 in.	813	Advis	$11.00
"Workshp"	810-W	Adnok	$ 6.00	15 in.	815	Aesop	12.00
9 in.	809	Abaft	9.00	16 in.	816	Aflot	13.00
11 in.	811	Acres	10.00				

Micrometer Carriage Stop



This attachment is useful in accurate facing, turning, boring, etc. It is used for stopping the carriage at any point along lathe bed. Can be used on either side of carriage. Has a micrometer adjustment. The stop is hardened on both ends and may be locked for doing duplicate work. This attachment does not stop the carriage automatically, but an automatic carriage stop can be supplied if desired. Price quoted on request.

Prices of Micrometer Carriage Stop

Size Lathe	Cat. No.	Code	Price	Size Lathe	Cat. No.	Code	Price
				13 in.	973	Chain	$13.00
"Workshp"	968-W	Capys	$10.00	15 in.	974	Cigar	14.00
9 in.	971	Calef	11.00	16 in.	975	Climb	15.00
11 in.	972	Ceded	12.00				

Oil Pans and Chip Pans for Lathes

Pans are heavy one-piece welded steel. Oil pans and chip pans are used on regular floor leg lathes, countershaft drive, pedestal motor drive, and underneath motor drive lathes.

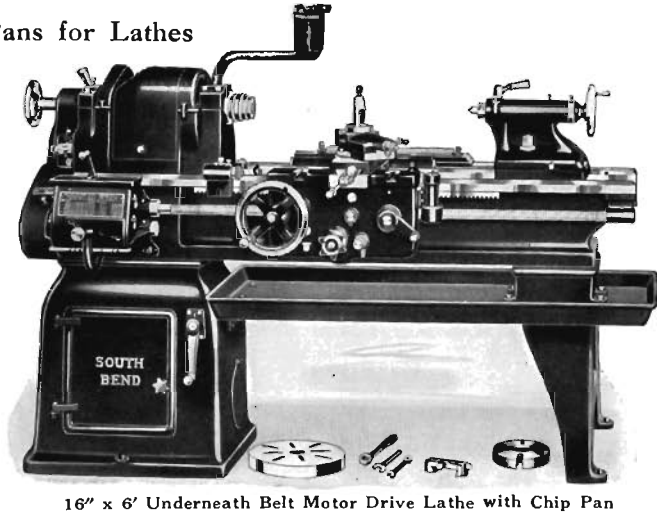
Prices of Oil Pans for Countershaft Drive and Pedestal Adjustable Motor Drive Floor Leg Lathes †

Size Lathe	Cat. No.	LENGTH OF BED 3′	3½′	4′	4½′	5′	5½′	6′	7′	8′	10′
9" W.S.	274-W	$21	$22	$23	$24	...	...	...	...	...	...
9 in.	282	23	24	25	26	...	...	...	...	...	...
11 in.	284	...	26	27	...	$29	$30	...	...	...	...
13 in.	286	...	...	35	...	38	...	$41	$44	...	...
15 in.	288	...	...	...	...	45	...	49	53	$57	$65
16 in.	292	...	...	...	...	...	...	50	55	60	70

Prices of Chip Pans for Underneath Belt Motor Drive Floor Leg Lathes †

9 in.	134	$17	$18	$19	$20	...	...	...	...	...	...
11 in.	135	...	20	21	...	$23	$24	...	...	...	...
13 in.	136	...	...	28	...	31	...	$34	$37	...	...
15 in.	137	...	...	...	...	32	...	36	40	$44	$52
16 in.	138	...	...	...	...	...	...	38	43	48	58

†Prices include special legs instead of regular legs.
NOTE: Pans should be fitted to lathe at factory.



16" x 6′ Underneath Belt Motor Drive Lathe with Chip Pan

Oil Pump, Reservoir and Piping for Countershaft Drive and Motor Drive Lathes

Countershaft Drive Lathe Equipment includes geared oil pump, piping, reservoir, and a flat pulley for the countershaft to drive the oil pump. See prices of equipment at right. Leather belt is extra.

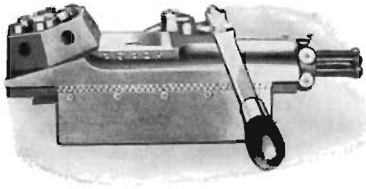
Pedestal Adjustable Motor Drive Lathe Equipment includes geared oil pump, V-belt driven by ¼ H.P. Split Phase Motor (1 Ph., 60-Cy., A.C. 110-V. or 220-V.); switch, wired to motor; and reservoir. See prices at right.

Underneath Belt Motor Drive Lathe Equipment includes geared oil pump, V-belt driven by ¼ H.P. Split Phase Motor (1-Ph., 60-Cy., 110-V. or 220-V.); switch, wired to motor; splash pans; and reservoir. Headstock and gear box have special fittings for returning oil to pan. See prices at right.

Prices of Oil Pump, Reservoir and Piping (Fitted to Lathe at Factory

Size of Lathe	For Countershaft Drive Lathes Cat. No.	Code	Price	For Pedestal Adjustable Motor Drive Lathes Cat. No.	Code	Price	For Underneath Belt Motor Drive Lathes Cat. No.	Code	Price
Workshop	1464-W	Basak	$80.00	1923-W	Ciner	$ 90.00	Not	Supplied	
9"	1465	Basis	80.00	1924	Ciniv	90.00	1726	Pazel	$110.00
11"	1466	Basay	80.00	1926	Cinoe	90.00	1727	Pebit	110.00
13"	1467	Batax	85.00	1927	Cisad	100.00	1728	Perox	125.00
15"	1468	Bateb	90.00	1928	Ciseh	100.00	1729	Pevar	125.00
16"	1469	Batal	90.00	1929	Cisil	100.00	1730	Pobat	125.00

Hand Lever Bed Turret

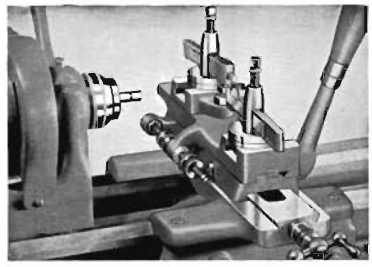


This Turret automatically indexes one-sixth of a turn by the backward movement of the hand lever. Adjustable stops are provided for each of the six faces of the turret for regulating the depth of each tool. The feed of the turret slide is controlled by the hand lever. Power feed cannot be supplied. Price includes special turret base.

Prices of Semi-Automatic Bed Turret

Size of Lathe	Cat. No.	Std. Turret Hole	Length Turret Base	Max. Turret Feed	Code Word	Price Fitted
9" W.S.	1509W	5/8 in.	9½ in.	4¼ in.	Jarim	$350.00
9 in.	1509	5/8 in.	9½ in.	4¼ in.	Jaber	350.00
11 in.	1511	5/8 in.	9½ in.	4¼ in.	Jenks	355.00
13 in.	1513	5/8 in.	9½ in.	4¼ in.	Jilts	360.00

*Price includes fitting turret to lathe bed and finish boring of the six turret holes.



Double Tool Slide*

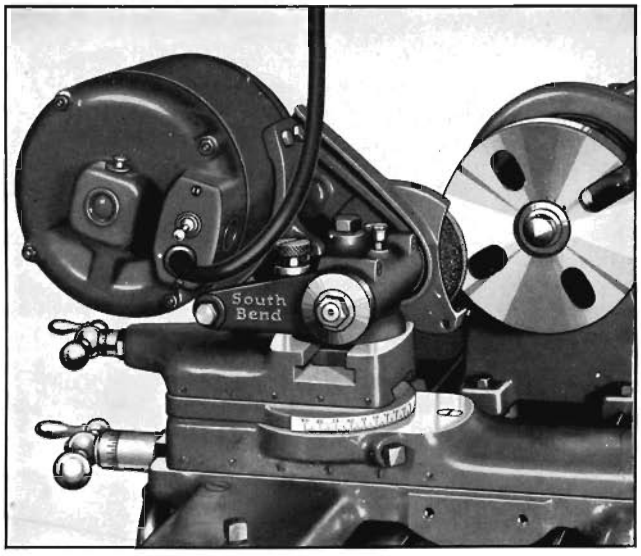
For mounting front and back tools on lathe. May be operated by either hand lever or cross feed screw. Top slide is operated by hand lever and has adjustable stops for both front and back tools. Bottom slide is operated by cross feed screw. Prices include tool post for back tool rest. Front rest takes tool post supplied with lathe.

Size of Lathe	Clearance Over Slide	Cat. No.	Code Word	Price Each
9" W.S.	2¾ in.	738	Abotz	$ 60.00
9 in.	2⅞ in.	744	Daple	65.00
11 in.	3⅞ in.	745	Debit	70.00
13 in.	4½ in.	746	Diced	80.00
15 in.	4¾ in.	747	Doles	90.00
16 in.	4⅞ in.	748	Drain	100.00

*Cannot be supplied with taper attachment.

No. 30 Electric Grinder for South Bend Lathes

For Grinding Hardened or Tempered Tools and Parts



No. 30 Electric Grinder Mounted on Compound Rest of Lathe

The No. 30 Electric Grinder makes a valuable addition to the screw cutting lathe in any shop that is not equipped with a modern tool room cutter and reamer grinder. It is practical for grinding straight, taper or spiral reamers, lathe centers, milling cutters, taps, dies, valves, pistons, bushings, hardened and tempered tools, parts, etc., but is not intended for grinding lathe tool bits, drills, etc. This grinder operates from electric light socket.

Equipment for Grinder

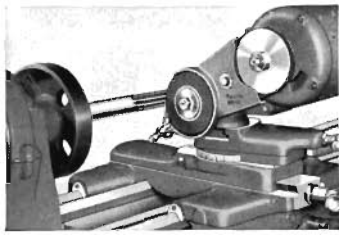
Price of grinder includes ¼ h.p. motor, 1-phase, 60-cycle, 110-volt, A.C.; V-belt; belt guard; one Alundum grinding wheel (Grain 46-N, Grade 5-B); extension cord; switch; and clamp for mounting to compound rest. For D.C. current we supply a ¼-h.p. motor at $16.00 extra; for 3-phase current we supply a ¼-h.p. motor at $19.00 extra. When ordering specify voltage and current required.

Net Factory Prices of No. 30 Electric Grinder

Size of Lathe	Cat. No.	Size Grind. Wheel	Diam. Will Grind	Motor Speed R.P.M.	Spindle Speed R.P.M.	Code Word	Price, Each
"Workshop"	30-W	4"x½"	1 in.	1725	4000	Tobas	$45.00
9 in.	30-B	4"x½"	5 in.	1725	4000	Tobew	50.00
11 in.	30-C	4"x½"	7 in.	1725	4000	Tobog	55.00
13 in.	30-D	4"x½"	9 in.	1725	4000	Tobum	55.00
15 in.	30-F	4"x½"	10 in.	1725	4000	Tocag	55.00
16 in.	30-G	4"x½"	11 in.	1725	4000	Tocek	60.00

Extra Grinding Wheels, Price Each $1.50. State class of work.

No. 3236, Special Cup Wheel for cutter grinding. Shipping weight, 14 oz. Code "Lapom".....$2.00



Sharpening a Straight Reamer

Sharpening Cutters and Reamers

Cutters and reamers, of all angles, valve seat counterboring cutters, valve guide reamers, straight and taper reamers, and adjustable reamers can be sharpened quickly and accurately in the lathe equipped with the No. 30 Electric Grinder.

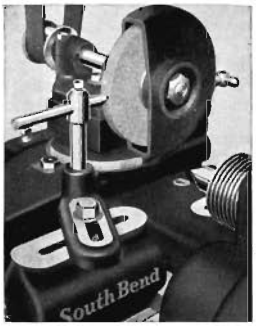
Adjustable Cutter Stop

The Adjustable Cutter stop shown at right attaches directly to the grinding attachment and travels with the wheel so that either straight, spiral, or fluted cutters may be ground. Cannot be used to hold diamond dresser.

No. 1362 Code "Macoc," Ship. wt., 14 oz..$2.00

Adjust. Cutter Stop

Fixture for Diamond Dresser and Reamer Grinding Stop



Truing a Grinding Wheel with a Dresser Mounted in Holding Fixture

The No. 19 Adjustable Holding Fixture, as illustrated at left, will hold the industrial diamond dresser for truing grinding wheels and will also hold the reamer and cutter stop which is supplied with the fixture.

The fixture clamps directly to the bed of the lathe so that the carriage has free movement both when truing grinding wheels and sharpening reamers and cutters.

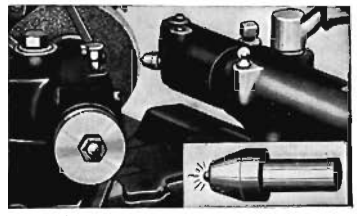
Net Factory Prices of Adjustable Holding Fixture

Size of Lathe..	Workshop	9 in.	11 in.	13 in.	15 in.	16 in.
Catalog No.....	19-W	19	19-B	19-C	19-D	19-E
Code Word.....	Abnog	Quenc	Quarz	Quest	Quick	Quirt
Price, Each....	$8.00	$8.00	$9.00	$10.00	$12.00	$13.00

Industrial Diamond Dresser

Industrial Diamond Dresser

No. 18, Industrial Diamond, special metal mount, ⅓ carat. Code word "Quaft." Price each.....$6.00

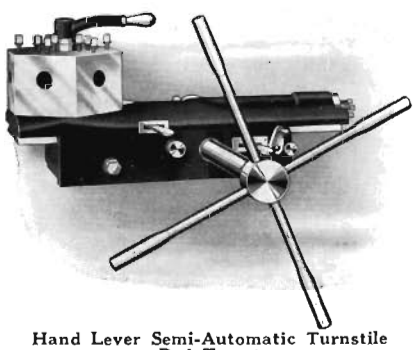


Diamond Holding Fixture

Clamps to tail-spindle. Holds No. 406 diamond dresser for truing grinding wheel for valve or general work.

Size Lathe	Cat. No.	Code Word	Price Each	Size Lathe	Cat. No.	Code Word	Price Each
W.S.*	91-W	Kibaf	$4.00	13"	91-D	Kirav	$4.50
9"	91-B	Kipet	4.00	15"	91-E	Kirix	4.50
11"	91-C	Kipte	4.00	16"	91-F	Kiroz	5.00

No. 406, Diamond, Code "Kirwe".....$6.00
*9-inch Workshop Lathe.



Hand Lever Semi-Automatic Turnstile Bed Turret

Semi-Automatic Turnstile Bed Turret

The Turnstile Bed Turret revolves automatically one-sixth of a turn on the return stroke of each hand revolution of the turnstile. Adjustable stops for each of the six faces of the turret regulate the depth of each tool operation. The feed of the turret slide is controlled by turning the turnstile by hand. Prices of turrets with hand feed or power feed will be quoted on request.

Prices include fitting turret to lathe bed, and the finish boring of the six turret holes. Specify diameter of tool shanks when ordering.

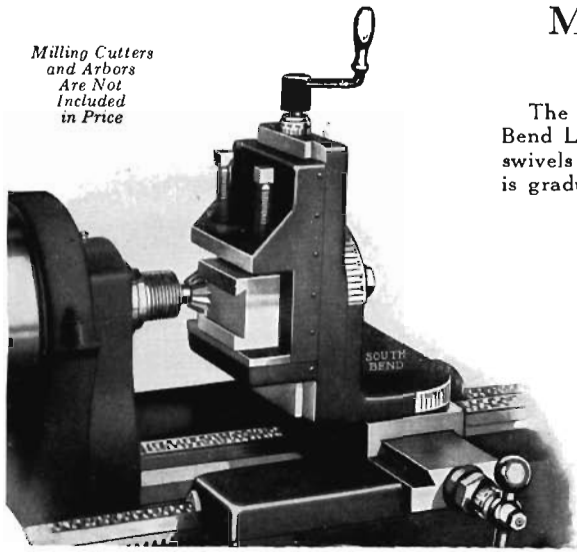
Specifications of Turnstile Bed Turret (Hand Feed)

Size of Lathe	Cat. No.	Hole Size Finished	Hole, Center to Slide Top	Maximum Feed	Code Word
15 in.	415	1 in.	2¼ in.	9 in.	Fight
16 in.	416	1 in.	2¼ in.	9 in.	Flown

Milling and Keyway Cutting Attachment

For All Sizes and Types of South Bend Lathes

Milling Cutters and Arbors Are Not Included in Price



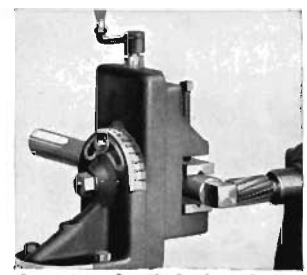
Milling Attachment for 13" and Larger South Bend Lathes.

The Milling and Keyway Cutting Attachment is made for all sizes of South Bend Lathes from 9-inch to 16-inch swing. It fits on compound rest base, swivels all the way around in a horizontal plane like the compound rest and is graduated 180 degrees. In addition, the upright Angle Plate to which the vise is attached swivels in a vertical plane, and is graduated 180 degrees. The vertical adjusting screw at the top of the attachment is equipped with a micrometer graduated collar. The automatic cross and longitudinal feeds of carriage can be used as well as the hand feeds.

A lathe fitted with a milling and keyway cutting attachment makes an excellent equipment for small shops not having enough work to invest in an expensive milling machine.

Equipment Included in Price

The equipment consists of milling and keyway cutting attachment, two standard V-blocks for holding round work, one crank handle for feed screw, one double end wrench and necessary bolts and nuts for installing attachments to lathe.

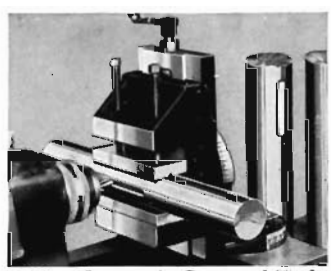


Squaring the End of a Shaft.

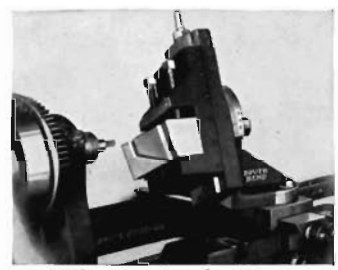
Net Factory Prices of Milling and Keyway Cutting Attachment

Size of Lathe	Cat. No.	Vertical Feed	Cross Feed	Vise Will Hold	Depth of Jaws	Width of Jaws	Weight Each	Code Word	Price Each
Work-shop	9-W	2½ in.	5½ in.	1⅜ in.	⅜ in.	3 in.	13 lbs.	Vabif	$35.00
9 in.	1	3 in.	7 in.	1¾ in.	½ in.	3½ in.	25 lbs.	Vagon	45.00
11 in.	2	4 in.	8 in.	1¾ in.	⅝ in.	3½ in.	30 lbs.	Valet	50.00
13 in.	3	4¼ in.	9 in.	2⅞ in.	1 1/16 in.	4⅞ in.	40 lbs.	Victo	55.00
15 in.	4	6 in.	9¾ in.	4 in.	2 in.	5¾ in.	50 lbs.	Visit	65.00
16 in.	5	6 in.	9¾ in.	4 in.	2 in.	5¾ in.	65 lbs.	Varen	75.00

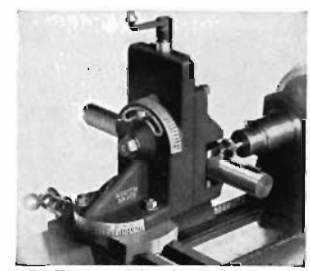
Milling a Standard Keyway.



Milling Keyway in Center of Shaft.



Milling an Angular Piece.



Milling a Woodruff Keyway.

Milling Cutters and Arbors for Milling Attachment

Plain Milling Cutters

Made of High Speed Steel, hardened and ground. Cut on face only. Have standard keyway.

Net Factory Prices of Plain Milling Cutters

Cat. No.	Face Width	Cutter Diam.	Hole Diam.	Price Each
849-A	⅜ in.	2½ in.	1 in.	$3.10
849-B	¼ in.	2½ in.	1 in.	4.10
849-C	⅝ in.	2½ in.	1 in.	4.30
849-J	⅜ in.	2½ in.	1 in.	4.60
849-X	⅞ in.	2½ in.	1 in.	4.90
849-F	½ in.	2½ in.	1 in.	5.10
849-N	⅝ in.	2½ in.	1 in.	5.60
849-P	¾ in.	2½ in.	1 in.	6.00

Side Milling Cutters

Made of High Speed Steel, hardened and ground. Cut on face and both sides. Have standard keyway.

Net Factory Prices of Side Milling Cutters

Cat. No.	Face Width	Cutter Diam.	Hole Diam.	Price Each
850-A	⅛ in.	3 in.	1 in.	$ 6.50
850-B	⅜ in.	3 in.	1 in.	6.90
850-C	⅝ in.	3 in.	1 in.	7.20
850-F	⅝ in.	3 in.	1 in.	7.60
850-J	½ in.	3 in.	1 in.	8.00
850-N	¾ in.	4 in.	1 in.	13.30
850-P	⅞ in.	4 in.	1 in.	14.30

Collet Chuck for Woodruff Cutters

Prices of Chuck for Woodruff Cutters (without cutter)

Size Lathe..	9" W.S.*	9"	11"	13"	15"	16"
Cat. No.....	101-W	101-A	102-A	103-A	104-A	105-A
Morse Taper.	2	2	2	3	3	3
Price.....	$4.00	$4.00	$4.00	$5.00	$5.00	$5.00

*9-inch Workshop Lathe.

Arbor for Side and Plain Milling Cutters

For holding cutters with standard 1-inch hole. Capacity between nut and shoulder is 1½ inches. Three spacing collars and hardened nut are furnished with each arbor. The Taper Shank is ground to fit the head spindle of the lathe.

Net Factory Prices of Arbors for Milling Cutters

Size of Lathe	Cat. No.	Morse Taper	Price Each	Size of Lathe	Cat. No.	Morse Taper	Price Each
"Work-shop"	109-W	No. 3	$6.00	15 in.	115-M	No. 3	$6.00
9 in.	109-M	No. 3	6.00	16 in.	116-M	No. 3	6.00
11 in.	111-M	Special	6.00				
13 in.	113-M	No. 3	6.00				

Woodruff System Keyway Cutters

Made of High Speed Steel, hardened and ground. Have straight shanks ½-inch in diameter. Right-hand cutters only are carried in stock. Prices of left-hand cutters quoted on request.

Net Factory Prices Woodruff System Milling Cutters

Cat. No.	Diam.	Width	Price Each	Cat. No.	Diam.	Width	Price Each
897-A	½ in.	1/16 in.	$2.80	897-I	1 in.	¼ in.	$3.80
897-B	½ in.	1/8 in.	2.80	897-J	1 in.	5/16 in.	4.00
897-C	⅝ in.	1/8 in.	2.80	897-K	1⅛ in.	5/16 in.	4.20
897-D	¾ in.	1/8 in.	3.10	897-L	1⅛ in.	¼ in.	4.20
897-E	¾ in.	5/32 in.	3.10	897-M	1⅛ in.	5/16 in.	4.40
897-F	⅞ in.	5/32 in.	3.40	897-N	1¼ in.	5/16 in.	4.60
897-G	⅞ in.	1/4 in.	3.40	897-O	1¼ in.	¼ in.	4.60
897-H	1 in.	5/32 in.	3.80	897-P	1¼ in.	5/16 in.	4.90

Spiral End Mills

High Speed Steel, hardened and ground. Furnished in right-hand cut, right-hand spiral only.

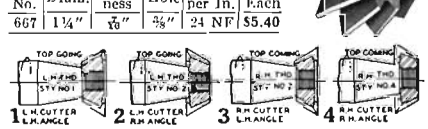
Net Factory Prices of Spiral End Mills

Cat. No.	Diam. of Mill	Morse Taper	Price Each	Cat. No.	Diam. of Mill	Morse Taper	Price Each
868-B	½ in.	No. 2	$4.80	870-A	¾ in.	No. 3	$7.00
868-J	⅝ in.	No. 2	4.90	870-B	⅞ in.	No. 3	7.00
868-L	¾ in.	No. 2	4.90	870-C	1 in.	No. 3	7.30
868-F	⅞ in.	No. 2	5.70	870-D	1⅛ in.	No. 3	8.40
868-N	1 in.	No. 2	6.60	870-E	1¼ in.	No. 3	9.60

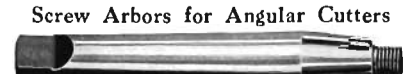
Angular Cutters with Threaded Holes

Furnished R.H. or L.H. angle and with either R.H. or L.H. threaded hole. Have 60° included angle. When ordering specify whether style No. 1, 2, 3 or 4 is wanted.

Cat. No.	Diam.	Thick-ness	Hole	Thread per In.	Price Each
667	1¼"	1/10"	⅜"	24 NF	$5.40



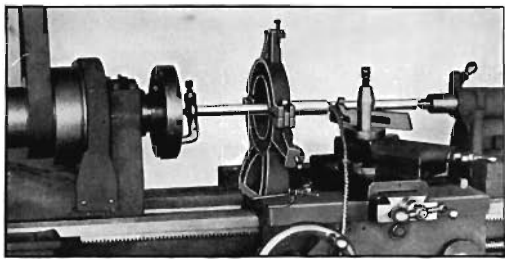
Screw Arbors for Angular Cutters



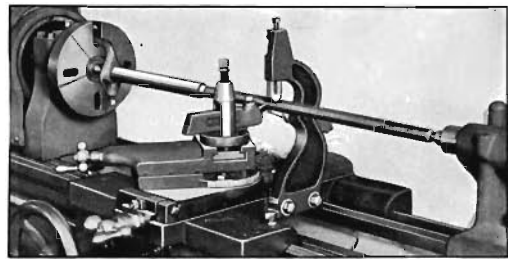
When ordering arbor only give catalog number and style number of cutter the arbor is to be used with.

No. 829-A. Arbor for Workshop and 9" lathes..$2.75
No. 829-B. Arbor for 11" lathes..... 2.75
No. 829-F. Arbor for 13", 15", 16" lathes..... 2.75

Tools, Attachments and Accessories for South Bend Lathes



Using center rest to support long slender shaft while being machined



Cutting a screw thread on a long shaft with the aid of a follower rest.

Center Rest

The center rest clamps onto the inside ways of the lathe bed and is used for supporting long shafts, boring spindles, etc. The three jaws are adjustable to accommodate various sizes of work, and the top of the center rest is hinged to facilitate inserting and removing shafts.

The jaws are made of cast iron, and if properly lubricated, will wear very little. The jaws are machined all over and have adjusting screws and lock screws for setting them in the desired position.

Net Factory Prices of Center Rests

Size of Lathe	Catalog Number	Maximum Capacity	Minimum Capacity	Code Word	Price Each
"Workshop"	125-W	3 In.	¼ in.	Cegke	$ 6.00
9 in.	125	3 in.	¼ in.	Nygia	8.00
11 in.	303	3½ in.	¼ in.	Nygog	9.00
13 in.	341	3¾ in.	⅛ in.	Nygas	11.00
15 in.	512	4¾ in.	⅜ in.	Nygew	14.00
16 in.	720	4¾ in.	⅜ in.	Nyjou	15.00

Follower Rest

The follower rest is attached to the lathe carriage and travels with the carriage, as shown above. The follower rest is used to support long, slender shafts while being machined between the lathe centers. Adjusting screws and lock screws are provided for setting the jaws in position.

Slots in bottom of follower rest are used for attaching follower rest to carriage, and permit attaching or removing quickly, as it is not necessary to remove the screws from the saddle.

Net Factory Prices of Follower Rests

Size of Lathe	Catalog Number	Maximum Capacity	Minimum Capacity	Code Word	Price Each
"Workshop"	34-W	2 in.	3/16 in.	Cegmo	$ 4.00
9 in.	130	2½ in.	3/16 in.	Culve	4.00
11 in.	322	3 in.	3/16 in.	Faroj	6.00
13 in.	376	3¼ in.	3/16 in.	Fanba	7.00
15 in.	513	4¼ in.	3/16 in.	Farfa	8.00
16 in.	730	4¼ in.	3/16 in.	Famuf	9.00

Large Face Plate

The large face plate is threaded to fit the spindle nose of the lathe, has slots for clamping work or special face plate fixtures. It is heavily constructed and is ribbed on the back. May be used for general tool work and machine shop work.

Cat. No. 40-W. Face Plate for 9" Workshop Lathe. Outside diameter 7⅜". Code Word, "Cehak".....$6.00

Cat. No. 40. Face plate for 9" Junior Lathe. Outside diameter 7⅜". Code Word, "Cryed"...$6.00

Adjustable Thread Cutting Stop

The adjustable thread cutting stop is used for regulating the depth of each chip when cutting screw threads. This attachment may also be used for regulating the depth of the cut for regular turning operations. The attachment clamps on the cross slide dovetail of the lathe and can be locked in any position.

Cat. No. 67-W. Thread Cutting Stop for 9" Workshop Lathe. Code Word, "Cegpy."....$2.50

Cat. No. 67. Thread Cutting Stop for 9" Junior Lathe. Code Word, "Cobra."....$2.50

Center Gauge

The center gauge is a useful tool for the lathe operator. The 60° included angle is used for checking the angle of the lathe center point. The two small 60° notches in the side of the tool are used for grinding and setting the point of the lathe tool for cutting screw threads. Made of good quality tool steel, hardened and tempered.

Cat. No. 650. Center Gauge. Code Word, "Xutje".....$0.50

4-Way Turret Tool Post

May Be Fitted with 4 Tool Holders

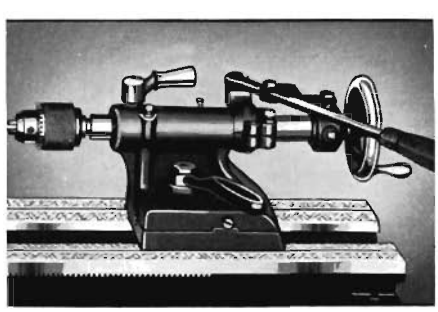
Clamps on the compound rest base of lathe in place of the regular tool post. Takes four tool holders. Turret operates easily and indexes accurately.

Price includes fitting to lathe but does not include extra tool holders.

Prices of 4-Way Turret Tool Posts

Size of Lathe	Cat. No.	Size Square	Takes Tools	Price Each
9 in.	5228	4¼ in.	⅜"x ⅜"	$155.00
11 in.	5229	4¼ in.	⅜"x ⅞"	160.00
13 in.	5230	4¼ in.	½"x1⅛"	165.00
15 in.	5231	5¼ in.	½"x1⅛"	170.00
16 in.	5232	5¼ in.	⅝"x1⅜"	175.00

Hand Lever Tailstock



Prices of Hand Lever Tailstock in Lieu of Regular Tailstock

Size Lathe.....	9" W.S.	9 in.	11 in.	13 in.
Cat. No.....	519	900	901	902
Code Word.....	Jibet	Jiden	Jilet	Jebot
Length of Feed..	2⅝"	2⅝"	2⅝"	4⅜"
Price Each.....	$50.00	$52.00	$55.00	$62.00

Open Side Tool Post

The Open Side Tool Post, sometimes called "European Tool Post" is convenient for working close to the face plate or chuck. Made of malleable iron and equipped with clamping bolt, two heat treated dog point screws, and drop forged rocker.

Prices of Open Side Tool Post

Size of Lathe	Price in Lieu of Regular Tool Post			Price in Addition to Regular Tool Post		
	Cat. No.	Code	Price	Cat. No.	Code	Price
9" W. S.	1276-W	Poraw	$2.00	1386-W	Renaf	$ 6.00
9 in.	1276	Porok	3.00	1386	Renot	6.00
11 in.	1277	Porun	3.00	1387	Renuz	6.50
13 in.	1278	Posak	3.00	1388	Repek	8.00
15 in.	1279	Posoy	3.50	1389	Requy	9.50
16 in.	1280	Potax	3.50	1390	Reqic	10.00

Lathe Dogs, Centers and Accessories for South Bend Lathes

Above—Standard Lathe Dog

Right—Safety Lathe Dog

Standard and Safety Lathe Dogs

Made of heavy malleable iron and are properly designed for strength and service. The Standard Dog has square head alloy steel set screw. The Safety Dog has a headless alloy steel set screw and wrench.

Prices of Heavy Type Lathe Dogs
For 11-inch to 16-inch Swing Lathes

Capacity of Lathe Dog	Standard Lathe Dogs		Safety Lathe Dogs	
	Cat. No.	Price, Each	Cat. No.	Price, Each
⅜ in.	1-M	$0.50	1-MH	$0.60
½ in.	2-M	.60	2-MH	.70
¾ in.	4-M	.70	4-MH	.80
1 in.	6-M	.80	6-MH	.90
1¼ in.	8-M	.90	8-MH	1.00
1½ in.	10-M	1.05	10-MH	1.15
1¾ in.	11-M	1.20	11-MH	1.30
2 in.	12-M	1.35	12-MH	1.45
2½ in.	14-M	1.60	14-MH	1.70
3 in.	15-M	1.75	15-MH	1.90
3½ in.	16-M	2.40	16-MH	2.60
4 in.	17-M	3.20	17-MH	3.40

Light Pattern Lathe Dogs
For 9-inch and 11-inch Swing Lathes Only

⅜ in.	1-MJ	$0.45	1-JH	$0.55
½ in.	2-MJ	.50	2-JH	.60
¾ in.	4-MJ	.60	4-JH	.70
1 in.	6-MJ	.70	6-JH	.80
1¼ in.	8-MJ	.80	8-JH	.90
1½ in.	10-MJ	.95	10-JH	1.05

Clamp Lathe Dogs

Made of heavy drop forged steel, carefully machined and hardened. Practical for holding round, hexagonal or rectangular work. Each lathe dog is boxed separately.

Prices of Clamp Lathe Dogs

Capacity Between Screws	Clamp Dog	
	Cat. No.	Price, Each
1¾ in.	160	$2.25
2¼ in.	161	3.00
2¾ in.	162	3.75
3½ in.	163	5.00

60° Head Spindle Lathe Center

Prices of Head Spindle Lathe Center

Size Lathe..	9" W.S.	9 in.	11 in.	13 in.	15 in.	16 in.
Cat. No.....	725-W	725-A	725-B	725-C	725-D	725-E
Price, each..	$2.00	$2.00	$2.00	$2.75	$2.75	$2.75

60° Tail Spindle Lathe Center

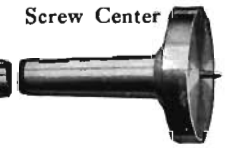
Prices of Tail Spindle Lathe Center

Size Lathe..	9" W.S.	9 in.	11 in.	13 in.	15 in.	16 in.
Cat. No.....	726-W	726-A	726-B	726-C	726-D	726-E
Price, each..	$2.25	$2.25	$2.25	$3.00	$3.00	$3.00

Drill Pad

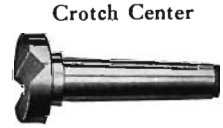
Size of Lathe	Cat. No.	Net Price
9" W.S.	727-W	$2.00
9 in.	727-A	2.00
11 in.	727-B	2.00
13 in.	727-C	2.75
15 in.	727-D	2.75
16 in.	727-E	2.75

Screw Center



Size of Lathe	Cat. No.	Net Price
9" W.S.	731-W	$2.50
9 in.	731-A	2.50
11 in.	731-B	2.50
13 in.	731-C	3.25
15 in.	731-D	3.25
16 in.	731-E	3.25

Crotch Center



Size of Lathe	Cat. No.	Net Price
9" W.S.	728-W	$2.50
9 in.	728-A	2.50
11 in.	728-B	2.50
13 in.	728-C	3.25
15 in.	728-D	3.25
16 in.	728-E	3.25

Spur Center

Size of Lathe	Cat. No.	Net Price
9" W.S.	732-W	$2.75
9 in.	732-A	2.75
11 in.	732-B	2.75
13 in.	732-C	3.25
15 in.	732-D	3.25
16 in.	732-E	3.25

Cup Center

Size of Lathe	Cat. No.	Net Price
9" W.S.	733-W	$2.00
9 in.	733-A	2.00
11 in.	733-B	2.00
13 in.	733-C	2.75
15 in.	733-D	2.75
16 in.	733-E	2.75

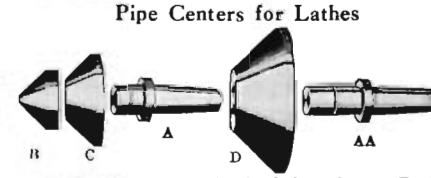
Morse Taper Sleeve

Made of steel and machined to Morse Standard Taper Gauges. Used in fitting small tapers to large sockets.

Prices of Morse Taper Sleeve

Cat. No.	Size Morse Taper	Taper of Bore	Outside Taper	Price, Each
118-A	No. 1 to 2	No. 1 Morse	No. 2 Morse	$0.75
118-B	No. 1 to 3	No. 1 Morse	No. 3 Morse	.90
118-C	No. 1 to 4	No. 1 Morse	No. 4 Morse	1.10
118-D	No. 2 to 3	No. 2 Morse	No. 3 Morse	.90
118-E	No. 2 to 4	No. 2 Morse	No. 4 Morse	1.10
118-F	No. 3 to 4	No. 3 Morse	No. 4 Morse	1.10

Pipe Centers for Lathes



For machining pipes in the lathe. Centers B, C, and D revolve on the short end of taper shanks A and AA, which fit within the head and tail spindle of the lathe. Shank A is used with Centers B and C; Shank AA with Center D. Prices of centers larger than those listed will be furnished on request.

Prices of Taper Shanks and Pipe Centers

Size of Lathe	Taper Shank A and Center Bf for Pipe ½" to 3"		Taper Shank AA and Center D for Pipe 5" to 8"	
	Cat. No.	Price	Cat. No.	Price
9" W.S.	663-W	$7.00	Not Made	Not Made
9", 11"	663-A	7.00	Not Made	Not Made
13", 15"	663-B	8.00	929-A	$16.50
16"	663-C	8.50	929-B	17.00

†Extra for No. 912-C Center C, for pipe 3" to 5", $6.00.

Hand Rest for Wood Turning

The hand rest for wood turning is a necessary attachment for the pattern shop and is also used in general shops where wood working, as well as metal working is done. This attachment is also used for turning fiber, bakelite, catalin and other cast resin plastics. Clamps direct to lathe bed. The prices listed below include the base, two T-rests, clamp and bolt.

Size Lathe	Cat. No.	"T" Rest Length		Price
		Small	Large	
9" W.S.	107-W	4 in.	12 in.	$7.50
9 in.	1071	4 in.	12 in.	9.00
11 in.	1072	4 in.	12 in.	9.00
13 in.	1073	6 in.	12 in.	10.00
15 in.	1074	7 in.	15 in.	13.00
16 in.	1075	7 in.	15 in.	13.00

Hand Rest for Wood Turning

For 9" "Workshop" Only

Attachment clamps on lathe carriage in place of the compound rest. Price includes base and "T" rests 4", and 12" long.

No. 896-W, Code "Adows," Ship. wt. 6 lbs. $5.00

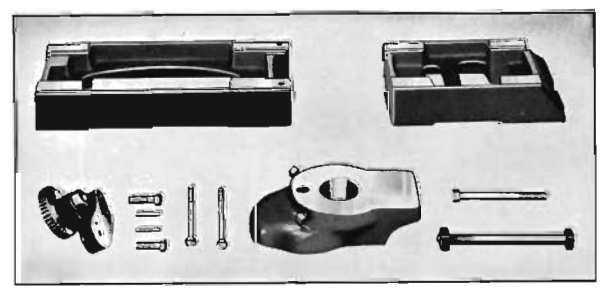
Raising Block Equipment For South Bend Lathes

Raising blocks are used to increase the swing over the lathe bed and carriage for machining light work of large diameter. Raising Blocks are preferable to a Gap Bed because the increased swing is available the entire length of the lathe bed and is not limited to face plate and chuck work.

Countershaft drive or pedestal motor drive lathes can be equipped with raising block equipment. Underneath belt motor drive lathes cannot be equipped with raising blocks.

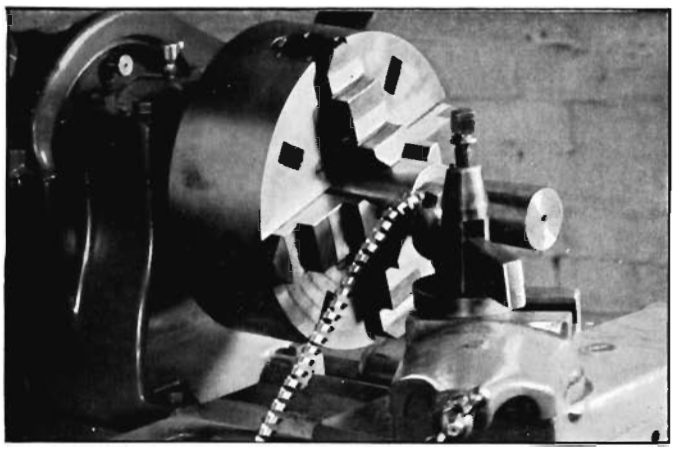
Raising blocks ordered with the lathe will be fitted and aligned at the factory and should not be removed from the lathe. If it is necessary to remove the raising blocks from the lathe, this must be specified when the lathe is ordered, as an extra charge is made for special fitting and accessories required when the lathe is to be used both with and without the raising blocks.

Equipment includes gearing to connect spindle and lead screw for cutting all the regular screw threads and for all automatic power feeds provided on lathes without raising blocks.



Net Factory Prices of Raising Block Equipment for South Bend Lathes

Swing Size of Lathe	Height of Raising Blocks Inches	Swing Over Bed With Raising Blocks	Swing Over Carriage With Raising Blocks	Approx. Shipping Weight Pounds	Raising Block Equipment for Standard Change Gear Lathes			Raising Block Equipment for Quick Change Gear Lathes		
					Catalog No.	Code Word	Factory Price	Catalog No.	Code Word	Factory Price
9" Workshop	1	11¼"	7"	36	1001-W	Jacis	$30.00	Not	Made	.....
9"	1 1/16	12"	8½"	45	1000	Jadeb	35.00	1121	Jadur	$40.00
11"	1¾	14¼"	10½"	58	1002	Jafom	40.00	1122	Jafec	46.00
13"	2 5/8	18"	13½"	100	1003	Japux	55.00	1123	Jafig	65.00
15"	2 5/8	20¼"	13 5/8"	126	1004	Japil	65.00	1124	Jagam	77.00
16"	3⅛	21¾"	13¾"	170	1005	Japor	75.00	1125	Jalop	89.00



A chuck mounted on the spindle of the lathe

Chucks for South Bend Lathes

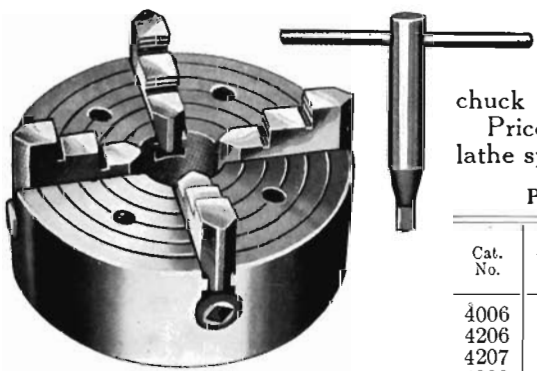
Selecting the Chuck for the Lathe

A 4-jaw Independent chuck is recommended if the lathe is to have but one chuck, as this type of chuck will hold square, round and irregular shapes in either a concentric or eccentric position. The jaws of the Independent chuck may be reversed so that work may be chucked either on the inside or the outside.

The 3-jaw Universal chuck is used for chucking round and hexagonal work quickly, as the jaws move simultaneously and automatically center the work. Two sets of jaws are supplied with each 3-jaw Universal chuck, one set for external chucking and one set for internal chucking.

4-Jaw Independent Lathe Chucks with Reversible Jaws

Fitted With Chuck Plate Threaded for Lathe Spindle



4-jaw Independent lathe chuck with reversible jaws fitted to lathe spindle nose ready for use

These chucks have four independent solid jaws with individual screw adjustment. The jaws may be reversed for chucking work either inside or outside. Chuck body is ground and chuck jaws are hardened and ground.

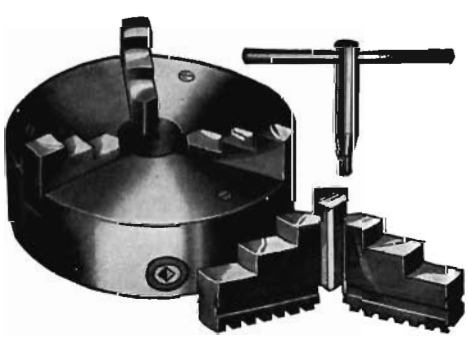
Prices include chucks, wrench, and threaded chuck plate fitted to lathe spindle and to chucks. Manufactured in the United States.

Prices of 4-Jaw Independent Lathe Chucks—Fitted to Lathe Spindle

Cat. No.	Size of Chuck	Approx. Ship. Weight	9-inch "Workshop"	9-inch Jr., Std., Quick	9-inch 1" Collet Lathe	11-inch Lathes	13-inch Lathes	15-inch Lathes	16-inch Lathes
4006	6"	13 lbs.	$23.00	$26.00	.....	.....	.....	.....	.....
4206	6"	18 lbs.	.....	45.00	$48.00	$46.00	$47.00	.....	.....
4207	7½"	37 lbs.	.....	.....	.....	51.00	52.00	$53.00	.....
4209	9"	50 lbs.	.....	.....	.....	.....	56.00	57.00	$58.00
4210	10"	60 lbs.	.....	.....	.....	.....	.....	65.00	66.00
4212	12"	80 lbs.	.....	.....	.....	.....	.....	75.00	76.00

3-Jaw Universal Lathe Chucks with Two Sets of Jaws

Fitted With Chuck Plate Threaded for Lathe Spindle



3-jaw Universal lathe chuck with two sets of jaws fitted to lathe spindle nose ready for use

Chuck jaws are moved simultaneously by a scroll, and work is automatically centered. Two sets of jaws furnished, one set for chucking internally and the other for chucking externally. Chuck body is ground and jaws are hardened. Prices include chuck with two sets of jaws, wrench and threaded chuck plate fitted to lathe spindle. Made in the United States.

Prices of 3-Jaw Universal Lathe Chucks—Fitted to Lathe Spindle

Cat. No.	Size of Chuck	Approx. Ship. Weight	9-inch "Workshop"	9-inch Jr., Std., Quick	9-inch 1" Collet Lathe	11-inch Lathes	13-inch Lathes	15-inch Lathes	16-inch Lathes
3005	5"	12½ lbs.	$28.00	$31.00	.....	.....	.....	.....	.....
3505	5"	16 lbs.	.....	49.00	$52.00	$50.00	$51.00	.....	.....
3506	6"	22 lbs.	.....	.....	59.00	57.00	58.00	$59.00	.....
3507	7½"	37 lbs.	.....	.....	.....	.....	66.00	67.00	$68.00
3509	9"	64 lbs.	.....	.....	.....	.....	.....	77.00	78.00

Chucks Fitted to Lathe at Factory

The illustration at the right shows a chuck that has been fitted with a threaded chuck plate to fit the spindle nose of the lathe. This chuck plate is carefully fitted to the back of the chuck so that the chuck will run true when mounted on the lathe spindle.

Chuck with Chuck-Back Attached

Threaded Chuck Plates

Threaded chuck plates fitted to spindle nose of lathe are supplied for those who wish to fit their own chucks. When ordering threaded chuck plates specify size and serial number of lathe and diameter of recess in back of chuck.

Additional Threaded Chuck Plates for South Bend Lathes

Size of Lathe...	9-inch Workshop	9 inch	9-inch 1" collet lathe	11 inch	13 inch	15 inch	16 inch
Catalog No. ...	126-W	1935	1935-L	1936	1937	1938	1939
Price Each....	$3.00	$5.00	$8.00	$6.00	$7.00	$8.00	$9.00

Drill Chucks for Manufacturing and General Machine Work

For All Sizes and Types of South Bend Lathes

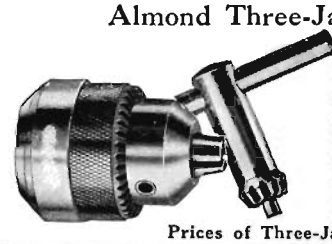
Jacobs Three-Jaw Drill Chuck

This Chuck is practical for general drilling work in the lathe. The jaws are of tempered steel and are operated by a heavy screw. The geared sleeve and key assure a powerful grip. Price and weight include pinion key, but not arbors, which are listed below.

Prices of Three-Jaw Drill Chuck

Cat. No.	Capacity	Diam.	Length	Net Wt.	Ship. Wt.	Code	Price
1200	0 to 3/8 in.	1 3/4 in.	2 1/4 in.	1 1/8 lbs.	1 7/8 lbs.	Cleve	$ 4.50
1201	0 to 1/2 in.	2 1/16 in.	2 1/8 in.	1 3/4 lbs.	2 3/8 lbs.	Wauko	6.50
1202	1/8 to 3/4 in.	2 15/16 in.	3 31/32 in.	3 1/8 lbs.	3 1/2 lbs.	Fuloa	9.50
1203	5/8 to 1 in.	3 5/16 in.	5 3/8 in.	7 1/8 lbs.	8 lbs.	Frank	12.50

Almond Three-Jaw Drill Chuck



This chuck is practical, powerful, well-balanced and accurate for all drilling work in the lathe. The jaws are of tempered steel and are operated by a heavy screw. Price and weight include pinion key, but not arbors which are listed below.

Prices of Three-Jaw Drill Chuck

Cat. No.	Capacity	Diam.	Length	Net Wt.	Ship. Wt.	Code	Price
219	0 to 3/8 in.	1 7/8 in.	2 1/4 in.	1 3/8 lbs.	1 7/8 lbs.	Acpen	$ 3.85
220	0 to 1/2 in.	2 1/8 in.	2 5/8 in.	1 3/4 lbs.	2 1/2 lbs.	Acpip	5.25
327	1/8 to 3/4 in.	2 1/2 in.	3 3/8 in.	3 1/8 lbs.	3 3/4 lbs.	Rulid	7.50
328	3/8 to 1 in.	3 in.	4 3/4 in.	5 5/8 lbs.	6 3/8 lbs.	Rulof	10.00

Solid Arbors for Fitting Drill Chucks to South Bend Lathes

Solid Arbor for Fitting Drill Chuck to Lathe

Solid Arbors are used for fitting drill chucks to lathe. When ordering drill chuck arbor only, state size and make of drill chuck, diameter and depth of arbor socket and size of lathe on which the chuck is to be used so that we can supply the correct size arbor.

Size Lathe	Morse Taper	Cat. No.	Net Wt.	Ship. Wt.	Code	Price
"Workshop"	No. 2	709-W	1/2 lb.	3/4 lb.	Achuk	$1.00
9-in.	No. 2	709	1/2 lb.	3/4 lb.	Abner	1.00
11-in.	No. 2	707	1/2 lb.	3/4 lb.	Aerom	1.00
13-15 in.	No. 3	713	7/8 lb.	1 lb.	Adams	1.50
16-in.	No. 3	716	7/8 lb.	1 lb.	Agate	1.50

Hollow Arbor Chuck

This is an ideal chuck for holding small rods and bar work for machining in the lathe. It is also practical for holding all kinds of engine valves, centered and centerless, for refacing in the lathe. Price and weight include pinion key and hollow steel arbor.

Prices of Hollow Arbor Chuck

Cat. No.	Size Lathe	Capacity	Net Wt.	Ship. Wt.	Code	Price
354-A	9", 13", 15", 16"	1/8" to 5/8"	2 3/8 lbs.	3 1/4 lbs.	Tavif	$10.50
354-B	9", 13", 15", 16"	3/8" to 3/4"	4 7/8 lbs.	5 3/4 lbs.	Taved	14.25

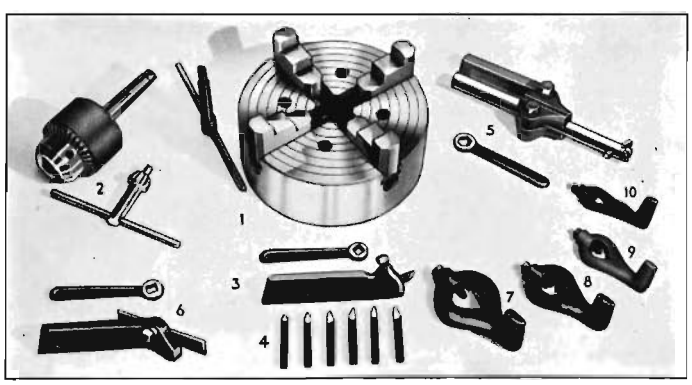
Hollow Chuck Threaded for Spindle

Screws on spindle nose of lathe. Has hollow body for holding small rods, bars and automobile engine valves for refacing. 5/8" chuck can also be used in tailstock of lathe, as chuck has taper hole in body which can be fitted with solid arbors listed above. Price includes pinion key.

Prices of Hollow Chuck Threaded for Headstock Spindle

Cat. No.	Size Lathe	Capacity	Net Wt.	Ship. Wt.	Code	Price
907-W	"Workshop"	1/8" to 5/8"	3 1/8 lbs.	3 3/4 lbs.	Robal	$10.00
*907-L	9-in.	1/8" to 5/8"	3 1/8 lbs.	3 3/4 lbs.	Robet	10.00
*925-A	9-in.	3/8" to 3/4"	3 3/4 lbs.	4 1/4 lbs.	Rodna	11.25
925-B	11-in.	3/8" to 3/4"	3 3/4 lbs.	4 1/4 lbs.	Rodpe	11.25

* For 9-inch 1" Collet Lathe use Hollow Arbor Chuck.



Practical Chuck and Tool Assortment for General Machine Work

Chuck and Tool Assortments

For South Bend Lathes

The chuck and tools shown in the assortment at left and listed below are recommended for use in the various sizes of South Bend Lathes. This is the basic equipment required for the average shop for handling general machine work, such as turning, boring, drilling, cutting-off, chucking, etc.

The 4-jaw Independent lathe chuck is listed in each assortment because this chuck will handle round, square and irregular shaped work. However, if a 3-jaw Universal chuck is wanted instead it can be furnished at additional cost.

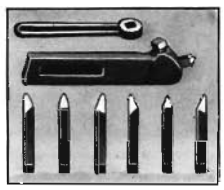
Assortment for Each Size Lathe....	9" "Workshop"	9-inch	9-inch 1" Collet Lathe	11-inch	13-inch	15-inch	16-inch
4-Jaw Independent Lathe Chuck fitted to lathe ready for use.....	$23.00	$26.00	$48.00	$46.00	$52.00	$57.00	$66.00
Size of Above Lathe Chuck.....	6 in.	6 in.	6 in.	6 in.	7 1/2 in.	9 in.	10 in.
3-Jaw Drill Chuck.....	5.25	5.25	5.25	5.25	7.50	7.50	10.00
Capacity of Drill Chuck.....	1/2 in.	1/2 in.	1/2 in.	1/2 in.	3/4 in.	3/4 in.	1 in.
Arbor Fitted to Above Drill Chuck...	1.00	1.00	1.00	1.00	1.50	1.50	1.50
Straight Shank Tool Holder.....	1.25	2.35	2.35	2.50	2.85	2.85	3.50
Six Ground Cutters for Tool Holders..	1.65	1.65	1.65	1.65	2.50	2.50	3.75
Boring Tool Holder, Style "D".....	3.00	....	...	....	....	....	....
Boring Tool Holder, Style "B".....	....	4.30	4.30	4.30	5.15	5.15	6.75
Cutting-Off Tool Holder.....	1.50	2.55	2.55	2.75	3.20	3.20	4.00
Four Malleable Lathe Dogs.....	2.60	2.60	2.60	2.60	3.15	3.15	3.15
Size of Above Lathe Dogs.....	1/2, 3/4, 1, 1 1/4"	1/2, 3/4, 1, 1 1/4"	1/2, 3/4, 1, 1 1/4"	1/2, 3/4, 1, 1 1/4"	1/2, 3/4, 1, 1 1/2"	1/2, 3/4, 1, 1 1/2"	1/2, 3/4, 1, 1 1/2"
Assortments, Complete	$39.25	$45.70	$67.70	$66.05	$77.85	$82.85	$98.65
Catalog No., Assortment Complete.....	105-WT	109-T	109-L	111-T	113-T	115-T	116-T
Code Word, Assortment Complete.....	Dakem	Ducak	Dulop	Dufec	Dufus	Dugam	Dukob

Tool Holders and Boring Tools for South Bend Lathes

Lathe Tool Holders

Tool Holder and Cutter Bit Set

Set consists of tool holder (choice of straight, right-hand or left-hand) with one unground H.S. Steel Cutter Bit and a set of 6 H.S. Steel Cutter Bits ground to forms A to F shown at right.



Prices of Tool Holder and Cutter Bit Set

Size Lathe	"Workshop"	9"	11"	13" 15"	16"
Cat. No....	323-A	603-B	603-C	603-D	603-E
Price	$2.90	$4.00	$4.15	$5.35	$7.25

Threading Tool Holder

Cutter requires grinding on top edge only to sharpen. Prices below include threading tool, wrench and a high speed steel single point cutter (choice of V, U.S.S. or Whitworth Standard). Sharp V Cutter is furnished unless otherwise ordered. Specify pitch or number threads per inch required.

Size of Lathe, Inches	Threading Tool Complete: Cat. No.	Size of Shank, Inches	Price, Each	Extra Cutters (H. S. Steel): Cat. No.	Price, Each
9"W.S.*	845	⅜ x ¾	$2.50	814	$1.50
9	865	⅝ x ¾	3.60	860	2.25
11	866	⅝ x ⅞	3.60	861	2.25
13, 15	867	1 x 1½	4.25	862	2.70
16	868	1⅛ x 1⅜	5.50	863	3.55

Tool Holder—Straight Shank

Prices below include one drop forged, heat treated and hardened steel tool holder (choice of straight, right-hand or left-hand shank) with hardened steel set screw, a hardened drop forged steel wrench and one unground high speed steel cutter bit, complete for the lathe.

Size of Lathe, Inches	Size of Shank, Inches	Size of Cutter, Inches	Catalog Numbers: Straight	Right Hand	Left Hand	Price Tool Complete
9"W.S.*	⅜ x ¾	¼ x ¼	847-S	847-R	847-L	$1.25
9	⅜ x ¾	¼ x ¼	849-S	849-R	849-L	2.35
11	⅜ x ⅞	¼ x ¼	851-S	851-R	851-L	2.50
13, 15	½ x 1⅛	⅜ x ⅜	852-S	852-R	852-L	2.85
16	⅝ x 1⅜	⅜ x ⅜	853-S	853-R	853-L	3.50

Cutting-Off Tool Holders

Cutters are beveled on both sides and are held at an angle giving the side clearance and top rake required. Prices below include forged steel cutting-off tool holder wrench and one high speed cutter blade ground.

Size of Lathe, Inches	Size Shank, Inches	Size Cutter, Inches	Catalog Numbers: Straight	Right	Left	Tool Complete	Extra Cutter
9"W.S.*	⅜ x ¾	⅜ x ½	833-S	833-R		$1.50	$0.50
9	⅝ x ¾	⅜ x ½	881-S	881-R	881-L	2.55	.55
11	¾ x ⅞	⅜ x ⅝	882-S	882-R	882-L	2.75	.60
13, 15	½ x 1⅛	½ x ¾	883-S	883-R	883-L	3.20	.90
16	⅝ x 1⅜	½ x ⅞	884-S	884-R	884-L	4.00	1.25

Knurling Tool Holder

Prices include knurling tool holder and one set of medium knurls made of tool steel, tempered.

Prices of Knurling Tool

Size of Lathe, Inches	Tool Complete: Cat. No.	Size of Shank, Inches	Price, Each
9"W.S.*	829	⅜ x ¾	$3.00
9	891	⅝ x ¾	4.80
11	892	⅝ x ⅞	5.10
13, 15	893	½ x 1⅛	5.75
16	894	⅝ x 1⅜	6.85

Prices of Extra Knurls

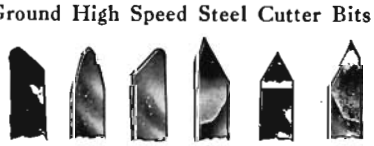
Coarse, Medium or Fine Straight or Diamond Shape: Cat. No.	Dimensions, In. Dia.	Face	Hole	Price, Pair
817	⅝	1/16	3/32	$1.00
886	⅝	1/8	3/32	1.00
887	⅞	1/8	3/32	1.00
888	¾	¼	¼	1.25
889	¾	¼	¼	1.25

High Speed Steel Cutter Bits Ground to Shape—Ready to Use

These cutter bits are for use with the tool holders listed above. They are made of best quality high speed steel (Rex AA, or Red Cut Superior) and are heat treated and hardened. We use the same quality of cutter bits in our own shops and recommend them very highly.

The illustration below shows six cutter bits ground to the shapes that are most practical for general work. When ordering, be sure to specify the catalog numbers and the letters designating shapes of cutter bits wanted.

Ground High Speed Steel Cutter Bits

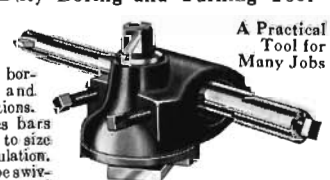


A L. H. Turning — B Round Nose — C R. H. Turning — D L. H. Side — E Threading — F R. H. Side

Prices of Ground High Speed Steel Cutter Bits

Size of Lathe Inches	Size Square Inches	Length Cutter Inches	Single Bit: Cat. No.	Price Each	Set of 6 Bits: Cat. No.	Price of Set
9"W.S.*	¼	2	1305	$0.30	291	$1.65
9	¼	2	1304	.30	1775	1.65
11	¼	2	1311	.30	1776	1.65
13, 15	⅜	2½	1313	.45	1777	2.50
16	⅜	3	1316	.65	1778	3.75

Heavy Duty Boring and Turning Tool



This is a very rigid combination tool for boring, turning and facing operations. Holder takes bars from ¾" up to size listed in tabulation. Tool may be swiveled to any angle and holder may be reversed for turning extra large diameters. Bar may be turned in holder to adjust angle of cutter bit and height of cutting edge.

Provides rigid support for the cutter bit and is a practical tool as it may be used for many unusual jobs.

Net Factory Prices of Boring and Turning Tool

Size of Lathe Inches	Tool Complete: Cat. No.	Size of Bar Ins.	Price Each	Holder Only: Cat. No.	Price Each	Bar Only: Cat. No.	Price Each
9" W.S.*	169W	¾x14	$12.50	3677W	$ 7.00	2119W	$ 5.50
9	169	¾x14	12.50	3677	7.00	2119	5.50
11	170	1 x15	15.00	3678	8.50	2120	6.50
13	171	1¼x18	20.50	3679	11.25	2121	9.25
15	172	1½x20	23.50	3680	13.00	2122	10.50
16	173	1½x20	23.50	3681	13.00	2123	10.50

Style "D" Boring Tool Holder

For boring work of small internal diameter, and for threading, turning, etc. Prices include boring tool holder, one boring bar and wrench. Will take the following sizes of boring bars: 9" Lathes ⅛" to ½"; 11" Lathes ¼" to ⅝"; 13" and 15" Lathes ¼" to ¾"; 16" and 18" Lathes ⅜" to 1".

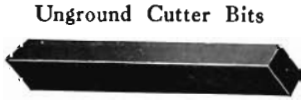
Size Lathe, Inches	Tool Complete: Cat. No.	Size Shank, Inches	Size Bar Inches	Price Each	Extra Boring Bars: Cat. No.	Size Bar Inches	Price, Each
9"W.S.*	505-F	⅜ x ¾	¼ x 5	$3.00	498-A	¼ x 5	$0.50
9	505-A	⅝ x ¾	¼ x 5	3.00	498-A	¼ x 5	.50
11	505-B	⅝ x ⅞	⅜ x 6	3.50	498-B	⅜ x 6	.60
13, 15	505-C	½ x 1⅛	⅜ x 7	4.00	498-C	⅜ x 7	.80
16	505-D	⅝ x 1⅜	½ x 8	4.50	498-D	½ x 8	1.10

Style "B" Boring Tool Holder

Made of Drop Forged Steel. Cutter can be set either straight or at a 45-degree angle. Prices include holder, sleeve bar, end cap, two wrenches and two unground cutter bits.

Size Lathe, Inches	Tool Complete: Cat. No.	Size Shank, Inches	Size Bar, Inches	Price, Each	Extra Cutter Bits: Cat. No.	Size Cutter Inches	Price, Each
9"W.S.*	423	⅜ x ¾	½ x 8	$4.30	454-W	⅛	$0.15
9	429	⅝ x ¾	½ x 8	4.30	454	1/16	.15
11	430	⅝ x ⅞	⅝ x 10½	4.30	455	3/16	.15
13, 15	431	½ x 1⅛	¾ x 12⅝	5.15	456	¼	.17
16	432	⅝ x 1⅜	¾ x 14⅛	6.75	457	5/16	.30

Unground Cutter Bits



These cutter bits are the same quality as those listed above but they are not ground. They are heat treated and hardened and are ready for use when sharpened. Specify catalog number and size when ordering cutter bits.

Prices of Unground High Speed Steel Cutter Bits

Size of Lathe Inches	Size Square Inches	Length Cutter Inches	Single Bit: Cat. No.	Price Each	Set of 6 Bits: Cat. No.	Price of Set
9"W.S.*	¼	2	1460	$0.17	1629	$0.90
9	¼	2	1419	.17	1630	.90
11	¼	2	1421	.17	1631	.90
13, 15	⅜	2½	1422	.30	1632	1.60
16	⅜	3	1423	.45	1633	2.50

Combination Center Drill & Countersink

For drilling center hole and countersinking 60° angle for lathe center. Made of carbon tool steel, hardened and ground.

Net Factory Prices of Center Drill and Countersink

Diam. of Work	Diam. of Drill	Diam. of Body	Single Drill: Cat. No.	Price
3/16" to 5/16"	1/8 in.	1/4"	898-A	$0.30
5/16" to 1"	3/16 in.	.302"	898-B	.35
1¼" to 2"	1/4 in.	.302"	898-C	.40
2¼" to 4"	5/16 in.	7/16"	898-D	.45

Style "C" Boring Tool Holder

Prices include holder, wrench, 2 boring bars (one on 9" "Workshop" Lathe) and H.S. steel cutter bit.

Size Lathe Inch	Tool Complete: Cat. No.	Size Shank Inches	Size Bar Inches	Price Each	Extra Cutter Bits: Cat. No.	Size Cutter Inches	Price Each
9"W.S.*	486	⅜ x ¾	¼	$3.00	440	⅛	$0.17
9, 11	434	⅜ x ¾	⅛, ¼	3.60	459	¼	.17
13, 15	435	½ x1	⅛, ¼	4.55	460	5/16	.30
16	436	⅝ x1¼	¼, ⅜	5.75	461	⅜	.45

* NOTE: "9" W.S." listed in the tabulations above is an abbreviation for the name 9-inch "Workshop."

Motors Supplied with South Bend Precision Lathes

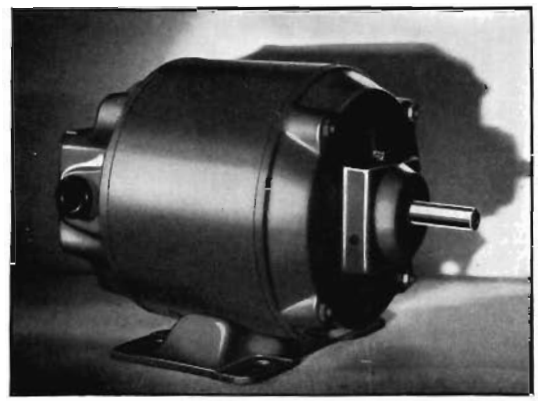
Electrical Equipment Included in Price of Lathe

Prices of all Motor Driven Lathes listed in this catalog include reversing motor, drum type reversing switch, wiring, V-belt for use between motor and countershaft and flat leather belt for use between the countershaft cone pulley and lathe spindle cone pulley. Motors supplied are General Electric, Westinghouse or equal make.

Reversing motors permit reversing the lathe spindle for cutting screw threads, tapping, grinding and other classes of work that require the lathe spindle to reverse.

The instant reversing type of motor will run in either direction, reversing itself instantly when the switch is thrown from the forward position to the reverse position.

The start-stop reversing motors are of the split-phase type and cannot be reversed instantly. The motor must be permitted to come to a stop before throwing the switch from "forward" to "reverse" position. This type of motor causes lights on the same circuit to dim when the motor is started.



Reversing Motor

How to Order South Bend Motor Driven Lathes

Electric Current Specifications: When ordering a Motor Driven Lathe give the following information regarding the electric current to be used, so that the proper style and type of reversing motor can be fitted to the lathe.

When giving voltage state the exact voltage of motor wanted. When ordering do not specify 110-220 volt motor as we cannot furnish motors for double voltage rating.

Always Give the Following Information:

—If Alternating Current state exact voltage, phase, cycle, and number of wires.

—If Direct Current state exact voltage only.

You can secure your current specifications from the electric power company furnishing your current.

Drum Type Reversing Switches for South Bend Lathes

Use Code Words: When ordering by telegram or cablegram use code words below to indicate motor specifications. If your motor specifications differ from those that we list below, give us the exact voltage, phase and cycle.

Code Word	Current Specifications
Zapin	1-phase, 60-cycle, 110-volt, A.C. Ins't. Rev. Motor
Zbras	1-phase, 60-cycle, 220-volt, A.C. Ins't. Rev. Motor
Zingo	3-phase, 60-cycle, 110-volt, A.C. Ins't. Rev. Motor
Zompe	3-phase, 60-cycle, 220-volt, A.C. Ins't. Rev. Motor
Zurik	115-volt, D.C. Ins't. Rev. Motor
Zuwel	230-volt, D.C. Ins't. Rev. Motor
Zados	1-phase, 60-cycle, 110-volt, Start-Stop, A.C. Motor
Zalob	1-phase, 60-cycle, 220-volt, Start-Stop, A.C. Motor
Zalut	1-ph., 60-cy., 110-volt, Condenser A.C. Rev. Motor

Deductions for Omission of Motor, Switch and Wiring

For Prices of Motor Driven Lathes Less Motor and Switch, Deduct Amounts Shown Below from Prices of Motor Driven Lathes with 3-phase, 60-cycle A.C. Motors.

Size of Lathe	Underneath Motor Drive Floor or Bench		Pedestal or Horizontal Motor Drive	
	Deduct for Motor	Deduct for Switch & Wire	Deduct for Motor	Deduct for Switch & Wire
16 in. Std. & Q. C....	$44.00	$14.00	$37.00	$10.00
15 in. Std. & Q. C....	44.00	14.00	37.00	10.00
13 in. Std. & Q. C....	35.00	14.00	35.00	10.00
11 in. Std. & Q. C....	30.00	14.00	30.00	10.00
9 in. (1" Collet Cap.)	30.00	13.25	30.00	9.25
9 in. Std. & Q. C....	30.00	13.25	30.00	9.25
9 in. "Junior"	9.75*	6.25*	9.75*	6.25*
9 in. "Workshop" ...	9.75*	6.25*	9.75*	5.00*

*Deduct from price with Split-Phase Start-Stop Motor.

Extra Charges for Special Motors with 9-inch "Workshop" Lathe in Lieu of Standard Motors

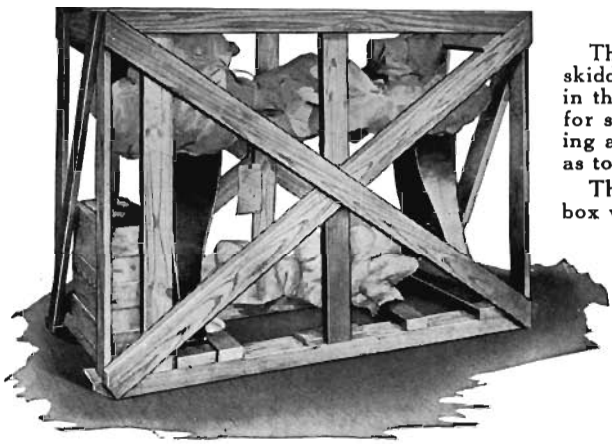
Add Amount Shown In Tabulation Below to Regular Price of Lathe to Obtain Price of Lathe with Special Motor Equipment In Lieu of the Standard ¼ H.P. Start-Stop Type Reversing 1-ph., 60 cy., 110-V. Motor

Specifications of A. C. Motors				SINGLE PHASE A. C. MOTORS						THREE PHASE A. C. MOTORS*		D. C. INSTANT REVERSING MOTORS WITH No. 791 DRUM REV. SWITCH*			
				Split Phase Type Start-Stop Reversing Motor with No. 789 Drum Reversing Switch		Condenser Type Start-Stop Reversing Motor with No. 789 Drum Reversing Switch		Instant Reversing Repulsion Induction Motor with No. 791 Drum Reversing Switch		Instant Reversing Induction Motor with No. 791 Drum Reversing Switch					
Size of Motor H.P.	Speed of Motor R.P.M.	Voltage	Cycle	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Size of Motor H.P.	Speed of Motor R.P.M.	Voltage	Cat. No.	Price
¼	1725	110	60	.....	.....	1151-X	Add $7.00	714-X	Add $27.00	717-X	Add $14.00	¼	1725	115	718-X	Add $21.00
¼	1425	110	50	711-X	Add $1.50	1152-X	Add 7.00	1156-X	Add 27.00	1164-X	Add 14.00	¼	1725	230	718-AX	Add 21.00
¼	1725	220	60	127-AX	Add 1.50	1151-AX	Add 7.00	714-AX	Add 27.00	717-AX	Add 14.00	..	....	...	.....	.....
¼	1425	220	50	711-AX	Add 3.00	1152-AX	Add 7.00	1156-AX	Add 27.00	1164-AX	Add 14.00	..	....	...	.....	.....
⅓	1725	110	60	.....	.....	1171-X	Add $12.00	1176-X	Add $32.00	1186-X	Add $18.00	⅓	1725	115	1191-X	Add $25.00
⅓	1425	110	50	.....	.....	1173-X	Add 12.00	1178-X	Add 32.00	1188-X	Add 18.00	⅓	1725	230	1191-AX	Add 25.00
⅓	1725	220	60	.....	.....	1171-AX	Add 12.00	1176-AX	Add 32.00	1188-AX	Add 18.00	..	....	..	.....	.....
⅓	1425	220	50	.....	.....	1173-AX	Add 12.00	1178-AX	Add 32.00	1188-AX	Add 18.00	..	....	...	.....	.....
½	1725	110	60	.....	.....	1348-X	Add $22.00	1193-X	Add $40.00	1360-X	Add $26.00	½	1725	115	1208-X	Add $34.00
½	1425	110	50	.....	.....	1349-X	Add 22.00	1195-X	Add 40.00	1361-X	Add 26.00	½	1725	230	1208-AX	Add 34.00
½	1725	220	60	.....	.....	1348-AX	Add 22.00	1193-AX	Add 40.00	1360-AX	Add 26.00	..	....	...	.....	.....
½	1425	220	50	.....	.....	1349-AX	Add 22.00	1195-AX	Add 40.00	1361-AX	Add 26.00	..	....	...	.....	.....

No. 1618. Stand for mounting No. 791 Switch on bench top when used with 9-inch "Workshop" Underneath Belt Motor Drive Bench Lathe, $1.50.

*Prices of 3-phase and D.C. motors do not include rubber covered cable to connect motor to switch, or 6-ft. extension cable and plug.

Cost of Shipping South Bend Lathes



Lathe crated for domestic shipment

Lathes Are Packed Carefully for Shipment

The illustration at left shows a New Model South Bend 16-inch Lathe skidded and crated for domestic shipment, that is, by rail to any point in the United States, Canada or Northern Mexico. In preparing lathes for shipment all finished or polished parts are greased to prevent rusting and each unit is wrapped securely with heavy waterproof paper so as to prevent dust or dirt accumulating in the mechanism.

The lathe is skidded and crated and the small parts are packed in a box which is nailed to the skids.

Lathes for domestic shipment are not knocked down but are crated and shipped completely assembled. All that is necessary on arrival is to remove the crating and wrapping and install the lathe in its proper place.

We Guarantee Safe Delivery in U. S. A.

We guarantee safe delivery of your South Bend Lathe to the freight depot in your city and protect you against any loss or damage while in transit. In case of accident or theft while in transit on the railroads we will duplicate the shipment as the railroads are responsible for all damages and thefts on their lines.

Lowest Freight Rates Are Figured

All shipments are made over the most direct and least expensive route. In long distance shipping to certain sections of the United States our Traffic Department often secures lower freight rates for our customers by the use of consolidated or package car.

Freight charges on the lathe you select can be closely estimated by using the freight rate from South Bend to the city nearest your shipping point (see list below). The weight of the lathe crated is shown in each lathe price tabulation throughout this catalog.

Use the freight rate applying to the city nearest your shipping point—see list of cities below. Multiply the total weight of your order by the rate given per hundred pounds and the result will be the approximate freight charges on your order.

Example—To find freight charges to Omaha, Neb., on the 9" x 3' Junior Bench Lathe shown on page 49.

Freight rate to Omaha, $1.46 per 100 lbs.

Weight of lathe, 375 lbs.

Approximate freight charges: 375 lbs. x $1.46 = $5.47.

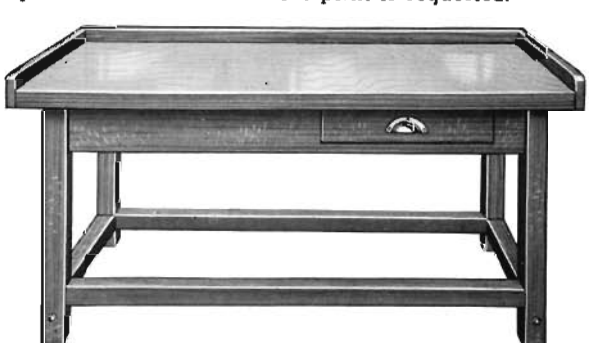
Approximate Freight Rates From South Bend to Principal Cities

City	State	Rate per 100 lbs.
Albuquerque	New Mexico	$3.55
Atlanta	Georgia	1.60
Baltimore	Maryland	1.10
Boise	Idaho	4.57
Boston	Massachusetts	1.25
Cedar Rapids	Iowa	1.03
Charleston	South Carolina	1.89
Cheyenne	Wyoming	2.44
Chicago	Illinois	.48
Cincinnati	Ohio	.68
Cleveland	Ohio	.71
Decatur	Illinois	.66
Denver	Colorado	2.47
Detroit	Michigan	.61
Fargo	North Dakota	$1.85
Hartford	Connecticut	1.21
Helena	Montana	4.58
Los Angeles	California	5.25
Louisville	Kentucky	.71
Memphis	Tennessee	1.34
Miami	Florida	2.56
Milwaukee	Wisconsin	.60
Minneapolis	Minnesota	1.37
Montgomery	Alabama	1.62
Natchez	Mississippi	1.80
New York	New York	1.21
New Orleans	Louisiana	1.88
Oklahoma City	Oklahoma	2.34
Omaha	Nebraska	1.46
Philadelphia	Pennsylvania	$1.15
Phoenix	Arizona	4.60
Pittsburgh	Pennsylvania	.82
Portland	Oregon	5.25
Portland	Maine	1.31
Reno	Nevada	4.58
Richmond	Virginia	1.18
St. Louis	Missouri	.78
Salt Lake City	Utah	4.46
San Antonio	Texas	2.89
San Francisco	California	5.25
Seattle	Washington	5.25
Sioux Falls	South Dakota	1.66
Tampa	Florida	2.32
Wichita	Kansas	1.86

Blue Print Plans for Making Benches

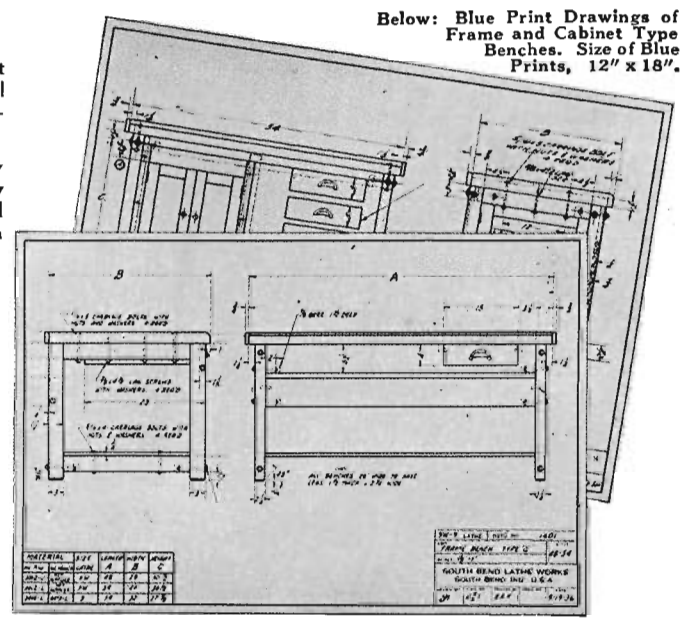
Blue print plans showing how to build either a cabinet type bench or an open type frame bench for the lathe will be supplied on request postpaid, no charge, to any purchaser of a South Bend Lathe.

Bench may be constructed of maple, hard pine or any other suitable, well seasoned wood, as these blue prints show construction and all principal dimensions. Specify size and type of lathe and whether you wish to build a cabinet bench or open frame bench when blue print is requested.



Open Type Frame Bench with One Drawer

Below: Blue Print Drawings of Frame and Cabinet Type Benches. Size of Blue Prints, 12" x 18".



Metric Thread Cutting Equipment

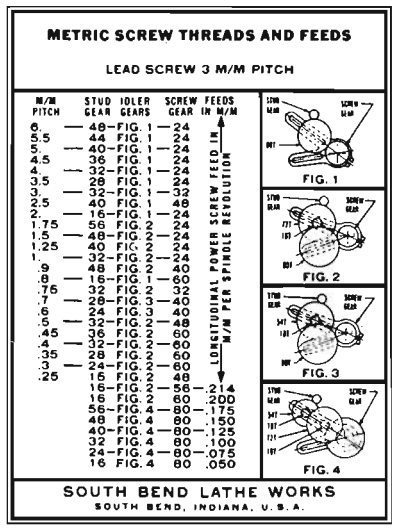
All sizes and types of South Bend Lathes listed in this catalog can be supplied with equipment for cutting: (1) English screw threads exclusively, (2) metric screw threads exclusively, or (3) for cutting both English and metric screw threads.

Either metric lead screw* or English lead screw with metric transposing gears can be furnished. Metric threads are cut with equal accuracy using either type of equipment.

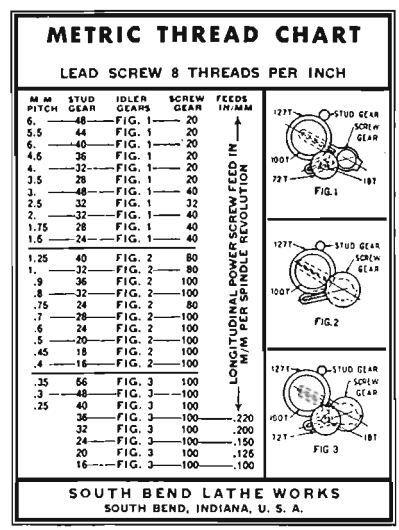
Graduations on the cross feed screw, compound rest screw, tailstock spindle, taper attachment and micrometer carriage stop are made to read in either the English system or the metric system.

Four different types of equipment are outlined below. When ordering metric lathes be sure to state whether Equipment No. 2, 3 or 4 is wanted.

*Supplied on Standard Change Gear Lathes only.



Index Chart A
For Lathes with Acme Thread Metric Pitch Lead Screw



Index Chart B
For Lathes with Acme Thread American National Lead Screw and Metric Transposing Gears

No. 1—All English Equipment

English Lead Screw and English Graduations For Cutting English Screw Threads Only

All sizes and types of lathes listed on pages 12 to 53 will be supplied with English lead screw and English graduations described below, unless otherwise specified. No extra charge.

a. Lead screw with American National Acme Thread and equipment for cutting American National Screw Threads and English Standard Screw Threads, as outlined on pages 7 and 56.
b. Cross feed screw with American National Acme Thread and graduated collar reading in thousandths of an inch. See page 6.
c. Compound rest screw with American National Acme Thread and graduated collar reading in thousandths of an inch. See page 6.
d. Tailstock spindle with graduations reading in sixteenths of an inch. See page 5.
e. Taper attachment swivel graduated in degrees and in inches per foot (if ordered). See page 58.
f. Micrometer carriage stop graduated in thousandths of an inch (if ordered). See page 59.

Note—Above is all standard equipment. No special instructions required.

No. 2—All Metric Equipment

Metric Lead Screw and Metric Graduations For Cutting Metric Screw Threads Only

All Standard Change Gear Lathes, Junior Lathes and "Workshop" Lathes listed on pages 12 to 53 can be supplied to order with metric lead screw and metric graduations in lieu of English lead screw and graduations, as described below. No extra charge.

a. Lead screw with metric pitch Acme thread and change gears for cutting standard and special metric screw threads 6. mm pitch to .25 mm pitch, as listed on Index Chart "A" above.
b. Cross feed screw with metric pitch Acme screw thread and graduated collar reading in tenths of a millimeter.
c. Compound rest screw with metric pitch Acme screw thread and graduated collar reading in tenths of a millimeter.
d. Tailstock spindle with graduations reading in millimeters and in sixteenths of an inch. See page 5.
e. Taper attachment swivel graduated in degrees, millimeters per centimeter, and inches per foot (if ordered). See page 58.
f. Micrometer carriage stop graduated in twentieths of a millimeter (if ordered). See page 59.

Note—Transposing gears for cutting English threads cannot be supplied for above. Quick Change Gear Lathes cannot be supplied with metric lead screw.

No. 3—Combination English & Metric Equip.

Metric Transposing Gears—English Graduations For Cutting Both English and Metric Threads

All sizes and types of lathes listed on pages 12 to 53 can be supplied to order with metric transposing equipment and English graduations described below at extra cost.

a. Lead screw with American National Acme Thread and equipment for cutting American and English screw threads, as outlined on pages 7 and 56 and, in addition, metric transposing gear equipment for cutting metric screw threads from 6. mm pitch to .25 mm pitch, as listed on Index Chart "B" above.
b. Cross feed screw with American National Acme Thread and graduated collar reading in thousandths of an inch. See page 6.
c. Compound rest screw with American National Acme Thread and graduated collar reading in thousandths of an inch. See page 6.
d. Tailstock spindle with graduations reading in sixteenths of an inch. See page 5.
e. Taper attachment swivel graduated in degrees and in inches per foot (if ordered). See page 58.
f. Micrometer carriage stop graduated in thousandths of an inch (if ordered). See page 59.

Metric Thread Equipment No. 3

Size of Lathe	Standard Change			Quick Change		
	Cat. No.	Code	Price	Cat. No.	Code	Price
9" W.S.	1759-W	Kazaj	$ 5.00	....	.....	.....
9 in.	1765	Kazen	7.00	1955	Luhel	$20.00
11 in.	1766	Kaziv	8.00	1956	Luhip	24.00
13 in.	1767	Kazox	9.00	1957	Luhov	27.00
15 in.	1768	Kazud	11.00	1958	Luhub	33.00
16 in.	1769	Kebat	12.00	1959	Lujem	34.00

NOTE—Special gear guard required if above is ordered after lathe leaves factory. Price on request.

No. 4—Combination English & Metric Equip.

Metric Transposing Gears—Metric Graduations For Cutting Both English and Metric Threads

All sizes and types of lathes listed on pages 12 to 53 can be supplied to order with metric transposing equipment and metric graduations as described below at extra cost.

a. Lead screw with American National Acme Thread and equipment for cutting American and English screw threads, as outlined on pages 7 to 56 and, in addition, metric transposing gear equipment for cutting metric screw threads from 6. mm pitch to .25 mm pitch, as listed on Index Chart "B" above.
b. Cross feed screw with metric pitch Acme screw thread and graduated collar reading in tenths of a millimeter.
c. Compound rest screw with metric pitch Acme screw thread and graduated collar reading in tenths of a millimeter.
d. Tailstock spindle with graduations reading in millimeters and in sixteenths of an inch. See page 5.
e. Taper attachment swivel graduated in degrees, millimeters per centimeter, and inches per foot (if ordered). See page 58.
f. Micrometer carriage stop graduated in twentieths of a millimeter (if ordered). See page 59.

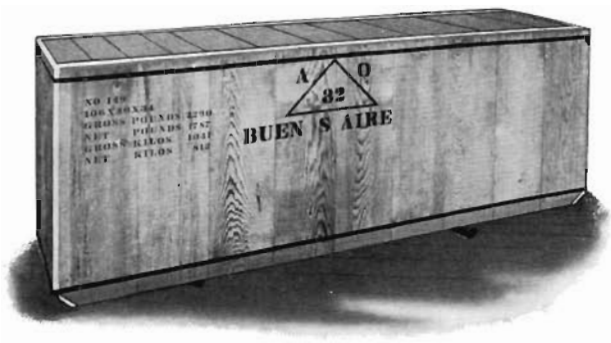
Metric Thread Equipment No. 4

Size of Lathe	Standard Change			Quick Change		
	Cat. No.	Code	Price	Cat. No.	Code	Price
9" W.S.	1781-W	Kobaj	$ 5.00	....	.....	.....
9 in.	1781	Koben	7.00	1941	Ludaf	$20.00
11 in.	1782	Kobir	8.00	1942	Ludej	24.00
13 in.	1783	Kobox	9.00	1943	Ludin	27.00
15 in.	1784	Kobab	11.00	1944	Ludot	33.00
16 in.	1785	Kobud	12.00	1945	Luduz	34.00

NOTE—Above must be ordered with lathe. Cannot be supplied after lathe leaves factory.

Export Information on South Bend Precision Lathes

Informes con Respecto a la Exportación de Tornos South Bend



South Bend Lathes Have Been Exported to all parts of the world for more than twenty-nine years. In that time shipments have been made to 102 different countries or colonies which are shown on the page opposite. The reputation of South Bend Lathes is, therefore, world-wide and users everywhere can testify to their high quality.

Your Order Carefully Handled. Your order receives careful and prompt attention at our hands. You may entrust it to our care, secure in the knowledge that we will do our part to fulfill your every requirement.

The Latest Export Information is available to our friends overseas at all times. We maintain a special department in our offices having the latest information on steamship rates, shipping data, insurance premiums, consular charges, and other details that our customers may be interested in when purchasing a lathe. The services of this department are extended free of cost or obligation to our friends in other countries.

C.I.F. Prices to Various Ports. Write to us specifying the size and type of lathe in which you are interested and we will send you a detailed itemized C.I.F. quotation to your nearest port.

Correspondence in Any Language. You may write us in any language you wish and we will respond in your own language, the English language, or in any other you specify. We have competent translators in our Export Department for correspondence in various languages.

Metric Graduations on the cross feed screw, compound rest screw, taper attachment and tailstock spindle can be supplied to order, in lieu of English graduations, on all sizes of South Bend Lathes if desired at no extra cost.

Boxing for Export Shipment. When boxing South Bend Lathes for export shipment, the lathe is dismantled and all parts removed are oiled, greased, wrapped and packed in one strong case as illustrated above. All parts are blocked and fastened solidly inside the case to prevent moving while in transit. The box is lined inside with waterproof paper, and bound with steel tape outside.

CHARGES FOR BOXING LATHES FOR OCEAN SHIPMENT:

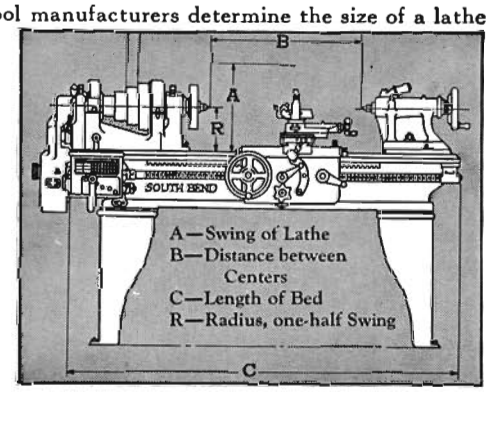
9" Lathes, "Workshop"	$ 7.00	13" Lathes, Std. and Q...	$12.00
9" Lathes, (All Types)	9.00	15" Lathes, Std. and Q...	13.00
11" Lathes, Std. and Q...	11.00	16" Lathes Std. and Q...	14.00

Mule Back Packing. When desired, we can pack South Bend Lathes for shipment in small boxes suitable for mule back transportation. Prices and information on request.

The Size of a Lathe

The size of a Screw Cutting Lathe is determined by the Swing over the Bed and Length of the bed as indicated by the illustration below.

European tool manufacturers determine the size of a lathe by its radius or center distance: for example, an 8" center lathe is a lathe having a radius of 8 inches. What the European terms an 8" center Lathe, United States manufacturers term a 16-inch swing lathe.



Los Tornos South Bend han sido exportados a todos los rincones del mundo durante los últimos veinte y nueve años. Durante este tiempo, se han hecho despachos a ciento y dos países los cuales aparecen en la página siguiente. La reputación de los Tornos South Bend es, por lo tanto, mundial, y todos los que usan nuestros tornos pueden testificar su alta calidad y su adaptabilidad a todo trabajo fino y de gran exactitud.

Tenemos a su disposición los informes mas recientes sobre la exportación de nuestros productos a cualquier país. Tenemos un departamento dedicado a obtener los últimos informes sobre las tarifas de las compañías de vapores, los derechos consulares, las primas de seguro y otros detalles en los cuales nuestros clientes estan interesados al comprar tornos. Los servicios de este departamento son enteramente gratis.

Su Pedido Recibirá Manejo Cuidadoso. Su pedido tendrá nuestra más esmerada atención, pudiendo Ud. confiar en nuestro criterio, porque haremos lo posible para asegurarle satisfacción absoluta.

Cotizaciones con Precios Costo, Seguro y Flete hasta cualquier puerto serán suministradas a solicitud. Sírvase escribirnos indicando el tamaño y tipo de torno en el cual Ud. está interesado que nosotros le enviaremos una cotización, costo, seguro y flete hasta su puerto más cercano.

Correspondemos en cualquier idioma. Puede Ud. escribirnos en cualquier idioma que nosotros le contestaremos en su lengua propia, en inglés, o en cualquier otro idioma que Ud. nos indique. Tenemos traductores de español, francés, y portugués en nuestro departamento de exportación. Podemos corresponder en los otros idiomas pues tenemos relaciones con traductores adiestrados.

Las Graduaciones Métricas en los tornillos del avance transversal y del soporte compound, en el aditamento para torneado cónico y el husillo de la contrapunta pueden ser suministradas a solicitud sin cargo extra en todos los tamaños de los Tornos South Bend, en lugar de las graduaciones del sistema inglés.

El Empaque para Transporte Marítimo. Al encajonar los Tornos South Bend para transporte marítimo, se desarman y todas sus partes se aceitan, engrasan, envuelven y empacan en una caja fuerte como se puede ver en la ilustración de arriba. Todas las partes se fijan sólidamente en la caja para evitar su movimiento durante el tiempo que las máquinas estan en camino. Las cajas tienen forros de papel impermeable, y estan reforzadas por cintas de acero. Las cajas estan marcadas de acuerdo con las indicaciones de nuestros clientes sin costo adicional de su parte. La maquinaria destinada a la República Méjicana se empaca del mismo modo que si fuera enviada dentro del país, o sea, en cajas hechas de tablillas de madera.

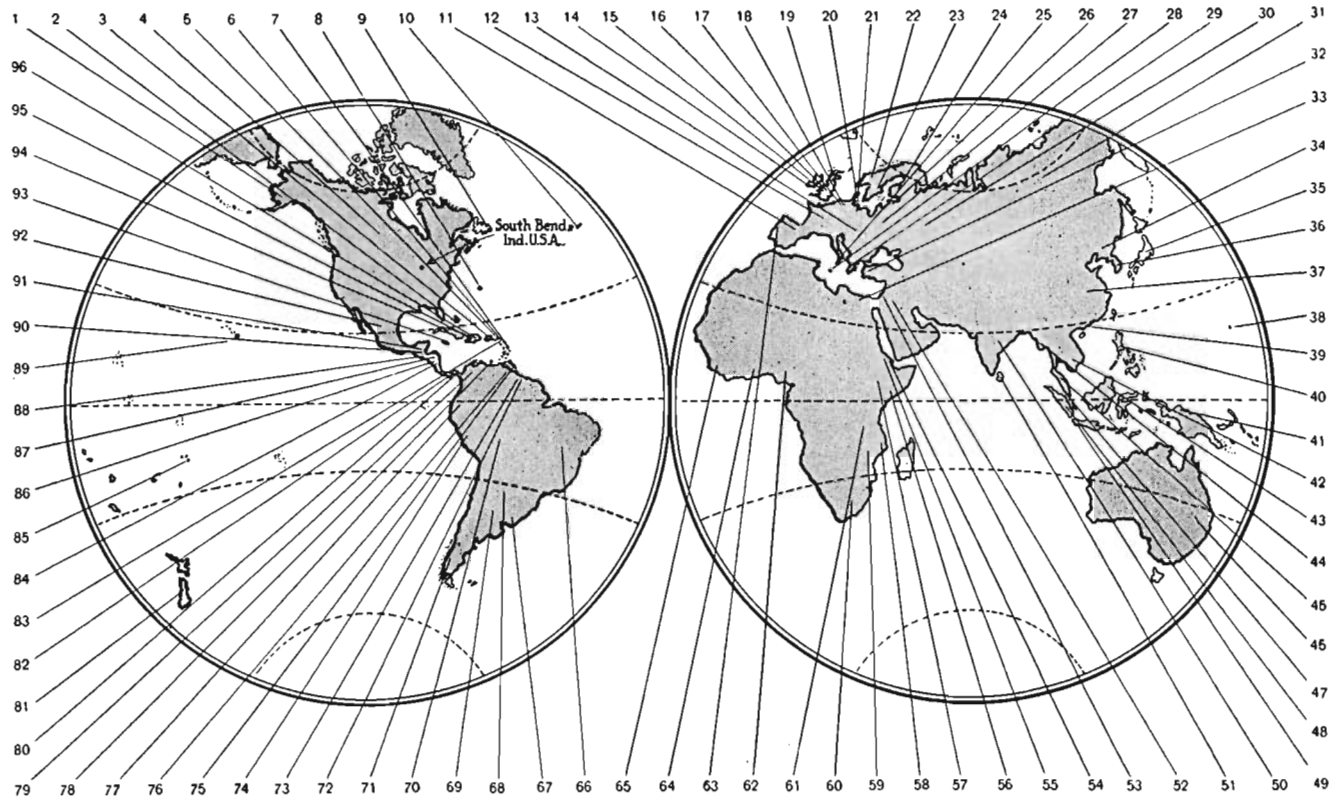
GASTOS PARA EL ENCAJONAMIENTO DE TORNOS PARA EXPORTACIÓN:

Tornos: 9" "Workshop"	$ 7.00	Tornos: 13" Std. y Ráp...	$12.00
Tornos: 9" (Todo tipo)	9.00	Tornos: 15" Std. y Ráp...	13.00
Tornos: 11" Std. y Ráp...	11.00	Tornos: 16" Std. y Ráp...	14.00

Encajonamiento para Transporte a Lomo de Mula

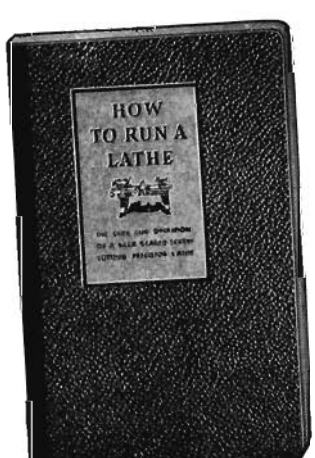
A solicitud, podemos empacar Tornos South Bend en cajas pequeñas para permitir su transporte a lomo de mula. Se suministran precios y detalles a petición.

South Bend Precision Lathes are Used in 102 Countries



The map above shows most of the 102 countries, colonies and territories where South Bend Lathes are in use. To find the name of any country in the map above, follow the reference lines from the country to the numbers on the margin. The name of the country can then be found opposite that number in the table below.

1. Territory of Alaska
2. Bahama Islands
3. Puerto Rico
4. Dominion of Canada
5. Virgin Islands
6. Island of Guadeloupe
7. Island of Barbados
8. Bermuda Islands
9. Newfoundland
10. Azores Islands
11. Republic of Spain
12. Republic of France
13. Republic of Austria
14. Irish Free State
15. Wales
16. England
17. The Netherlands
18. Kingdom of Belgium
19. Scotland
20. Kingdom of Denmark
21. Republic of Germany
22. Kingdom of Norway
23. Kingdom of Sweden
24. Republic of Finland
25. Kingdom of Italy
26. Republic of Esthonia
27. Republic of Poland
28. Island of Malta
29. Republic of Greece
30. U.S.S.R. (Russia)
31. Siberia
32. Republic of Turkey
33. Kingdom of Egypt
34. Manchukuo
35. Japanese Empire
36. Korea
37. Republic of China
38. Island of Guam
39. Territory of Hong Kong
40. Philippine Islands
41. Island of New Guiana
42. French Indo China
43. Island of Borneo
44. Burma
45. Federated Malay States
46. Commonwealth of Australia
47. Straits Settlements
48. Island of Sumatra
49. Island of Java
50. India
51. Ceylon
52. Syria
53. Palestine
54. French Somaliland
55. Kingdom of Abyssinia
56. Kenya Colony
57. Uganda
58. Portuguese East Africa
59. South Rhodesia
60. Union of South Africa
61. North Rhodesia
62. Nigeria
63. Republic of Portugal
64. Gold Coast Colony
65. Republic of Liberia
66. Republic of Brazil
67. Republic of Uruguay
68. Republic of Paraguay
69. Argentine Republic
70. Republic of Bolivia
71. Republic of Chile
72. Dutch Guiana
73. British Guiana
74. Republic of Peru
75. Island of Trinidad
76. Republic of Venezuela
77. Republic of Ecuador
78. Island of Curacao
79. Republic of Colombia
80. Canal Zone
81. New Zealand
82. Republic of Panama
83. Island of Martinique
84. Republic of Costa Rica
85. Samoan Islands
86. Republic of Nicaragua
87. Republic of Honduras
88. Republic of Salvador
89. Territory of Hawaii
90. Republic of Guatemala
91. British Honduras
92. Republic of Mexico
93. Island of Jamaica
94. Republic of Cuba
95. Republic of Haiti
96. Dominican Republic



"How to Run a Lathe"—34th Edition

Copy Free with Each South Bend Lathe

"How to Run a Lathe" is an authoritative and instructive manual completely covering the care and operation of a back-geared, screw cutting lathe and gives the fundamentals of lathe operation in detail with illustrations. The book is printed in English and contains 128 pages, 5½" x 8", and more than 350 illustrations.

Students in education institutions and apprentices in industrial plants, railroads and machine shops use "How to Run a Lathe" as a textbook. This instruction book is the most popular text on lathe work in the world.

One and one-half million copies printed in English, Spanish and Portuguese are in use throughout the United States and all countries throughout the entire world.

Price 25c Postpaid

A copy of "How to Run a Lathe" will be mailed anywhere in the world postpaid, **25c** for the paper bound copy and 75c for the leatherette bound book. Coin or stamps of any country accepted.

Also published in French, Portuguese, Dutch, Swedish, and Spanish.

New South Bend Time Payment Plans

For the Purchase of South Bend Lathes, Chucks, Tools, and Attachments

No. 1 Plan—20% Down—Balance 18 to 24 Monthly Payments——See No. 1 Schedule Below

No. 2 Plan—10% Down—Balance 18 Monthly Payments—See No. 2 Schedule Below

Any size or type South Bend Lathe with attachments, chucks and tools may be purchased on the South Bend time payment plans as described below. A small down payment is required with the order and the balance may be paid in monthly installments. The South Bend time payment schedules showing the down payment with order, the amount of each monthly payment, the amount of financing charge, and the number of months to pay are shown at right.

The monthly payments depend on the amount of the balance to be paid and vary as shown in the schedule. The payments are distributed evenly over a period of eighteen to twenty-four months. The first monthly payment will not be due until thirty days after the lathe has been shipped to you.

In making out a time payment order for a South Bend Lathe add the prices of the lathe, attachments, chucks and tools you select for your work and the total will be the cash price of the order. If you want to make your installation on the Time Payment Plan, refer to the schedule of terms and find in the first column the amount nearest the total price of your order. The amount of down payment required with the order is shown in the second column. In the third column is the approximate amount of the monthly payments, in the fourth column is the approximate number of months to pay and in the fifth column, the finance charges.

No. 1 Time Payment Plan—For All Size Lathes

The minimum down payment on the No. 1 Time Payment Plan is 20% of the total amount of the order. The balance is payable in 18 to 24 monthly payments. Under this plan you have the advantage of lower financing charges.

Example Order—Plan No. 1

1 No. 17-C, 16″ x 6′ Series "N" South Bend Quick Change Gear Lathe Countershaft Drive (Complete with Countershaft and Regular Equipment). Price f.o.b. Cars, South Bend, Ind	$722.00
1 No. 116-T Chuck and Tool Assortment	98.65
Total Price f. o. b. Cars, South Bend, Ind	$820.65

Time Payment Terms on Above Order

Total Amount of Above Order	$820.65
Subtract Amount of Down Payment (20%)	164.13
Balance Due	$656.52
Add Finance Charges for 22 Months	56.00
Amount to be Paid in Monthly Installments	$712.52
Payment Each Month (22 Months to Pay)	32.39

No. 2 Time Payment Plan—For Small Lathes

The down payment on the No. 2 Time Payment Plan is 10% ($15.00 minimum) of the total amount of the order. The balance is payable in 18 monthly payments. If the balance is paid in less time than shown in schedule, there will be a corresponding reduction in the amount of the financing charge.

Example Order—Plan No. 2

1 No. 415-ZA, 9″ x 3½′ "Workshop" South Bend Adjustable Horizontal Motor Driven Bench Lathe complete with motor drive equipment and regular lathe equipment. Price f. o. b. Cars, South Bend, Ind	$129.00
1 No. 105-WT Chuck and Tool Assortment	39.25
Total Price f. o. b. Cars, South Bend, Ind	$168.25

Time Payment Terms on Above Order

Total Amount of Above Order	$168.25
Subtract Amount of Down Payment (10%)	16.83
Balance Due	$151.42
Add Finance Charges for 18 Months	15.00
Amount to be Paid in Monthly Installments	$166.42
Payment Each Month (18 Months to Pay)	9.25

No. 1 TIME PAYMENT SCHEDULE—FOR ALL SIZE LATHES

20% Down Payment—Balance 18 to 24 Months

Total Amount of Order	Payment With Order	Average Monthly Payments	Number of Months to Pay	Charge for Financing Balance
$ 85.00 to $ 100.00	20% of Total	$ 5.00	16	$ 5.00
100.01 to 110.00	20% of Total	5.00	18	6.00
110.01 to 120.00	20% of Total	5.50	18	6.50
120.01 to 130.00	20% of Total	6.00	18	7.50
130.01 to 140.00	20% of Total	6.50	18	8.00
140.01 to 150.00	20% of Total	7.00	18	9.00
150.01 to 160.00	20% of Total	7.50	18	10.00
160.01 to 170.00	20% of Total	8.00	18	11.00
170.01 to 180.00	20% of Total	8.50	18	12.00
180.01 to 190.00	20% of Total	9.00	18	12.50
190.01 to 200.00	20% of Total	9.50	18	13.00
200.01 to 210.00	20% of Total	10.00	18	14.00
210.01 to 220.00	20% of Total	10.50	18	14.50
220.01 to 230.00	20% of Total	11.00	18	15.00
230.01 to 240.00	20% of Total	11.50	18	16.00
240.01 to 250.00	20% of Total	12.00	18	16.50
250.01 to 260.00	20% of Total	12.50	18	17.50
260.01 to 270.00	20% of Total	13.00	18	18.00
270.01 to 280.00	20% of Total	13.50	18	18.50
280.01 to 290.00	20% of Total	14.00	18	19.00
290.01 to 300.00	20% of Total	14.50	18	19.50
300.01 to 320.00	20% of Total	15.00	18	20.50
320.01 to 340.00	20% of Total	15.50	19	22.00
340.01 to 360.00	20% of Total	16.50	19	23.50
360.01 to 380.00	20% of Total	17.50	19	25.00
380.01 to 400.00	20% of Total	18.50	19	26.50
400.01 to 425.00	20% of Total	19.00	19	29.00
425.01 to 450.00	20% of Total	19.50	19	30.50
450.01 to 475.00	20% of Total	20.00	20	32.50
475.01 to 500.00	20% of Total	21.00	20	34.00
500.01 to 550.00	20% of Total	23.00	20	37.00
550.01 to 600.00	20% of Total	25.00	20	40.00
600.01 to 650.00	20% of Total	27.00	20	43.00
650.01 to 700.00	20% of Total	28.00	21	46.00
700.01 to 750.00	20% of Total	30.00	21	49.00
750.01 to 800.00	20% of Total	32.00	21	52.00
800.01 to 850.00	20% of Total	33.00	22	56.00
850.01 to 900.00	20% of Total	35.00	22	60.00
900.01 to 950.00	20% of Total	37.00	22	65.00
950.01 to 1000.00	20% of Total	38.00	22	70.00
1000.01 to 1050.00	20% of Total	39.00	23	75.00
1050.01 to 1100.00	20% of Total	40.00	24	80.00
1100.01 to 1150.00	20% of Total	50.00	24	85.00
1150.01 to 1200.00	20% of Total	53.00	24	90.00
1200.01 to 1300.00	20% of Total	56.00	24	95.00
1300.01 to 1400.00	20% of Total	60.00	24	100.00
1400.01 to 1500.00	20% of Total	65.00	24	105.00

No. 2 TIME PAYMENT SCHEDULE—FOR SMALL LATHES

10% Down Payment—Balance 18 Months

Total Amount of Order	Payment With Order	Average Monthly Payments	Number of Months to Pay	Charge for Financing Balance
$ 85.00 to $ 100.00	$15.00	$ 6.00	18	$ 8.00
100.01 to 110.00	15.00	6.50	18	9.00
110.01 to 120.00	15.00	7.00	18	10.00
120.01 to 130.00	15.00	7.50	18	11.00
130.01 to 140.00	15.00	8.00	18	12.00
140.01 to 150.00	15.00	9.00	18	13.00
150.01 to 160.00	10% of Total	9.50	18	14.00
160.01 to 170.00	10% of Total	10.00	18	15.00
170.01 to 180.00	10% of Total	10.50	18	16.00
180.01 to 190.00	10% of Total	11.00	18	17.00
190.01 to 200.00	10% of Total	12.00	18	18.00
200.01 to 210.00	10% of Total	12.50	18	19.00
210.01 to 220.00	10% of Total	13.00	18	20.00
220.01 to 230.00	10% of Total	13.50	18	21.00
230.01 to 240.00	10% of Total	14.00	18	21.50
240.01 to 250.00	10% of Total	15.00	18	22.50
250.01 to 260.00	10% of Total	15.50	18	23.00
260.01 to 270.00	10% of Total	16.00	18	24.00
270.01 to 280.00	10% of Total	16.50	18	25.00
280.01 to 290.00	10% of Total	17.00	18	26.00
290.01 to 300.00	10% of Total	17.50	18	27.00

NOTE: On orders over $300.00 use Plan No. 1.

Thousands of Industries Use South Bend Precision Lathes

A Few Prominent Users are Listed Below

MACHINERY AND EQUIP'T

Allis Chalmers Mfg. Company
American Laundry Machinery Co.
American Locomotive Works
Badger Meter Mfg. Company
Black and Decker Company
Bridgeport Brass Company
Caterpillar Tractor Company
Ettco Tool Company
Harnishfeger Corporation
Ingersoll Milling Machine Co.
Jacobs Mfg. Company
J. I. Case Company
John Deere Company
Johnson Gas Appliance Company
Landis Tool Company
National Twist Drill Company
New Britain Machine Company
Norton Company
Oliver Farm Equipment Company
Otis Elevator Company
Singer Manufacturing Company
Standard Tool Company
The Bullard Company
The Trane Company
The Warner & Swasey Company
Tuthill Pump Company
Union Hardware Company
U. S. Slicing Machine Company
Van Norman Machine Tool Co.
Worthington Pump and Mach. Co.
Yale and Towne Mfg. Company

PLASTICS

American Phenolic Corporation
Bakelite Corporation
Formica Insulation Company
Synthane Corporation

ELECTRICAL EQUIPMENT

Baldor Electric Company
Chicago Flexible Shaft Company
Emerson Electric & Mfg. Co.
Fairbanks-Morse Company
General Electric Company
Hygrade Sylvania Corporation
Ken-Rad Corporation
Square D Corporation
The Sunlight Elec. & Mfg. Co.
Trumbull Electric & Mfg. Co.
Wagner Electric Company
Western Electric Company
Westinghouse Elec. & Mfg. Co.

POWER PLANTS

Brooklyn Edison Co., Inc.
Consumers Power Company
Kansas City Power and Light Co.
Northern States Power Company
The Detroit Edison Company

OFFICE EQUIPMENT

Burroughs Adding Machine Co.
Dictaphone Corporation
Monroe Calculating Machine Co.
National Cash Register Company
Pitney-Bowes Postage Meter Co.
Remington Rand, Inc.
Smith-Corona Typewriter Co.

OIL INDUSTRY

Ethyl Gasoline Corporation
Gulf Refining Company
Shell Oil Company
Sinclair Refining Company
Standard Oil Company
The Texas Company

AIRCRAFT

Bendix Aviation Corporation
Curtiss Aeroplane & Motor Co.
Fairchild Aircraft Corporation
Pan American Airways
Pratt and Whitney Aircraft Co.
Sikorsky Aircraft Corporation

STEEL AND IRON

American Steel and Wire Co.
Bethlehem Steel Company
Carnegie Steel Company
Inland Steel Company
U. S. Steel Corporation
Youngstown Sheet & Tube Co.

RADIO AND SOUND EQUIPMENT

Crosley Radio Corporation
Philco Radio & Television
Radio Corporation of America
Sparton Radio Company
United American Bosch Corp.

BEARING MFRS.

Bantam Bearing Corporation
Bower Roller Bearing Company
Bunting Brass & Bronze Company
Fafnir Bearing Company
Federal Bearings Company
SKF Industries

HOME APPLIANCES

Edison Electric Appliance Co.
Frigidaire Corporation
Kelvinator Corporation
O'Cedar Corporation
Sunbeam Electric Mfg. Company
The Hoover Company

AUTOMOBILES & TRUCKS

Cadillac Motor Car Company
Chevrolet Motor Company
Chrysler Corporation
Ford Motor Company
Hudson Motor Company
International Harvester Company
Packard Motor Company
Studebaker Corp. of America
White Motor Company

AUTO ACCESSORIES

Auto Specialties Mfg. Company
Briggs Manufacturing Company
C. F. Burgess Laboratory, Inc.
Doehler Die Casting Company
Fisher Body Corporation
Handy Governor Corporation
Trico Products Company
Willard Storage Battery Company

INSTRUMENT MFRS.

Arma Engineering Company
Bell Telephone Laboratories
Bridgeport Thermostat Company
Eastman Kodak Company
Esterline-Angus Company
Eugene Dietzgen Company
Federal Products Corporation
General Electric X-Ray Corp.
Leeds and Northrup Company
Minneapolis Honeywell Company
Pioneer Instrument Company
Scintilla Magneto Company
Shore Instrument Company
Sperry Gyroscope Company
Taylor Instrument Company
U. S. Gauge Company
Viking Instrument Company
Veeder-Root, Inc.

CHEMICAL MFRS.

Dow Chemical Company
E. I. duPont de Nemours Co.
E. R. Squibbs & Sons, Inc.
Johnson and Johnson, Inc.
Lambert Pharmacal Company
Linde Air Products Company
Union Carbide and Carbon Corp.

TEXTILES

American Enka Company
American Woolen Company
Cannon Manufacturing Company
Celanese Corporation
Holeproof Hosiery Company
Southern Mills Corporation
Wilson Brothers

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TRADE MARK
SOUTH
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TWINS
ENGINE LATHES