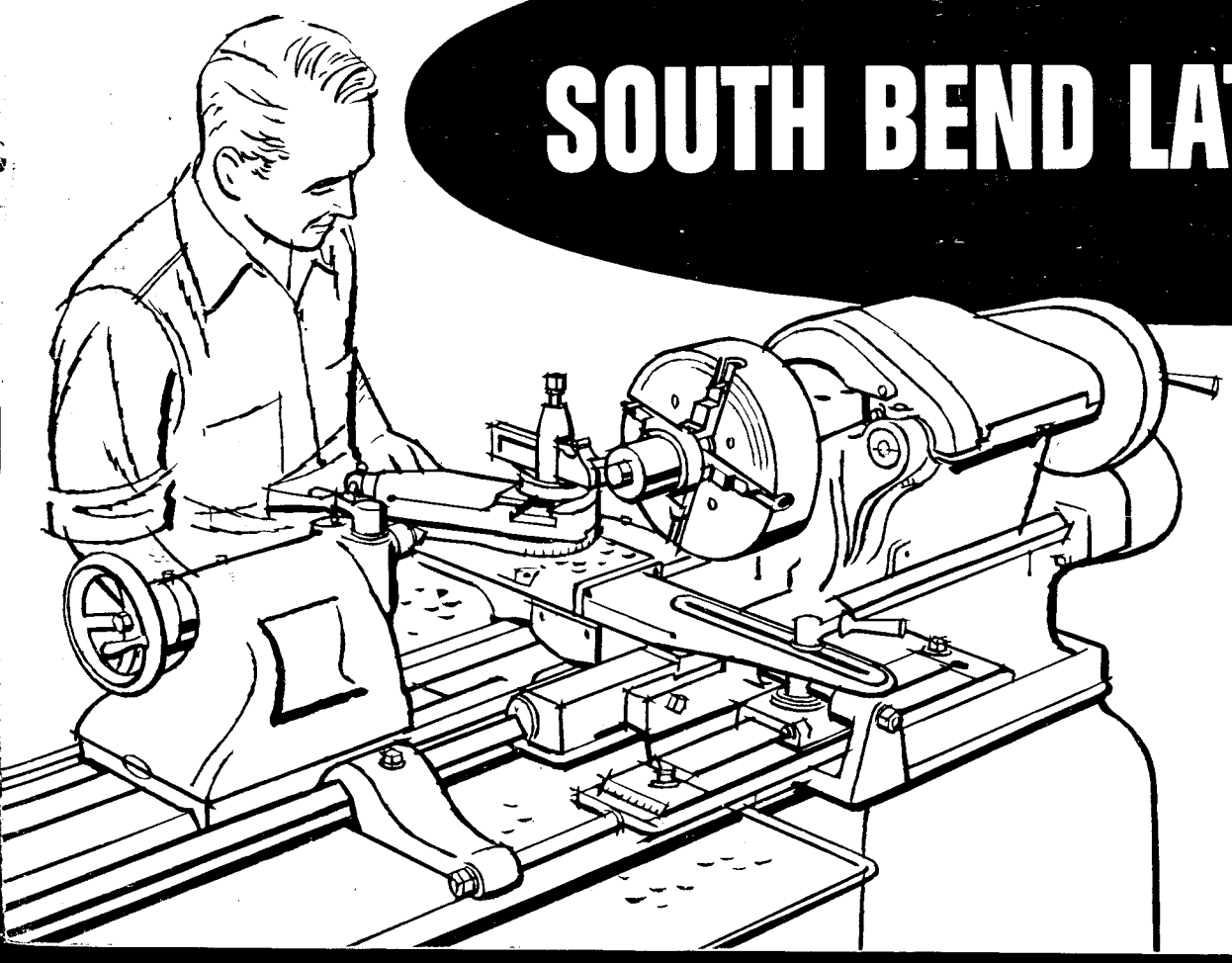
Builders of Precision Machine Tools Since 1906

SOUTH BEND LATHE



INDEX

SOUTH BEND *Precision* MACHINE TOOLS

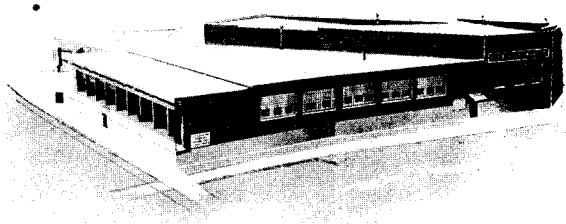
ENGINE LATHES • TOOLROOM LATHES • TURRET LATHES • MILLING MACHINES • SHAPERS • DRILL PRESSES • PEDESTAL GRINDERS

Precision Built for Precision Machine Work

For more than fifty years South Bend Lathe has been building Precision Machine Tools exclusively. During that time a vast amount of experience has been gained. It has always been the policy of this company to produce a quality product at a reasonable price. Modern plant facilities plus half a century of "know-how" enable us to build a better product and to give you a better value than ever before.

PRICES

Prices in this catalog are net f.o.b. South Bend, Indiana unless otherwise stated. In accordance with our established policy prices are subject to change without notice and accordingly prices herein are not necessarily those at which deliveries will be made at any future date because we reserve the right to invoice future deliveries at prices in effect at that time.

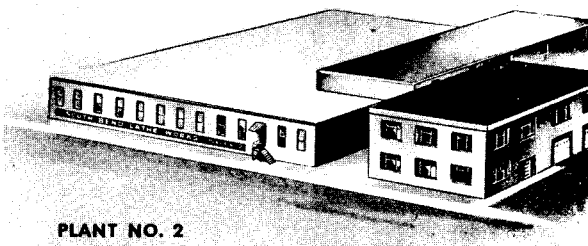


PLANT NO. 3

WARRANTY

South Bend Lathe Works warrants its products to conform to or excel the specifications set forth in its catalogs in use at the time of sale and reserves the right, at its own discretion, without notice and without making similar changes in articles previously manufactured, to make changes in materials, design, finish, or specifications. South Bend Lathe Works warrants products of its own factory against defects of material or workmanship for a period of one year from date of sale. Liability of South Bend Lathe Works under this warranty shall be limited to replacing, free of charge, f.o.b. South Bend, Indiana, any such parts proving defective within the period of this warranty but South Bend Lathe Works will not be responsible for transportation charges or consequential damages.

The warranty of South Bend Lathe Works is not made for products manufactured by others which are illustrated and described in "South Bend" catalogs or incorporated in "South Bend" products in essentially the same form as supplied by the original manufacturer. With respect to all such products, the warranties of the original manufacturers supplant the warranty of South Bend Lathe Works but, in applicable instances, the latter agrees to use its best efforts to have original suppliers make good their warranties.



PLANT NO. 2

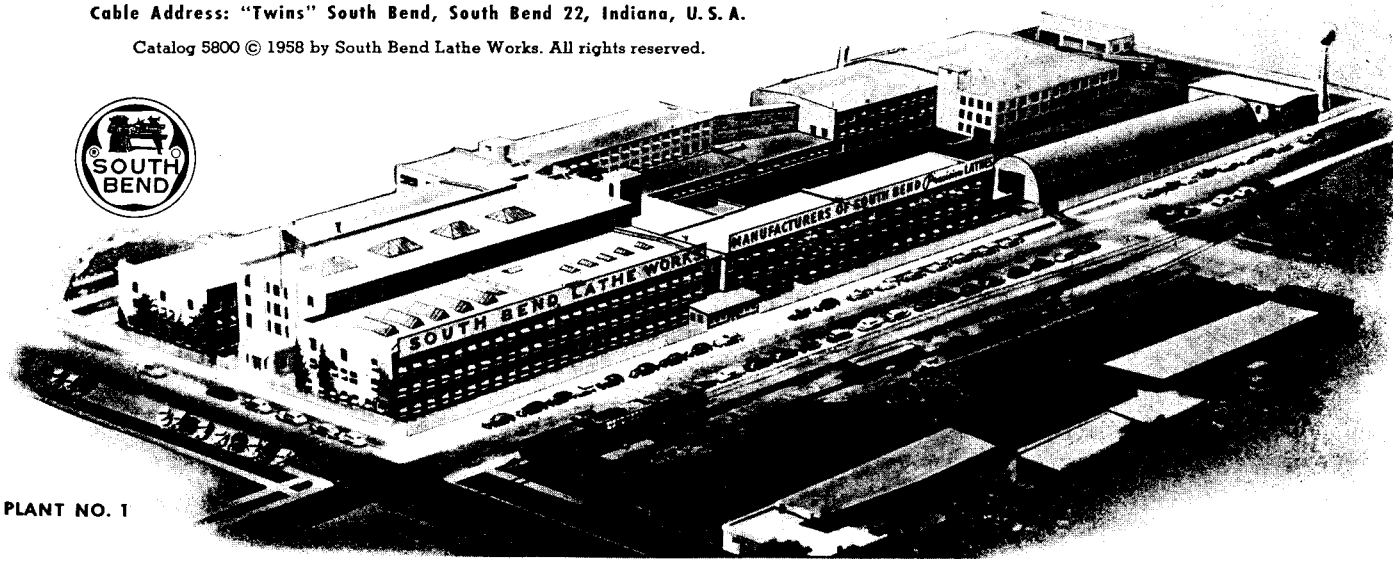
TRADE MARKS

The trade marks **SOUTH BEND** and  are owned by South Bend Lathe Works and are registered in the United States Patent Office and in principal foreign countries. In order to obtain the very best in precision machine tools and other products illustrated in this catalog, ask for them by name **SOUTH BEND.**

SOUTH BEND LATHE WORKS

Building Better Tools Since 1906

Cable Address: "Twins" South Bend, South Bend 22, Indiana, U. S. A.



PLANT NO. 1

Improved
SOUTH BEND *Precision* LATHES

FEATURES OF 10"-1⅛" COLLET AND LARGER SIZES

DEPENDABLE QUALITY

You can depend on the quality of South Bend Lathes because they are designed and built by men who take pride in their craftsmanship. Each operation, each part, each assembly, each lathe is manufactured to exacting specifications. Inspection is frequent and rigid. Parts that do not "measure up" are discarded. Final tests are recorded on a factory test card similar to the one shown and are kept on file in our office permanently.

Continual research has resulted in many improvements which contribute to the accuracy, durability, and ease of operation of South Bend Lathes. Each new design is thoroughly tested in our experimental laboratory or by actual use in our own shops (usually both) before it is approved for production.

SMOOTH POWER

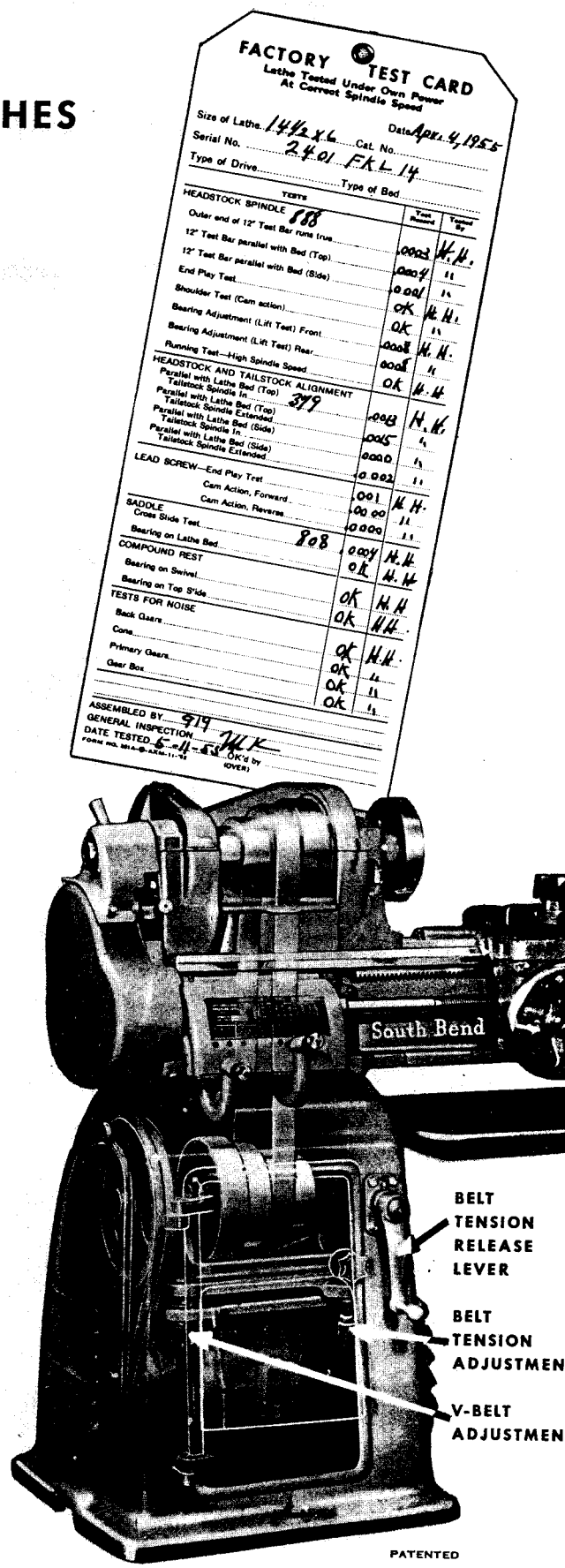
Direct belt drive to the spindle gives you the smooth, silent power so essential for high speed precision finishing operations. For heavy cuts you have a powerful back-geared drive. Motor and driving mechanism are fully enclosed in base of lathe. Quick acting belt tension release and convenient back-gear lever permit changing spindle speeds quickly and easily.

SUPERFINISHED SPINDLE

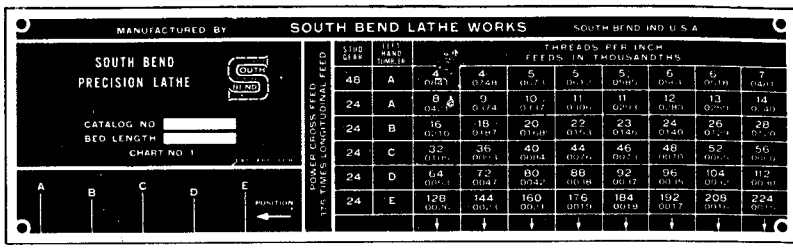
Headstock spindle bearing surfaces are hardened, ground and superfinished to a surface smoothness of five microinches (.000005") r.m.s. Spindle runs in bronze bearings which are precision bored and burnished to a smoothness of ten microinches (.000010") r.m.s. Large oil reservoirs and capillary wicks circulate clean filtered oil through the bearings. This bearing construction provides rigid support to the spindle and eliminates vibration which sometimes results when ball or roller bearings are used.

IMPROVED CARRIAGE

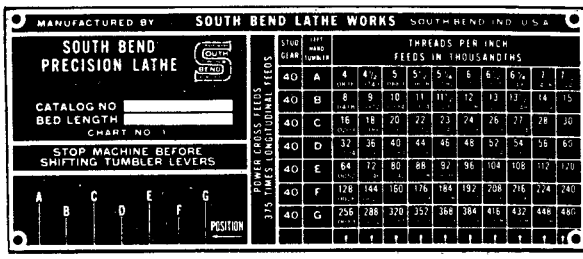
New time saving improvements developed by South Bend engineers add to the convenience and ease of operation of the improved carriage. Large, easy reading graduated collars on cross-feed and compound rest screws have non-glare satin finish chrome surface with black lines and figures. Cross-feed screw has ball thrust bearing for smooth, easy operation. Quick-acting lever operated clutch permits instant engagement or dis-



engagement of power feeds. Ground thread cross-feed screw is optional at extra cost. Also available at extra cost is a fine feed apron handwheel with planetary gear reduction for positioning carriage on bed with extreme precision. See page 47. Saddle has long bearings on bed ways with convenient oilers and felt wipers. Both compound rest top and base dovetails have tapered gibs and compound rest swivel is accurately graduated 180°. Carriage lock is conveniently located on right saddle wing. Cross-feed crank and apron handwheel have swivel machine handles. Apron is of the rigid one-piece double wall construction with gear shafts supported on both ends. Large oil reservoir in apron provides automatic lubrication. Half-nuts are dovetailed into back wall of apron and have automatic interlock which prevents engaging power feeds and half-nuts at the same time.



Index chart showing threads cut on 13″ and larger lathes.

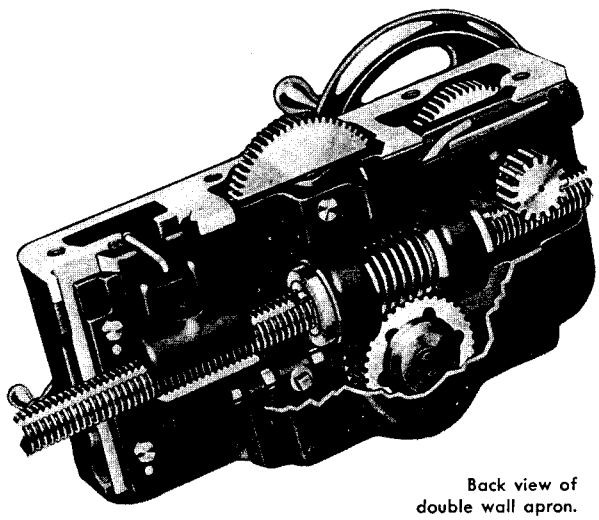


Index chart showing threads cut on 10″ lathes.

IMPROVED QUICK CHANGE BOX

Years of research and testing resulted in the improved double tumbler quick change box, an exclusive South Bend feature. Compact, dependable, and easy to set for any desired thread or feed, this mechanism has been copied but never duplicated. The direct reading index chart shows positions of levers for each of 48 screw threads, 48 power longitudinal feeds and 48 power cross-feeds. Wide range quick change box (on 10″ lathe only) has an additional 22 changes making a total of 70 threads or feeds. See index chart illustrations.

Standard screw threads are obtained by shifting the two tumbler levers on the gear box. Special stud and intermediate gearing can be supplied at extra cost for diametral pitch worm threads or other special pitches not shown on the index chart. Metric gear box and lead screw can be supplied in lieu of English (no extra cost) or metric transposing gears can be furnished (extra cost) for cutting metric threads. See page 59.

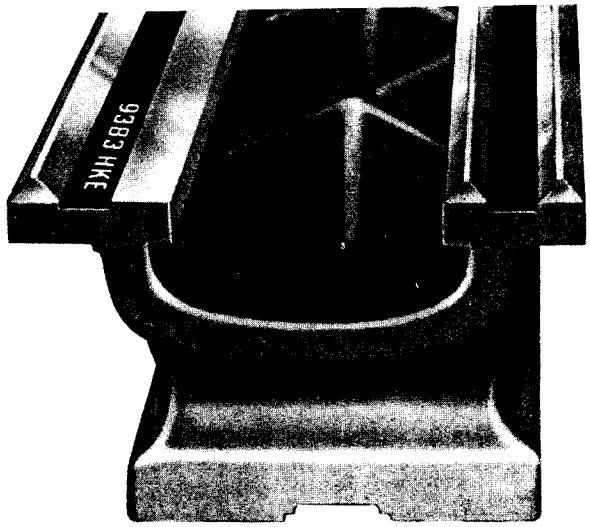


Back view of double wall apron.

RIGID LATHE BED

Hardened and ground bed ways are optional at small extra cost. See page 28.

Beds are heavily constructed with large braces cast in at short intervals. Bed castings are made of a special grade of iron with 30 to 70% steel (depending on size) which produces a hard, close-grained metal having unusual strength and long wearing qualities. Headstock, tailstock, and carriage are aligned on bed by three large V-ways and one flat way. Hardened bed ways are optional at small extra cost. See page 28.



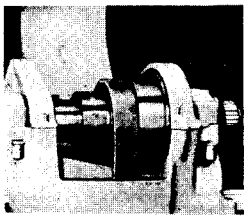
Careful inspection is made to be sure that a uniform bearing is obtained the full length of the bed and that all ways are straight and parallel. A serial number is stamped between the front ways at the tailstock end as shown. A record of each lathe is kept and is filed under this number. When attachments or parts are ordered, the serial number of the lathe should always be stated.

Specifications

10"-1 1/16" COLLET AND LARGER LATHES

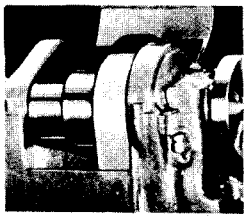
	10"	13"	14 1/2"	16"	16-24"
Capacity					
Swing over bed and saddle wings	10-1/8"	13-1/8"	14-5/8"	16-1/4"	25-1/8"
Swing over cross slide, engine lathe	5-7/8"	7-3/4"	8-3/4"	9-5/8"	18-3/4"
Swing over cross slide, toolroom lathe	5-3/4"	8"	8-15/16"	9-5/8"	.....
Swing over cross slide without chip guard, engine lathe only	6-3/4"	8-3/4"	10-1/4"	11-1/8"	19-1/4"
Between centers (various bed lengths)	14", 20", 27", 34"	16", 28", 40", 52"	24", 36", 48", 60"	33", 45", 57", 81", 105", 129"	30", 42", 54", 78", 102", 126"
Headstock					
Capacity through spindle, nose type collet chuck or lathe chuck	1-3/8"	1-3/8"	1-3/8"	1-3/8"	1-3/8"
Maximum collet capacity, handwheel or handlever type	1-1/16"	1-1/16"	1-1/16"	1-1/16"	1-1/16"
Threaded spindle nose, diameter and threads per inch	2-1/4"—8	2-1/4"—8	2-3/8"—6	2-3/8"—6	2-3/8"—6
Cam lock spindle nose, size	4" type D1	4" type D1	4" type D1	4" type D1	4" type D1
Long taper key drive spindle nose, size	LOO	LOO	LOO	LOO	LOO
Center, Morse taper	No. 2	No. 3	No. 3	No. 3	No. 3
Width, each step of 4-step cone pulley	....	1-3/4"	2-1/16"	2-1/4"	2-1/4"
Width, each step of 3-step cone pulley	1-5/16"	2-3/8"	2-25/32"	3"	3"
Spindle Speeds, Standard					
With 4-step cone pulley, 1-speed motor, number	.....	8	8	8	8
With 4-step cone pulley, 1-speed motor, approx. range, r.p.m.	.....	40—940	30—875	30—980	15—470
With 4-step cone pulley, 2-speed motor, number	.....	16	16	16	16
With 4-step cone pulley, 2-speed motor, approx. range, r.p.m.	.....	20—940	15—875	15—980	15—900
With 3-step cone pulley, 1-speed motor, number	12	6	6	6	6
With 3-step cone pulley, 1-speed motor, approx. range, r.p.m.	55—1400	40—940	30—875	32—945	14—405
With 3-step cone pulley, 2-speed motor, number	24	12	12	12	12
With 3-step cone pulley, 2-speed motor, approx. range, r.p.m.	27—1400	20—940	15—875	20—945	15—790
Higher spindle speeds available at extra cost, up to	2400 r.p.m.	1600 r.p.m.	1200 r.p.m.	1200 r.p.m.	.....
Threads and Feeds					
Number of changes for threads and feeds	70	48	48	48	48
Range of threads cut	4 to 480	4 to 224	4 to 224	4 to 224	4 to 224
Range of longitudinal feeds	.0007" to .0836"	.0015" to .0841"	.0015" to .0841"	.0015" to .0841"	.0015" to .0841"
Range of cross-feeds	.0003" to .0303"	.0006" to .0315"	.0006" to .0315"	.0006" to .0315"	.0006" to .0315"
Lead screw, 29° Acme thread, diameter and threads	3/4"—8	1"—6	1-1/8"—6	1-1/8"—6	1-1/8"—6
Compound Rest					
Cross slide travel, engine lathe model	6-1/4"	8-3/4"	10"	10-1/2"	10-1/2"
Cross slide travel, toolroom lathe model	5-7/8"	8-1/8"	9-1/2"	10-1/16"	....
Angular hand feed, compound rest top slide	2"	3-1/8"	3-1/8"	3-3/4"	3-3/4"
Tool post opening for tool holder shank	3/8" x 13/16"	1/2" x 1-1/8"	5/8" x 1-3/8"	5/8" x 1-3/8"	5/8" x 1-3/8"
Tailstock					
Center, Morse taper	No. 2	No. 3	No. 3	No. 3	No. 3
Spindle travel	2-1/8"	4-1/4"	5-1/4"	5-3/4"	5-3/4"
Set-over of top for taper turning	11/16"	15/16"	15/16"	1"	1"
Motor					
Recommended size, one-speed	3/4 h.p.	1 h.p.	2 h.p.	2 h.p.	2 h.p.
Recommended size, two-speed	1 h.p.—1/2 h.p.	1-1/2 h.p.—3/4 h.p.	2 h.p.—1 h.p.	2 h.p.—1 h.p.	2 h.p.—1 h.p.
Optional size, one-speed	1 h.p.	1-1/2 h.p.	3 h.p.	3 h.p.	3 h.p.
Optional size, two-speed	.....	2 h.p.—1 h.p.	3 h.p.—1-1/2 h.p.	3 h.p.—1-1/2 h.p.	3 h.p.—1-1/2 h.p.

Only South Bend
OFFERS ALL THESE
Optional Features



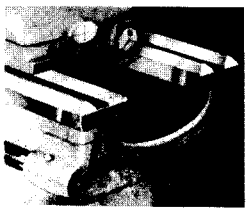
FOUR-STEP PULLEY
(13" and larger lathes only)

Provides eight spindle speeds with one-speed motor, sixteen speeds with two-speed motor. Desirable for toolroom work and finishing operations.



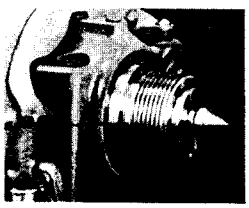
THREE-STEP PULLEY

Provides 6 or 12 spindle speeds with one-speed motor, 12 or 24 with two-speed motor. Wide belt transmits maximum power for heavy roughing cuts.



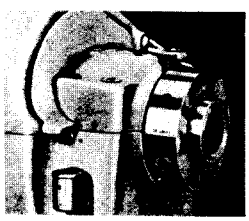
HARDENED BED WAYS

Hardened and ground bed ways resist wear and scoring. They are supplied to order in lieu of regular bed ways at extra cost. See page 28.



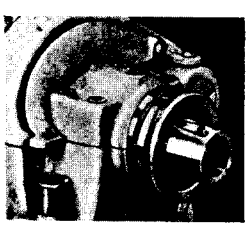
THREADED SPINDLE

Supplied unless cam lock or long taper key drive spindle is specified. Precision milled thread assures perfect interchangeability of chucks, face plates and work fixtures.



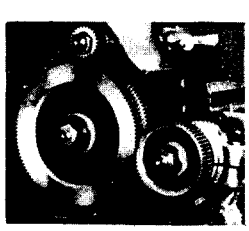
CAM LOCK SPINDLE

4" Type D1 Cam Lock Spindle supplied to order in lieu of regular threaded spindle at extra cost. Chucks, face plates and other accessories available. See pages 28 and 29.



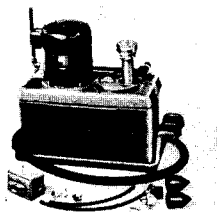
LONG TAPER SPINDLE

Size L00 Long Taper Key Drive Spindle supplied to order in lieu of regular threaded spindle at extra cost. Chucks, face plates, and other accessories available. See pages 28 and 29.



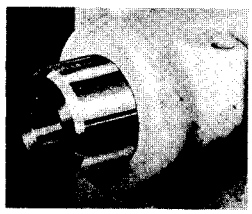
METRIC EQUIPMENT

Metric lead screw, metric quick change box and metric graduations supplied in lieu of English at no extra cost. Metric transposing gears at extra cost. See page 59.



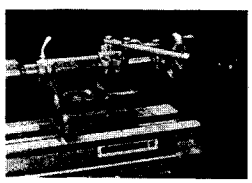
COOLANT EQUIPMENT

Coolant pump, reservoir, oil pan and piping speed production and improve finish on many classes of work. Supplied at extra cost. See page 44.



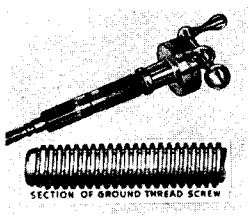
HARDENED TAILSTOCK TAPER

Tailstock spindle with hardened and precision ground taper furnished in lieu of regular at small extra cost. See page 47.



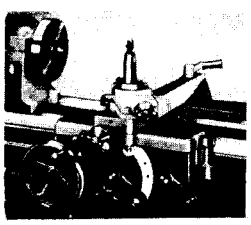
HANDLEVER TAILSTOCK

Supplied in lieu of regular tailstock at extra cost. Also available as an extra. Speeds drilling and reaming operations. See page 39.



GROUND THREAD CROSS-FEED SCREW

Special cross-feed screw assembly with hardened and ground thread supplied in lieu of regular at small extra cost. See page 47.



SPECIAL FINISH

Any desired color or combination of colors can be supplied in lieu of the regular gray enamel finish on South Bend Lathes. See page 38 for extra charges.

Standard Equipment –

ENGINE LATHES (10"-1⅛" Collet and larger)

Equipment supplied and included in the price of each South Bend Engine Lathe is as follows:

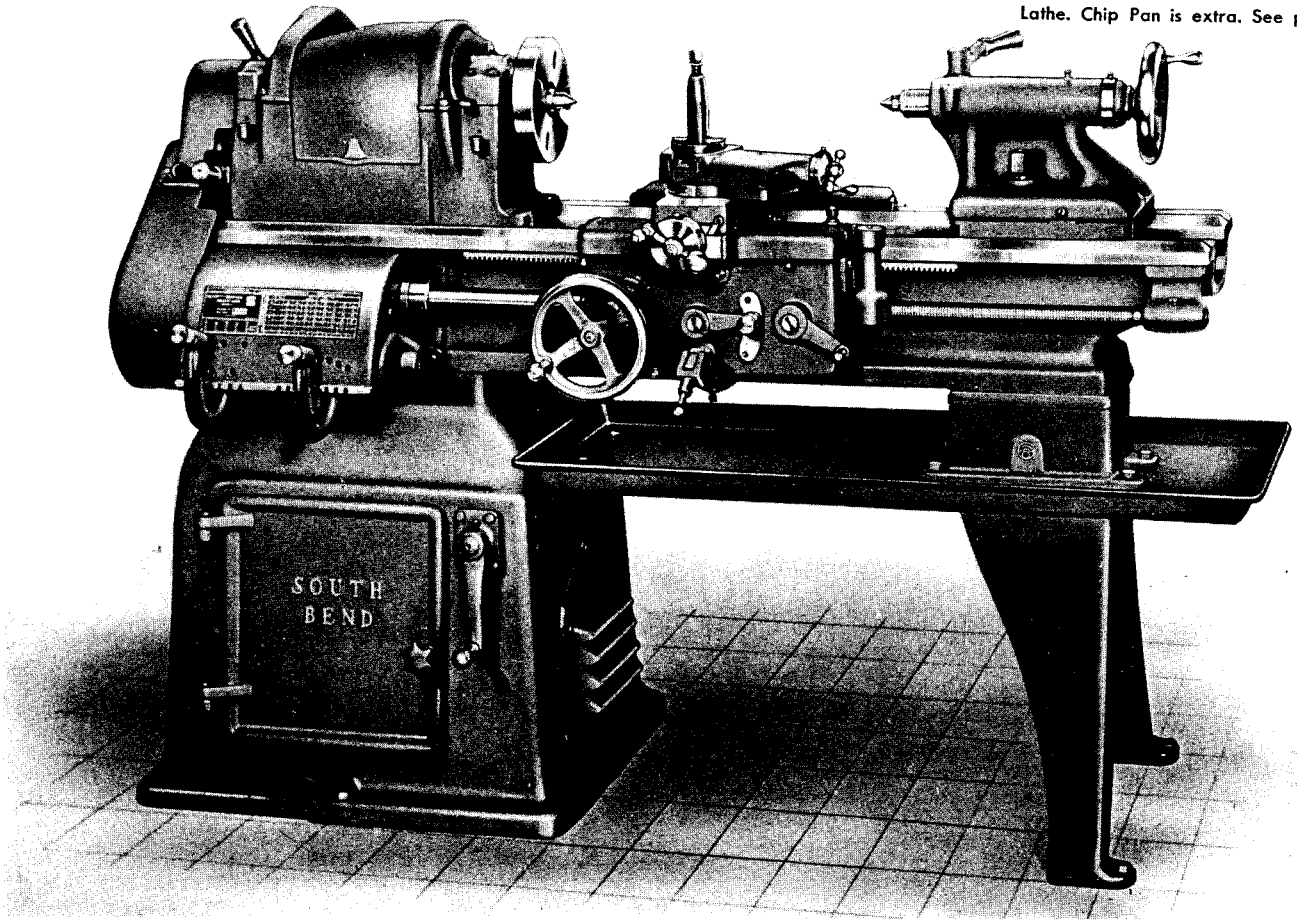
Thread indicator dial
Thread cutting stop
Small face plate
Round tool post assembly
60° Centers and spindle sleeve
Necessary belting and motor pulley
Wrenches, installation plan and manual
Prices of 10"-1⅛" Collet Bench Lathes also include steel bench with built-in chip pan.
Electrical equipment is not included. See pages 60-63.

TOOLROOM LATHES (10"-1⅛" Collet and larger)

South Bend Toolroom lathes are built to *ultra-precision* tolerances —even closer than our Engine Lathes. Special lead screw and spindle alignment tests are made on each toolroom lathe as it is assembled to assure precision for the most exacting toolroom work. In addition to all regular equipment supplied with South Bend Engine Lathes, the Toolroom Lathes have the following equipment:

***Precision* lead screw**
Handwheel collet attachment (less collets)
Collet rack
Telescopic taper attachment
Large face plate
Chip pan
Micrometer carriage stop

14½" Swing South Bend Precision Engine Lathe. Chip Pan is extra. See page 44.

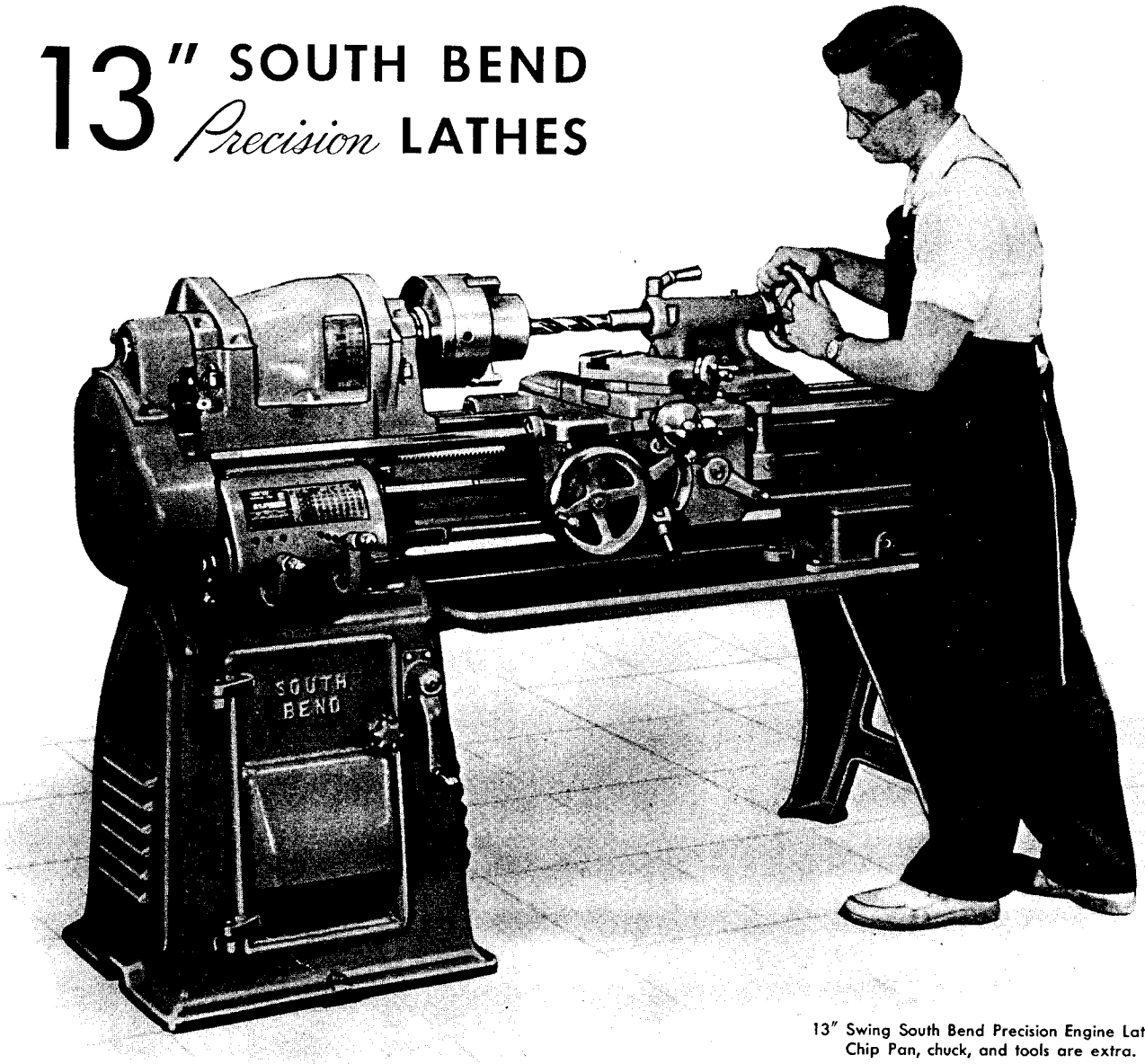


14½" SOUTH BEND *Precision* LATHES

Careful design and conscientious workmanship are combined in South Bend 14½" Lathes to give you a machine tool that you can depend on for years of satisfactory service. Continual research has resulted in many improvements and refinements which contribute to accuracy, durability, and ease of operation. This superbly engineered model will appeal to the most discriminating technician. We know of no other lathe selling at a competitive price that can match its performance.

TYPE OF LATHE	TYPE OF HEADSTOCK	CATALOG NUMBER	BED LENGTH FEET	BETWEEN CENTERS INCHES	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	PRICE F.O.B. FACTORY
ENGINE LATHES	THREE-STEP CONE PULLEY	CL129B	5	24	82	2500	1995	$2074
		CL129C	6	36	89	2600	2070	2134
		CL129D	7	48	96	2750	2145	2194
		CL129E	8	60	105	2900	2225	2254
	FOUR-STEP CONE PULLEY	CL185B	5	24	82	2500	1995	2074
		CL185C	6	36	89	2600	2070	2134
		CL185D	7	48	96	2750	2145	2194
		CL185E	8	60	105	2900	2225	2254
TOOLROOM LATHES	THREE-STEP CONE PULLEY	CL8129B	5	24	92	2685	2180	2629
		CL8129C	6	36	100	2785	2255	2696
		CL8129D	7	48	106	2935	2330	2763
		CL8129E	8	60	117	3085	2405	2830
	FOUR-STEP CONE PULLEY	CL8185B	5	24	92	2685	2180	2629
		CL8185C	6	36	100	2785	2255	2696
		CL8185D	7	48	106	2935	2330	2763
		CL8185E	8	60	117	3085	2405	2830

13" SOUTH BEND *Precision* LATHES



13" Swing South Bend Precision Engine Lathe. Chip Pan, chuck, and tools are extra.

The South Bend 13-inch Lathe is especially popular for small and medium sized jobs requiring speed and accuracy. Conveniently placed controls make for ease of operation that reduces fatigue to a minimum. Special accuracy tests are made to assure extreme precision. Having greater sensitivity and speed than larger lathes, this lathe will save you time and effort on all work within its capacity.

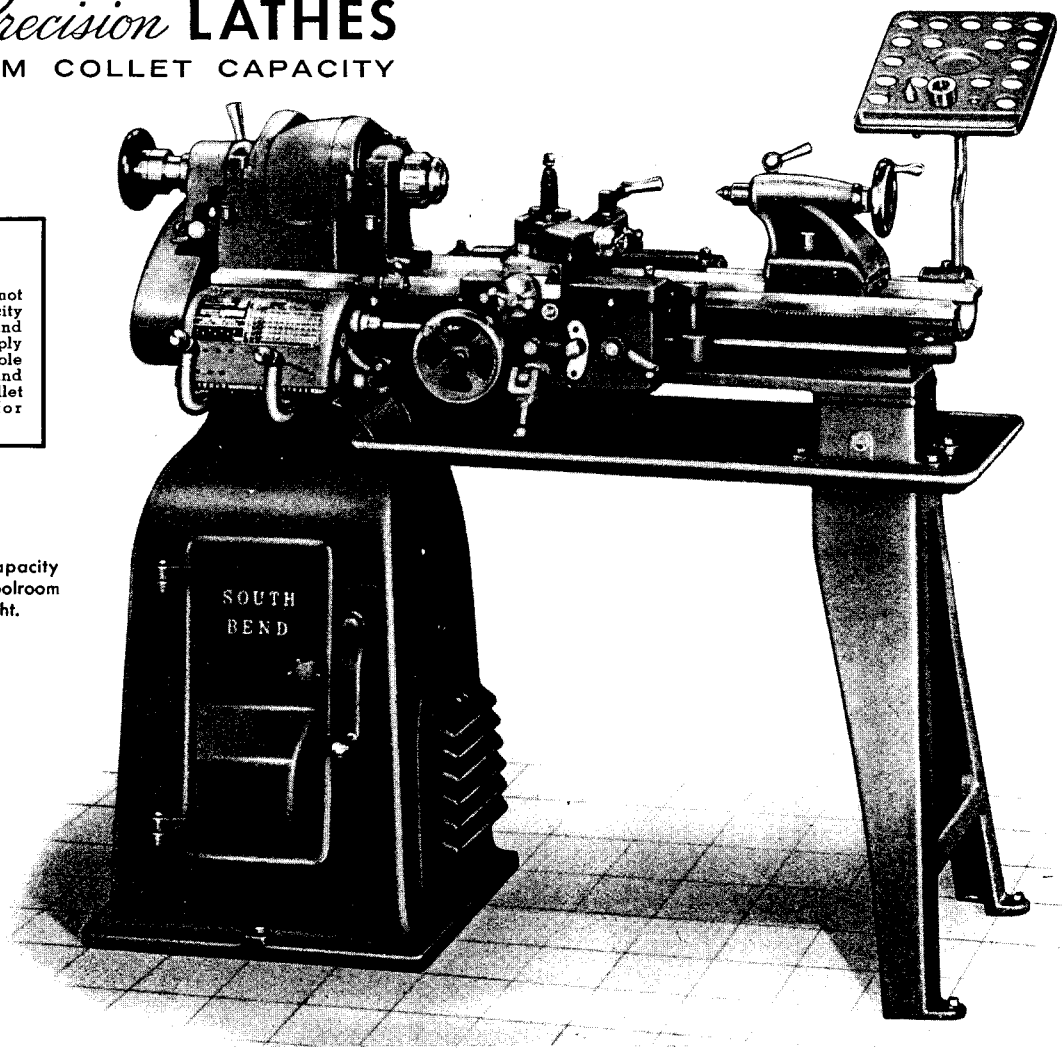
TYPE OF LATHE	TYPE OF HEADSTOCK	CATALOG NUMBER	BED LENGTH FEET	BETWEEN CENTERS INCHES	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	PRICE F.O.B. FACTORY
ENGINE LATHES	THREE-STEP CONE PULLEY	CL175A	4	16	63	1835	1460	$1675
		CL175B	5	28	73	1940	1510	1733
		CL175C	6	40	77	2045	1560	1791
		CL175D	7	52	82	2150	1615	1849
	FOUR-STEP CONE PULLEY	CL145A	4	16	63	1835	1460	1675
		CL145B	5	28	73	1940	1510	1733
		CL145C	6	40	77	2045	1560	1791
		CL145D	7	52	82	2150	1615	1849
TOOLROOM LATHES	THREE-STEP CONE PULLEY	CL8175B	5	28	84	1995	1665	2246
		CL8175C	6	40	89	2150	1715	2307
		CL8175D	7	52	96	2305	1770	2368
	FOUR-STEP CONE PULLEY	CL8145B	5	28	84	1995	1665	2246
		CL8145C	6	40	89	2150	1715	2307
		CL8145D	7	52	96	2305	1770	2368

10" SOUTH BEND *Precision* LATHES

1 1/16" MAXIMUM COLLET CAPACITY

10"-1 1/16" COLLET LATHES

For those who do not need the larger capacity through the collet and spindle, we can supply these lathes with 1" hole through the spindle and 11/16" maximum collet capacity. Write for information.

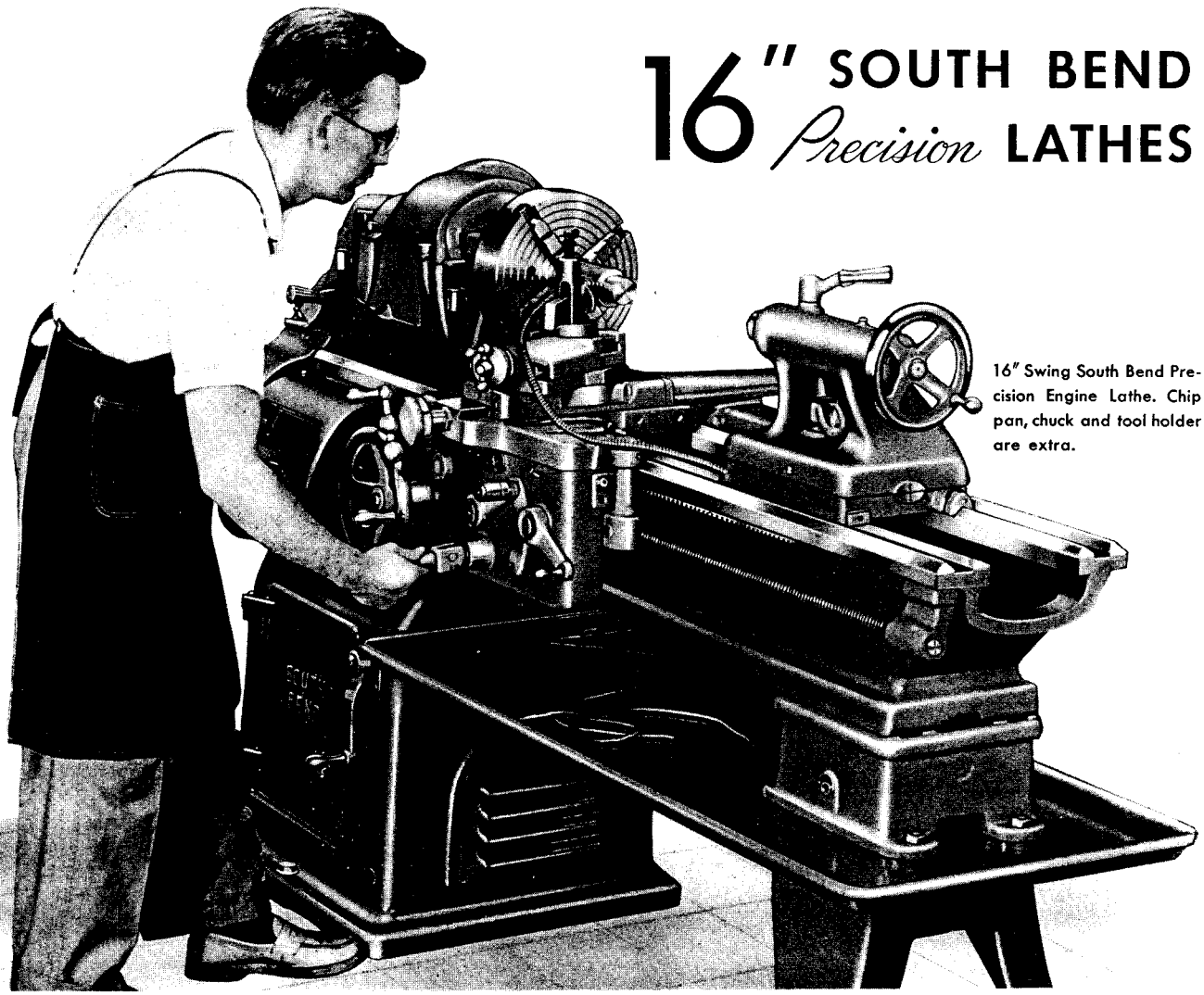


10" Swing 1 1/16" collet capacity South Bend Precision Toolroom Floor Lathe shown at right.

Modern in design and built with extreme care, the South Bend 10" Engine and Toolroom Lathes are fast, accurate, and versatile. They have the high spindle speeds and rigidity required for efficient machining with carbide or diamond tipped tools, and plenty of power for heavy roughing cuts. They are capable of finish turning and boring with such precision that subsequent grinding, honing, or lapping operations can often be eliminated. These lathes have 1 1/16" maximum collet capacity.

TYPE OF LATHE	TYPE OF MOUNTING	CATALOG NUMBER	BED LENGTH FEET	BETWEEN CENTERS INCHES	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	PRICE F.O.B. FACTORY
ENGINE LATHES	FLOOR	CL187Y	3	14	50	1230	930	$1282
		CL187Z	3½	20	50	1250	950	1308
		CL187A	4	27	50	1270	970	1334
		CL187R	4½	34	54	1290	990	1371
	BENCH	CL187YB	3	14	56	1200	850	1385
		CL187ZB	3½	20	56	1250	880	1411
		CL187AB	4	27	68	1300	950	1451
		CL187RB	4½	34	68	1350	980	1488
TOOLROOM LATHES	FLOOR	CL8187Y	3	14	54	1290	990	1698
		CL8187Z	3½	20	54	1310	1010	1725
		CL8187A	4	27	54	1330	1030	1753
	BENCH	CL8187YB	3	14	56	1310	960	1760
		CL8187ZB	3½	20	56	1360	990	1786
		CL8187AB	4	27	68	1410	1060	1826

16" SOUTH BEND *Precision* LATHES

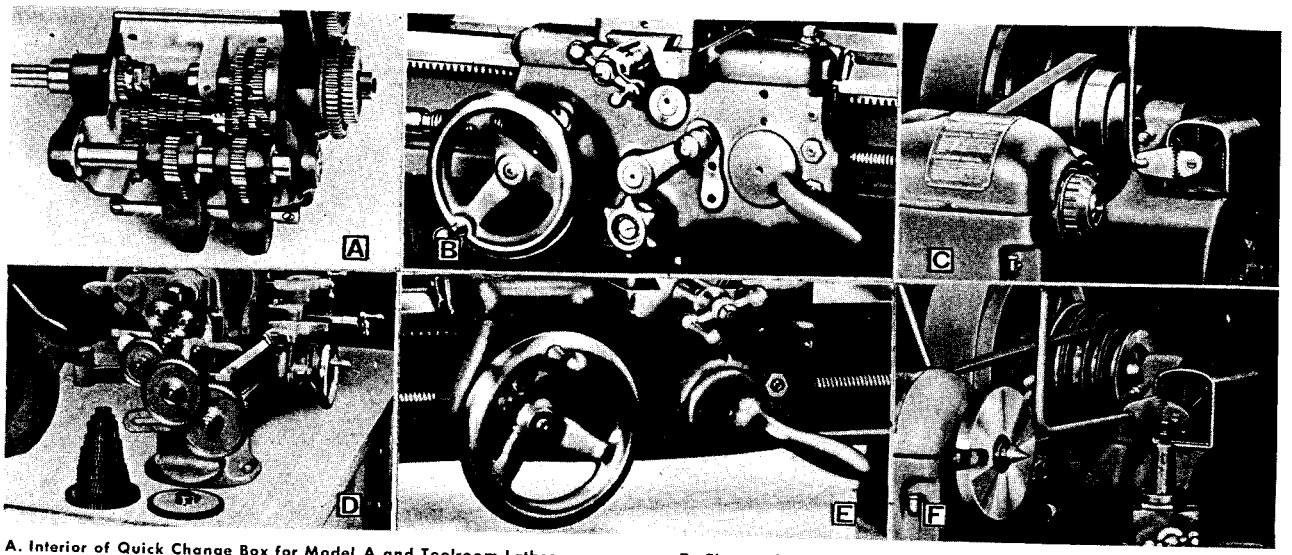


16" Swing South Bend Precision Engine Lathe. Chip pan, chuck and tool holder are extra.

Capable of heavy cuts at high speeds, South Bend 16" swing lathes are among the most popular for general production work. Because of their exceptionally smooth operation and ease of set-up they are also widely used for toolroom and experimental work. They can be equipped with square turret tool block, bed turret, handlever collet attachment and many other time saving accessories.

TYPE OF LATHE	TYPE OF HEADSTOCK	CATALOG NUMBER	BED LENGTH FEET	BETWEEN CENTERS INCHES	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	PRICE F.O.B. FACTORY
ENGINE LATHES	THREE-STEP CONE PULLEY	CL155C	6	33	89	2700	2300	$2468
		CL155D	7	45	96	2950	2380	2530
		CL155E	8	57	105	3150	2460	2592
		CL155G	10*	81	123	3550	2800	2764
		CL155H	12*	105	141	3900	2975	2936
		CL155K	14*	129	167	4380	3200	3251
	FOUR-STEP CONE PULLEY	CL117C	6	33	89	2700	2300	2468
		CL117D	7	45	96	2950	2380	2530
		CL117E	8	57	105	3150	2460	2592
		CL117G	10*	81	123	3550	2800	2764
		CL117H	12*	105	141	3900	2975	2936
		CL117K	14*	129	167	4380	3200	3251
TOOLROOM LATHES	THREE-STEP CONE PULLEY	CL8155C	6	33	100	2925	2525	3077
		CL8155D	7	45	106	3175	2605	3147
		CL8155E	8	57	117	3375	2685	3217
	FOUR-STEP CONE PULLEY	CL8117C	6	33	100	2925	2525	3077
		CL8117D	7	45	106	3175	2605	3147
		CL8117E	8	57	117	3375	2685	3217

*Center leg is supplied with 10', 12', and 14' beds.



A. Interior of Quick Change Box for Model A and Toolroom Lathes
B. Patented Apron used on Toolroom, Model A and Model B Lathes
C. Patented Twelve-speed Flat Belt Horizontal Motor Drive
D. Change Gears Supplied for Models B and C
E. Apron supplied on Model C Lathe
F. Patented Sixteen-speed V-belt Horizontal Motor Drive

are hand-operated. Otherwise the equipment is the same. Bench and electrical equipment are not included. See pages 48 and 60 to 63.

TOOLROOM 10-K Bench Lathes are the same as Model A Lathes, and have the same regular equipment. In addition, the following toolroom attachments are supplied: precision lead screw; handwheel type draw-in collet attachment (without collets); collet rack; plain taper attachment; thread indicator; thread cutting stop; large face plate; and micrometer carriage stop. Bench and electrical equipment are not included. See pages 48 and 60 to 63.

TWO TYPES OF DRIVES
Twelve or Sixteen Spindle Speeds

All models of 10-K Horizontal Motor Drive Bench Lathes can be supplied with either flat belt or V-belt cone pulleys for the headstock. The flat belt drive provides twelve spindle speeds. Power is transmitted with extreme smoothness at all speeds making this drive popular with those who require high precision and a fine finish. The sixteen-speed V-belt drive is well adapted to production work, especially for heavy roughing cuts at slow speeds. When worn out, the endless V-belt can be replaced easily by using a spliced leather V-belt. It is not necessary to disassemble the headstock.

10-K South Bend Bench Lathes

MODEL	BED LENGTH FEET	BETWEEN CENTERS INCHES	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	WITH 16-SPEED V-BELT HORIZONTAL MOTOR DRIVE		WITH 12-SPEED FLAT BELT HORIZONTAL MOTOR DRIVE	
						CAT. NO.	PRICE	CAT. NO.	PRICE
TOOLROOM	3	16	26	650	520	CL8770Y	$793	CL8670Y	$776
	3½	22	26	665	535	CL8770Z	817	CL8670Z	800
	4	28	29	690	550	CL8770A	841	CL8670A	824
MODEL A	3	16	22	600	490	CL770Y	563	CL670Y	546
	3½	22	22	615	505	CL770Z	587	CL670Z	570
	4	28	25	640	520	CL770A	611	CL670A	594
	4½	34	29	670	535	CL770R	645	CL670R	628
MODEL B	3	16	22	585	475	CL767Y	480	CL667Y	463
	3½	22	22	600	490	CL767Z	504	CL667Z	487
	4	28	25	625	505	CL767A	528	CL667A	511
	4½	34	29	655	520	CL767R	562	CL667R	545
MODEL C	3	16	22	575	465	CL753Y	403	CL653Y	388
	3½	22	22	590	480	CL753Z	427	CL653Z	412
	4	28	25	615	495	CL753A	451	CL653A	436
	4½	34	29	645	510	CL753R	485	CL653R	470

SPECIFICATIONS

CAPACITY OF LATHE
- Swing over bed, maximum . . . 10"
- Swing over saddle wings . . . 9 13/16"
- Swing over cross slide, (models A, B, C) . . . 6 1/4"
- Swing over cross slide, (toolroom lathe) . . . 5 7/8"

TAILSTOCK
- Size of center, Morse taper . . . No. 2
- Spindle travel . . . 2 1/8"
- Each graduation on tailstock spindle . . . 1/10"
- Tailstock top set-over for taper turning . . . 5/8"

COMPOUND REST
- Cross slide travel (models A, B, C) . . . 5 7/8"
- Cross slide travel (toolroom lathe) . . . 5 5/8"
- Angular hand feed of compound rest top slide . . . 2 1/4"

TOOL POST
- Size of tool holder shank . . . 3/8" x 13/16"
- Size of cutter bit for tool holder . . . 1/4" sq.

SPINDLE SPEEDS (approximate, not exact)

	Direct Drive	Back-Geared
With Flat Belt		
High, r.p.m.	1435, 844, 502	276, 165, 96
Low, r.p.m.	706, 415, 244	137, 80, 48
With V-belt		
High, r.p.m.	1365, 1010, 760, 570	265, 195, 150, 112
Low, r.p.m.	670, 495, 370, 285	130, 95, 75, 52

HEADSTOCK
- Hole through spindle . . . 2 7/32"
- Maximum collet capacity . . . 5/8"
- Spindle nose diameter and threads per inch . . . 1 1/2"-8
- Size of center, Morse taper . . . No. 2
- Width of cone pulley step for flat belt . . . 1"
- Small face plate diameter . . . 5 1/8"
- Front spindle bearing diameter . . . 1 13/16"

THREAD CUTTING RANGE
- Toolroom and Model A—
  - 48 pitches, R.H. or L.H. . . . 4 to 224 per inch
- Models B and C—45 pitches,
  - R.H. or L.H. . . . 4 to 160 per inch
- Lead screw, 29° Acme thread . . . 3/4" dia.—8 thrds.

POWER LONGITUDINAL FEEDS
- Toolroom and Model A—
  - 48 feeds . . . .0015" to .0853"
- Model B—26 feeds . . . .0021" to .0155"
- Model C—14 feeds . . . .0021" to .0156"

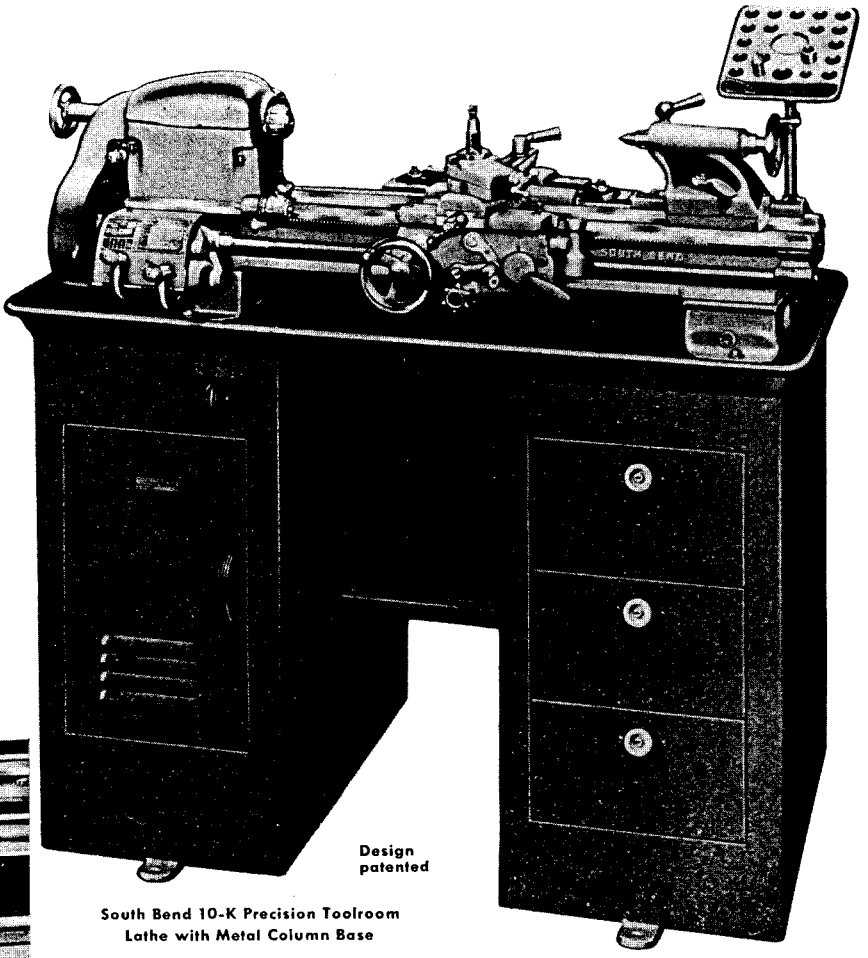
POWER CROSS-FEEDS
- Toolroom and Model A—
  - 48 feeds . . . .0004" to .0255"
- Model B—23 feeds . . . .0009" to .0046"

MOTOR
- Standard size of motor recommended . . . ½ h.p.

10-K

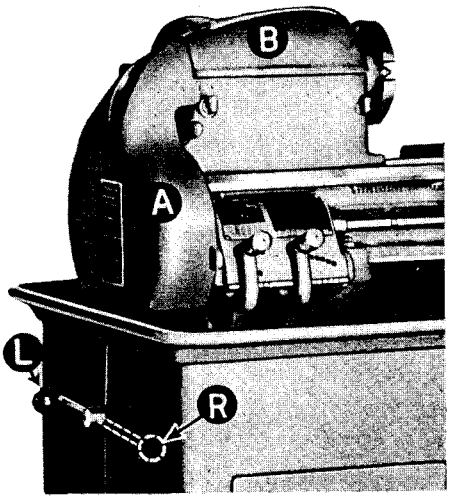
SOUTH BEND *Precision* FLOOR LATHES

WITH METAL COLUMN BASE UNDERNEATH MOTOR DRIVE



Design patented

South Bend 10-K Precision Toolroom Lathe with Metal Column Base



UNUSUAL SAFETY FEATURES

South Bend 10-K Underneath Motor Drive Lathes have an automatic safety interlock which makes it impossible to open the end gear guard, "A", or the cone pulley cover, "B", until the belt tension lever, "L" is placed in position "R", disconnecting power.

These lathes are the same as corresponding models of 10-K Bench Lathes except for the underneath motor drive and the necessary alterations in the headstock. Lathe is supplied with headstock and drive shaft cone pulleys for either V-belt or flat belt drive. Fully enclosed in the metal column base, the motor and driving mechanism are protected from dust, dirt and chips. Base is available with three drawers, 10¾" x 5½" x 14" as shown in illustration, or without drawers.* A built-in chip pan with ⅝" bead around the edge forms the top of the metal column base. Equipment included in price of lathe is same as for corresponding models of bench lathes listed on preceding pages. Electrical equipment is not included in price of lathe. See pages 60 to 63.

Specifications are the same as for corresponding models of 10-K Bench Lathes except for spindle speeds, shipping weights, and cubic feet boxed. Approximate spindle speeds with V-belt drive: low range, 52, 75, 95, 130, 285, 370, 495, and 670 r.p.m.; high range: 112, 150, 195, 265, 570, 760, 1010, and 1365 r.p.m. Approximate spindle speed with flat belt drive: low range, 50, 78, 135, 240, 410, and 715 r.p.m.; high range 90, 155, 265, 460, 780, and 1365 r.p.m.

MODEL	BED LENGTH FEET	BETWEEN CENTERS INCHES	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	WITH 16-SPEED V-BELT UNDERNEATH MOTOR DRIVE		WITH 12-SPEED FLAT BELT UNDERNEATH MOTOR DRIVE	
						CAT. NO.	PRICE	CAT. NO.	PRICE
TOOLROOM	3½	22	56	940	750	CL78370ZD	$1135	CL8370ZD	$1117
	4	28	68	1000	780	CL78370AD	1167	CL8370AD	1149
MODEL A	3½	22	56	910	720	CL7370ZD	905	CL370ZD	887
	4	28	68	960	750	CL7370AD	937	CL370AD	919
	4½	34	68	970	760	CL7370RD	972	CL370RD	954
MODEL B	3½	22	56	895	705	CL7367ZD	821	CL367ZD	803
	4	28	68	945	730	CL7367AD	853	CL367AD	835
	4½	34	68	955	740	CL7367RD	888	CL367RD	870
MODEL C	3½	22	56	895	695	CL7353ZD	745	CL353ZD	727
	4	28	68	940	720	CL7353AD	777	CL353AD	759
	4½	34	68	950	730	CL7353RD	812	CL353RD	794

*The 3' and 3½' bed lengths can be supplied without drawers, deduct $38.00. 4' and 4½' bed lengths without drawers, deduct $38.00.