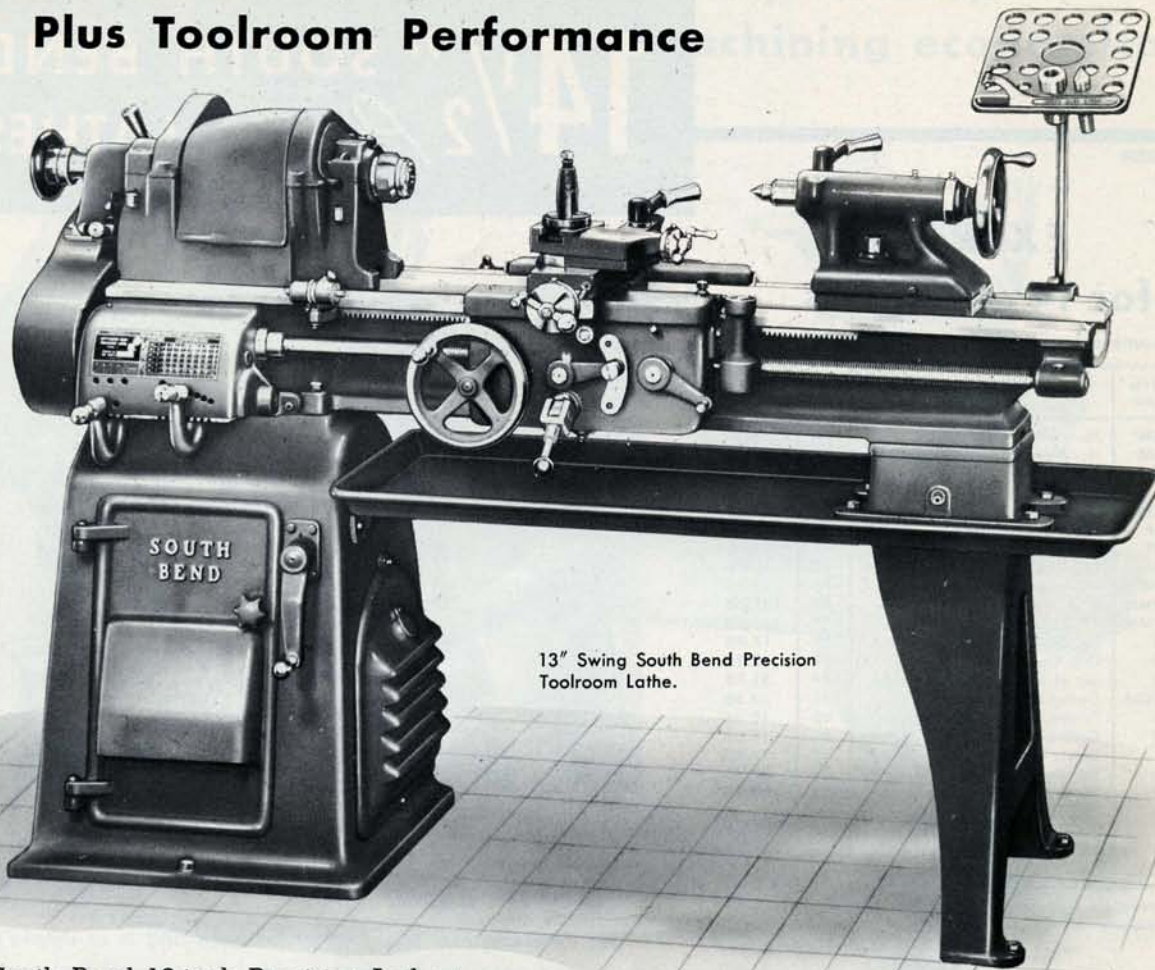


# Precision Built Throughout for Plus Toolroom Performance



13" Swing South Bend Precision  
Toolroom Lathe.

The South Bend 13-inch Precision Lathe is especially popular for small and medium sized jobs requiring speed and accuracy. Conveniently placed controls reduce operator fatigue. Special accuracy tests are made during assembling to assure extreme precision. You can save on first cost, cost of operation and floor space by selecting one or more of these lathes for your shop.

Headstock is made with 4-step cone pulley or wide belt 3-step cone pulley. The 4-step pulley headstock provides eight or sixteen spindle speeds, depending on whether a single-speed or a two-speed motor is used. The 3-step pulley headstock provides either six or twelve spindle speeds.

## SOUTH BEND 13-INCH Precision LATHES

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
TOOLROOM LATHES	THREE-STEP CONE PULLEY	CL8175B	5	28	84	1995	1665	\$2408
		CL8175C	6	40	89	2150	1715	2472
		CL8175D	7	52	96	2305	1770	2536
	FOUR-STEP CONE PULLEY	CL8145B	5	28	84	1995	1665	2408
		CL8145C	6	40	89	2150	1715	2472
		CL8145D	7	52	96	2305	1770	2536
ENGINE LATHES	THREE-STEP CONE PULLEY	CL175A	4	16	63	1835	1460	1809
		CL175B	5	28	73	1940	1510	1870
		CL175C	6	40	77	2045	1560	1931
		CL175D	7	52	82	2150	1615	1992
	FOUR-STEP CONE PULLEY	CL145A	4	16	63	1835	1460	1809
		CL145B	5	28	73	1940	1510	1870
		CL145C	6	40	77	2045	1560	1931
		CL145D	7	52	82	2150	1615	1992

Electrical equipment is not included in price of lathe.



# 13" SOUTH BEND *Precision* LATHES

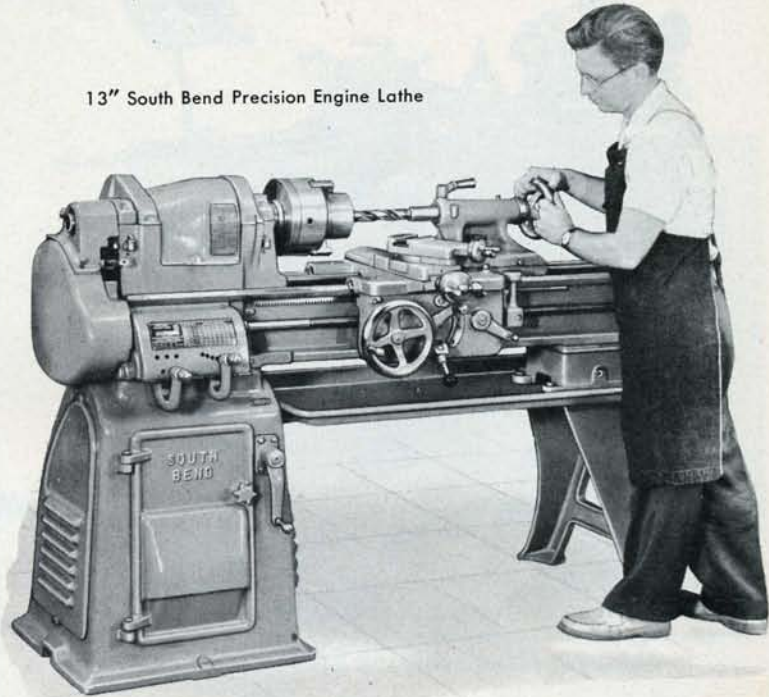
## EXTRAS for 13" Lathes

Most commonly used attachments and accessories

Catalog Number	Description	See Page	Factory Price
CL4306Q	Handwheel Collet Attachment*	38	\$ 68.75
CL5206Q	Handlever Collet Attachment...	38	158.00
CE3077	Set of 16 R-S-B Steel Collets for Round Work.....	40	97.00
CE1770Q	Collet Rack*.....	38	27.00
CL1545T	Taper Attachment*.....	50	245.00
CL2400T	Telescoping Jaw Steady Rest	43	27.50
CL2395T	Telescoping Jaw Follower Rest	43	16.65
CL968T	Micrometer Carriage Stop*.....	53	28.35
CL4207LQ	7½" 4-Jaw Independent Chuck	59	111.00
CL3506LQ	6" 3-Jaw Universal Chuck.....	59	137.00
CE1202	¾" Drill Chuck.....	59	17.10
CE2305	Drill Chuck Arbor.....	59	2.10
CE2103	Set of 11 Safety Lathe Dogs	64	31.75
CE1475QH	Center Knock-out Bar.....	57	4.40
CE8525	Turning Tool Holder, Straight	60	8.44
CE883R	Cutting-off Tool Holder, R.H.	60	9.28
CE431	Boring Tool, Style "B".....	61	15.10
CE893	Knurling Tool.....	62	17.49
CE2815	Work Light.....	54	14.20
CE2698	Plastic Cover for Lathe (7' bed).....	54	7.80
CE2218	12" Precision Level.....	54	17.15
	Chip Pan*.....	52	

\*These items are supplied with and included in prices of 13" Toolroom Lathes.

13" South Bend Precision Engine Lathe



## INDEPENDENT POWER FEEDS

Wide range of spindle speeds, nearly all sizes of work can be machined at effective cutting speeds.

Two lever gear box permits instantaneous selection of power feeds for any turning, facing or thread cutting operation.

Three V-ways and one flat way assure permanent alignment of headstock, carriage and tailstock.

Microfinished sleeve type spindle bearings give greater support to the work, smoother operation, long life and deliver extremely fine finish.

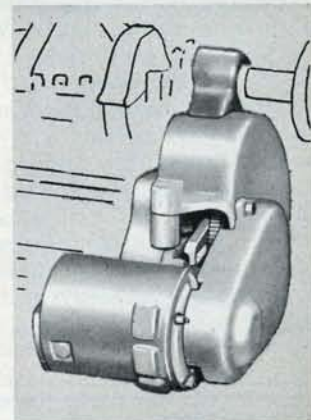
48 longitudinal and 48 cross feeds.

Easy reading, satin chrome, graduated dials—swivel machine handles, tapered gibs, all standard equipment.

Rugged design for proven low maintenance.

Trouble-free, cord reinforced belt drive to spindle—quiet, no vibration, no chatter marks.

**For 13-Inch Lathe.** Equipment includes a special high speed drive which provides spindle speeds ranging from 67 to 1600 r.p.m. and a separate motor, pulleys and gear for driving the power carriage feeds independent of the lathe spindle speeds. This provides 40 quick changes of carriage feed from .517 to 14.48 inches per minute, through the lathe gear box. When spindle revolves 1600 r.p.m. a fine longitudinal feed of approximately .00032 inches per revolution of spindle can be obtained. The independent power feed may easily be disconnected and the regular power carriage feeds used in a normal manner.



Catalog Number	Motor Specifications				Price
	Current	Phase	Cycle	Voltage	
CL331BT	A.C.	1	60	115	\$157.00
CL331DT	A.C.	1	60	230	164.00
CL333DT	A.C.	3	60	220	189.00
CL333FT	A.C.	3	60	440	199.00

Write for price of Independent Power Feed with motor for other current characteristics.



# Specifications

10"-1 1/16"

	10"	13"
<b>CAPACITY</b>		
Swing over bed and saddle wings .....	10-1/8"	13-1/8"
Swing over cross slide, engine lathe .....	5-7/8"	7-3/4"
Swing over cross slide, toolroom lathe .....	5-3/4"	8"
Swing over cross slide without chip guard, engine lathe only .....	6-3/4"	8-3/4"
Between centers (various bed lengths) .....	14", 20", 27", 34"	16", 28", 40", 52"
<b>HEADSTOCK</b>		
Capacity through spindle, nose type collet chuck or lathe chuck .....	1-3/8"	1-3/8"
Maximum collet capacity, handwheel or handlever type .....	1-1/16"	1-1/16"
Threaded spindle nose, diameter and threads per inch .....	2-1/4"-8	2-1/4"-8
Cam lock spindle nose, size .....	4" type D1	4" type D1
Long taper key drive spindle nose, size .....	LOO	LOO
Center, Morse taper .....	No. 2	No. 3
Width, each step of 4-step cone pulley .....		1-3/4"
Width, each step of 3-step cone pulley .....	1-5/16"	2-3/8"
<b>SPINDLE SPEEDS</b> (approximate, not exact)		
With 4-Step Cone Pulley 1-speed motor, r.p.m. ....		<b>Direct Drive</b> 940, 628, 418, 270   <b>Back-Geared</b> 135, 90, 60, 40
2-speed motor { High speeds—r.p.m. ....		940, 628, 418, 270   135, 90, 60, 40
Low speeds—r.p.m. ....		470, 314, 209, 135   67, 45, 30, 20
With 3-Step Cone Pulley 1-speed motor, r.p.m. ....		940, 497, 270   135, 71, 40
2-speed motor { High speeds—r.p.m. ....		940, 497, 270   135, 71, 40
Low speeds—r.p.m. ....		470, 248, 135   67, 35, 20
1-speed motor { High speeds—r.p.m. ....	<b>Direct Drive</b> 1400, 898, 585	<b>Back-Geared</b> 250, 160, 105
Low speeds—r.p.m. ....	740, 470, 304	130, 85, 55
2-speed motor { High speeds—r.p.m. ....	1400, 898, 585	250, 160, 105
Low speeds—r.p.m. ....	740, 470, 304	130, 85, 55
	700, 449, 292	125, 80, 52
	370, 235, 152	65, 42, 27
Higher spindle speeds available at extra cost, up to .....	2400 r.p.m.	1600 r.p.m.
<b>THREADS AND FEEDS</b>		
Number of changes for threads and feeds .....	70	48
Range of threads cut .....	4 to 480	4 to 224
Range of longitudinal feeds .....	.0007" to .0836"	.0015" to .0841"
Range of cross-feeds .....	.0003" to .0303"	.0006" to .0315"
Lead screw, 29° Acme thread, diameter and threads .....	3/4"-8	1"-6
<b>COMPOUND REST</b>		
Cross slide travel, engine lathe model .....	6-1/4"	8-3/4"
Cross slide travel, toolroom lathe model .....	5-7/8"	8-1/8"
Angular hand feed, compound rest top slide .....	2"	3-1/8"
Tool post opening for tool holder shank .....	3/8" x 13/16"	1/2" x 1-1/8"
<b>TAILSTOCK</b>		
Center, Morse taper .....	No. 2	No. 3
Spindle travel .....	2-1/8"	4-1/4"
Set-over of top for taper turning .....	11/16"	15/16"
<b>MOTOR</b>		
Recommended size, one-speed .....	3/4 h.p.	1 h.p.
Recommended size, two-speed .....	1 h.p.—1/2 h.p.	1-1/2 h.p.—3/4 h.p.
Optional size, one-speed .....	1 h.p.	1-1/2 h.p.
Optional size, two-speed .....		2 h.p.—1 h.p.

## SOUTH BEND'S Precision LATHES...

FOR over 50 years South Bend has lead the way in the manufacture of Precision Lathes. This has been possible only through a devoted program of testing, checking and refining every operation in the manufacturing process.

Inspect any South Bend Lathe. You'll see many of the reasons why South Bend's remain trouble free throughout long years of rough and tough service, why they deliver ultra-fine finish and why they last a lifetime if given proper care.