

## SOUTH BEND SELF-CONTAINED DRIVE PRECISION FLOOR LATHES

The 10-K Self-Contained Motor Drive Floor Lathe is made in four models, Model A, Model B, Model C and Toolroom. These lathes are the same and have the same equipment as corresponding models of 10-K Bench Lathes described on the preceding pages 16 and 17, with the exception of the selfcontained drive equipment, chip pan and floor legs. Specifications are the same except for shipping weights and cubic feet boxed.

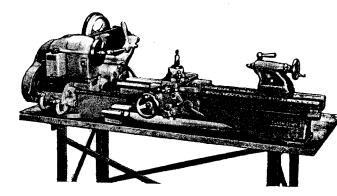
Self-contained drive equipment is permanently mounted back of the lathe headstock and consists of the self-contained motor drive unit (patented) for 1/2 h.p. motor, motor pulley with 5/8" hole, belt guard for motor belt and necessary belting.

Either flat belt or V-belt cone pulleys are supplied for the headstock. The flat belt drive transmits power with extreme smoothness required for high precision and fine finish. The V-belt drive is well adapted to production work, especially for heavy roughing cuts at slow speeds. See page 17.

	BED LENGTH	BETWEEN CENTERS	CUBIC FEET	BOXED CRATED WEIGHT WEIGHT POUNDS POUNDS	WITH 16-SPEED V-BELT SELF-CONTAINED DRIVE		WITH 12-SPEED FLAT BELT SELF-CONTAINED DRIVE		
	PEEI	INCHES	BOXED		POUNDS	CAT. NO.	PRICE	CAT. NO.	PRICE
TOOLROOM	3	16	33	875	700	CL8270Y	\$905	CL8970Y	\$889
	3½	22	33	900	725	CL8270Z	935	CL8970Z	919
	4	28	37	925	750	CL8270A	965	CL8970A	949
MODEL A	3	16	33	825	650	CL270Y	675	CL970Y	659
	3½	22	33	850	675	CL270Z	705	CL970Z	689
	4	28	37	875	700	CL270A	735	CL970A	719
	4½	34	37	900	725	CL270R	777	CL970R	761
MODEL B	3	16	33	805	630	CL267Y	592	CL967Y	576
	3½	22	33	830	655	CL267Z	622	CL967Z	606
	4	28	37	855	680	CL267A	652	CL967A	636
	4½	34	37	880	705	CL267R	694	CL967R	678
MODEL C	3	16	33	795	620	CL253Y	516	CL953Y	500
	3½	22	33	820	645	CL253Z	546	CL953Z	530
	4	28	37	845	670	CL253A	576	CL953A	560
	4½	34	37	870	695	CL253R	618	CL953R	602

# 10- SOUTH BEND GAP BED PRECISION BENCH LATHES

The 10-K Gap Bed Bench Lathe is made with 41/2\* foot bed and is available in three models. Model A, Model B and Model C. Also available in the Self-Contained Motor Drive Lathes with Model A, Model B and Model C. (See copy above.) The 10-K Gap Bed Lathes have a  $\mathbf{1}''$  gap measured from the face plate when bed insert is in place. When 4'' insert is removed, the 5'' gap allows 147/8'' swing capacity. Ideal for larger work requiring boring and facing operation. All models of the 10-K Gap Bed Lathe can be supplied with either flat belt or V-belt cone pulleys for the headstock. These lathes are the same and have the same equipment as the corresponding models of 10-K Bench Lathes described on the preceding pages. All other specifications are the same except for shipping weights. See pages 18 and 19.

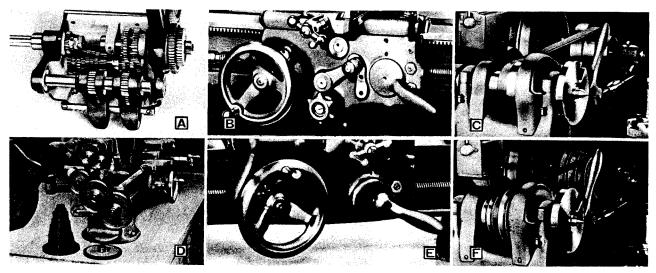


South Bend 10-K Gap Bed Bench Lathe

### 10-K HORIZONTAL MOTOR DRIVE GAP BED LATHES

Model	Bed Length Feet	Between Centers Inches	Cubic Feet	Boxed Weight	Crated Weight	With 16-Spe Self-Contain		With 12-Spe Self-Contai	
	- reei	Inches	Boxed	Pounds	Pounds	Cat. No.	Price	Cat. No.	Price
A B C	4 ½ 4 ½ 4 ½ 4 ½	34 34 34	29 29 29	700 685 675	565 550 540	CL770RG CL767RG CL753RG	\$680 597 520	CL670RG CL667RG CL653RG	\$663 580 505
	· · · · · · · · · · · · · · · · · · ·	10-k	SELF-CO	NTAINED [	DRIVE GAI	BED LATH	ES	-•	
A B C	4 ½ 4 ½ 4 ½	34 34 34	37 37 37	930 910 900	755 735 725	CL270RG CL267RG CL253RG	\$812 729 653	CL970RG CL967RG CL953RG	\$796 713 637

<sup>\*</sup> Available in only 4½ Bed Lengths.



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

MODEL C 9" Bench Lathes are the same as the Model B Lathes, except that they do not have the worm drive and clutch in the apron for operating the power feeds. Lead screw and half-nuts are used for power longitudinal feeds and the cross-feeds are hand-operated. Otherwise the equipment is the same. Bench and electrical equipment are not included. See pages 48 and 60.

TOOLROOM 9" 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 dial; thread cutting stop; large face plate; and micrometer carriage stop. Bench and electrical equipment are not included in price of lathe. See pages 48 and 60 to 63.

- D. Change Gears Supplied for Model B and C Lathes
- E. Apron supplied on Model C Lathe
- F. Patented Sixteen-speed V-belt Horizontal Motor Drive

### TWO TYPES OF DRIVES Twelve or Sixteen Spindle Speeds

All models of 9" 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.

### 9-inch South Bend Bench Lathes

MODEL	BED LENGTH	BETWEEN CENTERS	S FEET	BOXED CRATED WEIGHT POUNDS POUNDS			WITH 16-SPEED V-BELT HORIZONTAL MOTOR DRIVE		WITH 12-SPEED FLAT BELT HORIZONTAL MOTOR DRIVE	
	FEET	INCHES			POUNDS	CAT. NO.	PRICE	CAT. NO.	PRICE	
TOOLROOM	3	16	21	550	440	CL8744Y	\$709	CL8644Y	\$691	
	3½	22	21	565	455	CL8744Z	733	CL8644Z	715	
	4	28	23	580	470	CL8744A	757	CL8644A	739	
MODEL A	3	16	20	500	390	CL744Y	484	CL644Y	466	
	3½	22	20	515	404	CL744Z	508	CL644Z	490	
	4	28	21	530	420	CL744A	532	CL644A	514	
	4½	34	24	545	435	CL744R	566	CL644R	548	
MODEL B	3	16	20	485	375	CL777Y	393	CL677Y	375	
	3½	22	20	500	390	CL777Z	417	CL677Z	399	
	4	28	21	515	405	CL777A	441	CL677A	423	
	4½	34	24	530	420	CL777R	475	CL677R	457	
MODEL C	3	16	20	475	365	CL715Y	308	CL615Y	290	
	3½	22	20	490	380	CL715Z	332	CL615Z	314	
	4	28	21	505	395	CL715A	356	CL615A	338	
	4½	34	24	520	410	CL715R	390	CL615R	372	

Note: Above lathes are equipped with our standard drive unit which accommodates most ½ h.p. motors sold by us. For ½ h.p. motors Frame NEMA No. 66 and larger requiring a larger drive unit, such drive will be supplied at no extra charge when lathe is ordered with motor. If lathe is ordered less motor, we will supply a standard drive unless requested to supply the larger drive unit for which an additional charge of \$11.00 will be made.

### SPECIFICATIONS

•	CAPACITY OF LATHE  Swing over bed and saddle wings	
1	Size of center, Morse taper         No. 2           Spindle travel         2½"           Each graduation on tailstock spindle         ½"           Tailstock top set-over for taper turning         ½"	
•	COMPOUND REST  Cross slide travel (models A, B, C)	
1	FOOL POST Size of tool holder shank	

SPINDLE SPEED	S (approximate,	not exact)
	Direct Drive	Back-Geared
With flat belt		
High, r.p.m. 1	270, 750, 446	250, 145, 86
Low, r.p.m.	692, 410, 244	134, 81,50
With V-belt		
High, r.p.m	1200, 900,	235, 179,
*	662, 505	130, 100
Low, r.p.m.	640, 490,	130, 95,
•	362, 272	70, 54
HEADSTOCK	•	• •
Hole through s	pindle	
	t capacity	
	iameter and threac	
	Morse taper	
Width of cone	pulley step for be	elt 1"
	te diameter	
	earing diameter.	
ортого с		/ 10

THREAD CUTTING RANGE
Toolroom and Model A—48 pitches,
R.H. or L.H4 to 224 per inch
Models B and C—45 pitches,
R.H. or L.H
Lead screw, 29° Acme thread . 34" dia.—8 thrds.
POWER LONGITUDINAL FEEDS
Toolroom and Model A-
48 feeds
Model B—26 feeds
Model C—14 feeds
POWER CROSS-FEEDS
Toolroom and Model A-
48 feeds
Model B—23 feeds
MOTOR

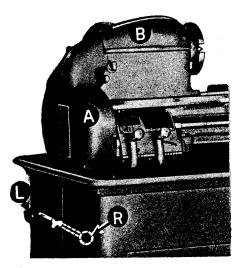
Standard size of motor recommended . . . . 1/2 h.p.

# **9**"

Precision

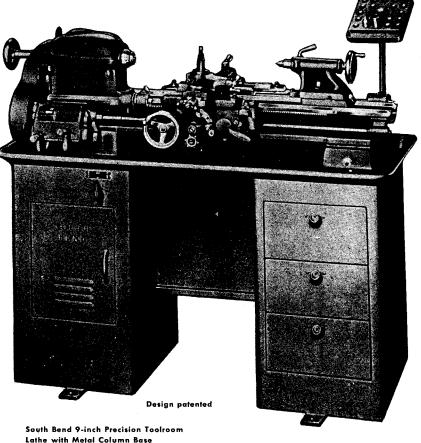
FLOOR LATHES
WITH METAL COLUMN
BASE UNDERNEATH

MOTOR DRIVE



### UNUSUAL SAFETY FEATURES

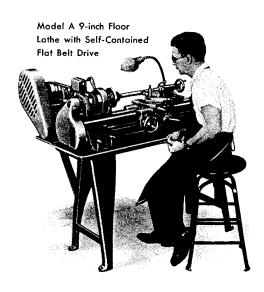
South Bend 9-inch Underneath Motor Driven Lathes have an automatic safety interlock which makes it impossible to open the end gear guard, "A", or the cone pulley cover, "B", until the belt tension lever, "L", is placed in position "R", disconnecting power.



These lathes are the same as corresponding models of 9-inch 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,  $103/4" \times 51/2" \times 14"$  as shown in illustration, or without drawers.\* A built-in chip pan with 5/6" bead around the edge forms the top of the metal column base. Regular 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 the price of lathe. See pages 60 to 63.

Specifications are the same as for corresponding models of 9-inch 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; high range, 112, 150, 195, 265, 570, 760, 1010, and 1365. 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	BETWEEN CENTERS		BOXED WEIGHT	CRATED WEIGHT	WITH 16-SPEED V-BELT UNDERNEATH MOTOR DRIVE		WITH 12-SPEED FLAT BELT UNDERNEATH MOTOR DRIVE	
	FEET	INCHES	BOXED	POUNDS	POUNDS	CAT. NO.	PRICE	CAT. NO.	PRICE
TOOLROOM	31/2	22	56	930	740	CL78344ZD	\$1006	CL8344ZD	\$ 988
TOOLKOOM	4	28	68	960	760	CL78344AD	1038	CL8344AD	1020
	31/2	22	56	900	710	. CL7344ZD	781	CL344ZD	763
MODEL A	4	28	86	930	720	CL7344AD	813	CL344AD	795
	41/2	34	86	950	730	CL7344RD	848	CL344RD	830
	31/2	22	56	885	695	CL7377ZD	689	CL377ZD	672
MODEL B	4	28	68	915	705	CL7377 AD	721	CL377AD	704
	41/2	34	68	935	715	CL7377RD	756	CL377RD	739
	31/2	22	56	880	685	CL7315ZD	604	CL315ZD	586
MODEL C	4	28	68	910	690	CL7315AD	636	CL315AD	618
	41/2	34	68	930	695	CL7315RD	671	CL315RD	653



## 9" SOUTH BENDSELF-CONTAINED DRIVE PRECISION FLOOR LATHES

The 9-inch Self-Contained Motor Drive Floor Lathe is made in four models, Model A, Model B, Model C and Toolroom. These lathes are the same and have the same equipment as corresponding models of 9-inch Bench Lathes described on the preceding pages 20 and 21, with the exception of the self-contained drive equipment, chip pan and floor legs. Specifications are the same except for shipping weights.

Self-contained drive equipment is permanently mounted back of the lathe headstock and consists of the self-contained motor drive unit (patented) for  $\frac{1}{2}$  h.p. motor, motor pulley with  $\frac{5}{8}$ " hole, belt guard for motor belt and necessary belting.

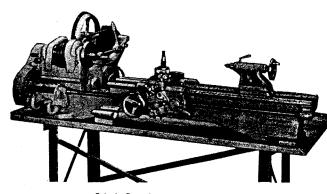
Either flat belt or V-belt pulleys are supplied for the headstock. The flat belt drive transmits power with the extreme smoothness required for high precision and fine finish. The V-belt drive is well adapted to production work, especially for heavy roughing cuts at slow speeds. See Page 21.

Model	Bed Length	Bet ween Centers	Cubic Feet	Boxed Weight Pounds	Crated Weight Pounds	With 16-Speed V-belt Self-Contained Drive		With 12-Speed Flat Belt Self-Contained Drive	
	Feet	Inches	Boxed			Cat. No.	Price	Cat. No.	Price
TOOLROOM	3	16	30	835	660	CL8244Y	\$808	CL8944Y	\$790
	3½	22	30	860	685	CL8244Z	833	CL8944Z	815
	4	28	34	885	710	CL8244A	858	CL8944A	840
MODEL A	3	16	30	775	600	CL244Y	583	CL944Y	565
	3½	22	30	800	625	CL244Z	608	CL944Z	590
	4	28	34	825	650	CL244A	633	CL944A	615
	4½	34	34	850	675	CL244R	668	CL944R	650
MODEL B	3	16	30	760	585	CL277Y	492	CL977Y	474
	3½	22	30	785	615	CL277Z	517	CL977Z	499
	4	28	34	815	635	CL277A	542	CL977A	524
	4½	34	34	835	660	CL277R	577	CL977R	559
MODEL C	3	16	30	740	575	CL215Y	407	CL915Y	389
	3½	22	30	775	605	CL215Z	432	CL915Z	414
	4	28	34	805	625	CL215A	457	CL915A	439
	4½	34	34	825	659	CL215R	492	CL915R	474

# 9" SOUTH BEND GAP BED PRECISION BENCH LATHES

The 9-inch Gap Bed Bench Lathe is made with  $41/2^*$  foot bed and is available in three models, Model A, Model B and Model C. Also available in the Self-Contained Motor Drive Lathes with Model A, Model B and Model C. (See copy above.) The 9-inch Gap Bed Lathes have a 1" gap measured from the face plate when bed insert is in place. When 4" insert is removed, the 5" gap allows 141/8" swing capacity. Ideal for larger work requiring boring and facing operation.

All models of the 9-inch Gap Bed Lathe can be supplied with either flat belt or V-belt cone pulleys for the headstock. These Lathes are the same and have the same equipment as the corresponding models of 9-inch Bench Lathes described on the preceding pages. All other specifications are the same except for shipping weights. See pages 20 and 21.

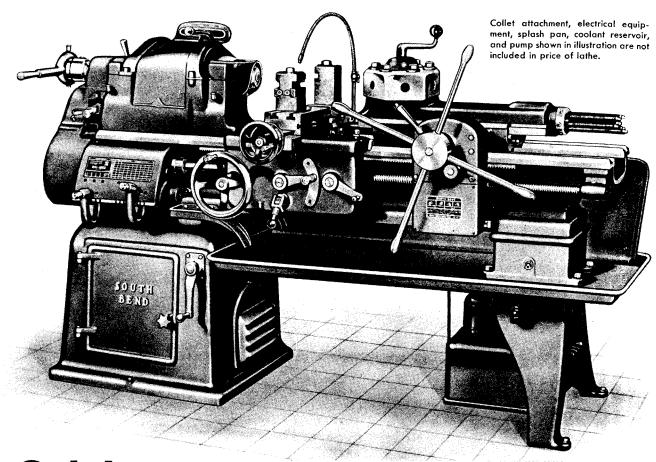


9-inch Gap Bed Bench Lathe

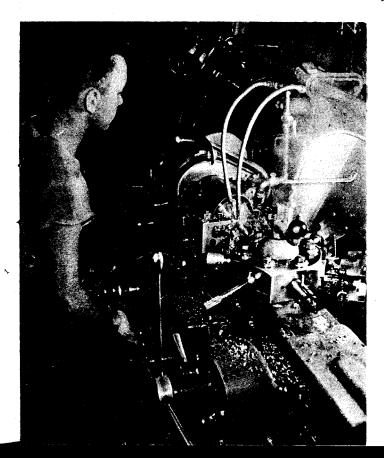
### 9" HORIZONTAL MOTOR DRIVE GAP BED LATHES

Bed Model Length	Length	Length	Between Centers	Cubic Feet	Boxed Weight	Crated Weight	With 16-Spo Self-Contai		With 12-Spec Self-Contai	
	Feet	Inches	Boxed	Pounds	Pounds	Cat. No.	Price	Cat. No.	Price	
A	41/2	34	24	575	465	CL744RG	\$616	CL644RG	\$598	
В	4 1/2	34	24	560	450	CL777RG	525	CL677RG	507	
С	41/2	34	24	550	440	CL715RG	440	CL615RG	422	
		9"	SELF-CON	TAINED DE	RIVE GAP	BED LATHE	S			
A	41/2	34	34	880	705	CL244RG	\$718	CL944RG	\$700	
В	41/2	34	34	865	690	CL277RG	627	CL977RG	609	
С	41/2	34	3.4	855	689	CL215RG	542	CIGITAR	524	

<sup>\*</sup> Available in only 4½ Bed Lengths.



# 2-H SOUTH BEND Precision TURRET LATHES



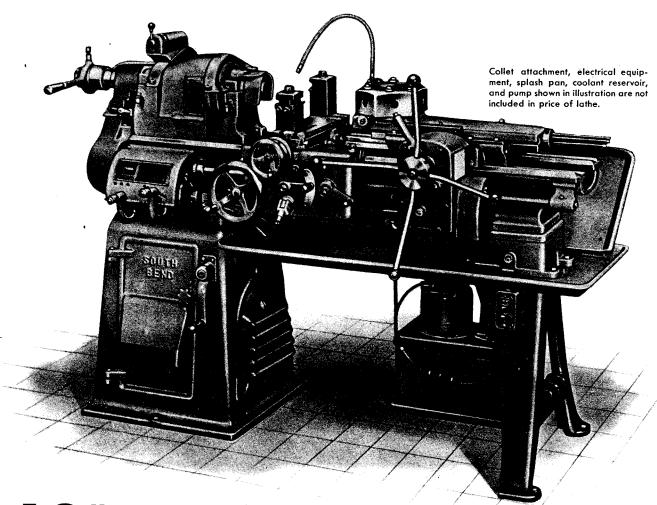
Designed for the efficient production of duplicate parts, the South Bend No. 2-H Turret Lathe has the precision for exacting close-tolerance operations, smooth power for producing a fine finish, and versatility that reduces set-up time to a minimum.

The ram-type turret has both power feed and hand feed, with an adjustable feed trip and stop for each of the six turret faces. The turret head indexes automatically on the return stroke of the turret slide. The quick change box provides 48 changes for power turret feeds. Change gears in the turret apron provide an additional change for turret power feed, independent of the universal carriage feeds in both rate of feed and direction of feed. Turret ram lock is provided.

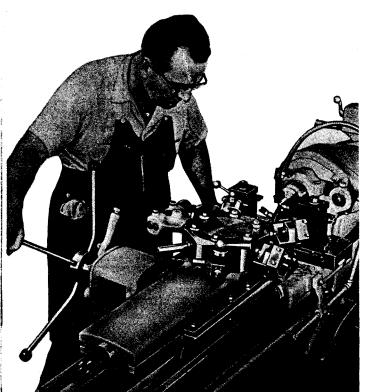
Full advantage may be taken of the higher cutting speeds of tungsten carbide tools as the result of the wide range of speeds and feeds available. The use of a two-speed motor permits quick change from high speeds to low speeds for reaming and tapping operations.

CATALOG NUMBER	BED LENGTH FEET	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	PRICE F.O.B. FACTORY
CL2CT	6	115	3175	2810	\$3658
CL2DT	7	130	3300	2900	3727

**NOTE**—These lathes can be supplied with hand feed only for the turret if desired. Write for information.



# 13" SOUTH BEND Precision TURRET LATHES



The South Bend 13" Turret Lathe is a dependable tool for the manufacture of duplicate parts. The turret head indexes and locks automatically when the turret slide is returned to the starting position. An individual feed trip and stop for each face of the turret accurately regulates the length of the cut with either the power feed or the hand feed.

Power feeds for the turret slide are driven by a lever operated friction clutch, permitting instant engagement and disengagement. Quick change box of lathe provides 144 power turret feeds .0006" to .1093". Lever shift gears in turret apron permit quick selection of fast, intermediate or slow feeds. Direction of feed is reversed by changing gears in turret apron.

Turret is mounted on inside bed ways and can be placed close to lathe headstock to eliminate excessive overhang of work or tools. Turret head is hollow so that either work or turret tools may pass entirely through the 1" diameter turret tool holes.

CATALOG NUMBER	BED LENGTH FEET	CUBIC FEET BOXED	BOXED WEIGHT POUNDS	CRATED WEIGHT POUNDS	PRICE F.O.B. FACTORY
CL1BT	5	88	1875	1570	\$2560
CL1CT	6	103	1950	1620	2618
CL1DT	7	117	2025	1670	2676

NOTE: These lathes can be supplied with hand feed turret if desired. Write for information.