



the
all
new
**south
bend**

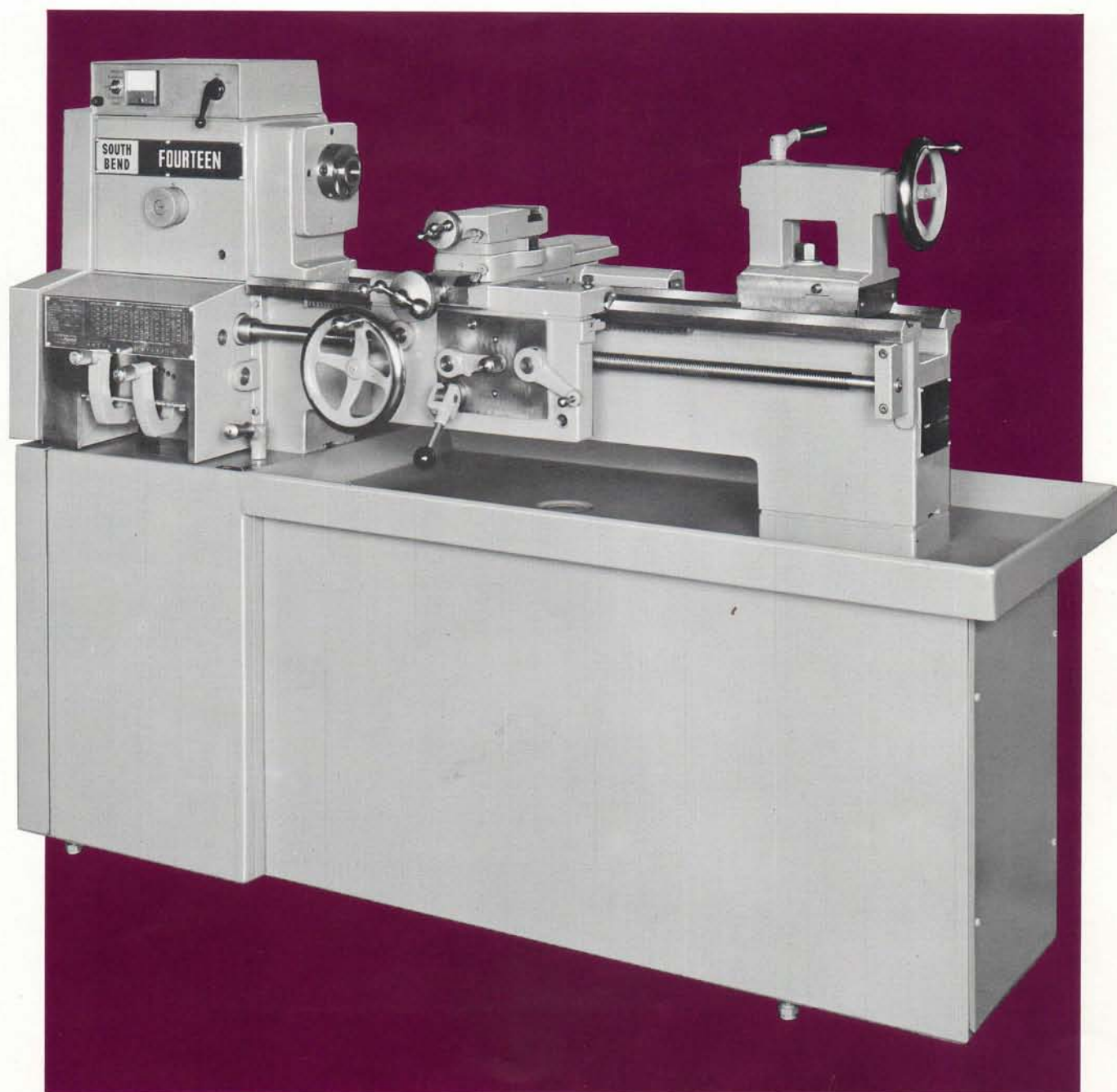
14 INCH ENGINE LATHE

OF PRECISION MACHINE TOOLS SINCE 1906

BUILDERS

South Bend® precision engine lathe

new 14"



NOW

a new style design that makes all other lathes old-fashioned...here's why:

BETTER FINISHES

... because vibration has been eliminated from the headstock by positioning the entire drive system in the base of the lathe.

... because heat build-up has been eliminated from the headstock by locating the heavy cut power range gearing in a transmission in the base of the machine.

... because you get infinitely variable speeds and there is no gap between the high and low spindle speed ranges.

... because the 3" D-1 cam lock spindle is dynamically balanced and supported by two extremely large precision tapered roller bearings for greater stability.

BETTER ROUGHING ABILITY

... because the variable speed drive features balanced, anodized aluminum, polyurethane impregnated sheaves which offer a high coefficient of friction with the belt so practically no power is wasted.

... because the full power of the drive is delivered to the spindle.

EASIER TO OPERATE

... because the electronic speed selector is sure and precise — with only one, simple control.

... because the electronic speed indicator is direct reading.

... because you simply operate one lever to shift from high to low speeds (and remember, there is no gap in obtainable speeds between the two ranges).

... because all operating controls are on the front of the lathe so the operator does not have to reach across the chuck.

... because you never have to run this lathe through its speed range to prevent sticking of the variable speed drive.

LONG, DEPENDABLE SERVICE

... because of the heavy flame hardened and ground bedways.

... because all the gears in the transmission run in a bath of oil.

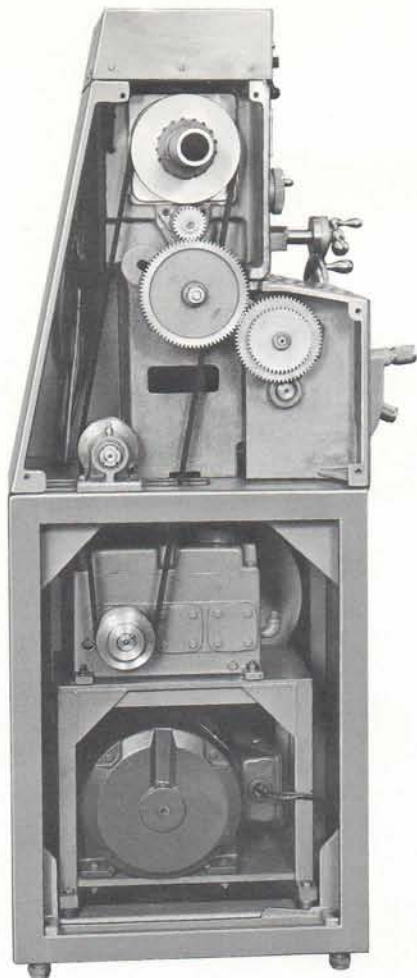
... because of the efficient pressure lubrication system in the headstock.

... because the variable speed drive requires no lubrication.

... because the speed changer will not operate except when the lathe is running — this prevents damage to the variable speed drive.

... because there are over 60 years of experience building high-quality lathes behind this machine.

**doesn't this add up to
today's greatest dollar value? YOU BET!**

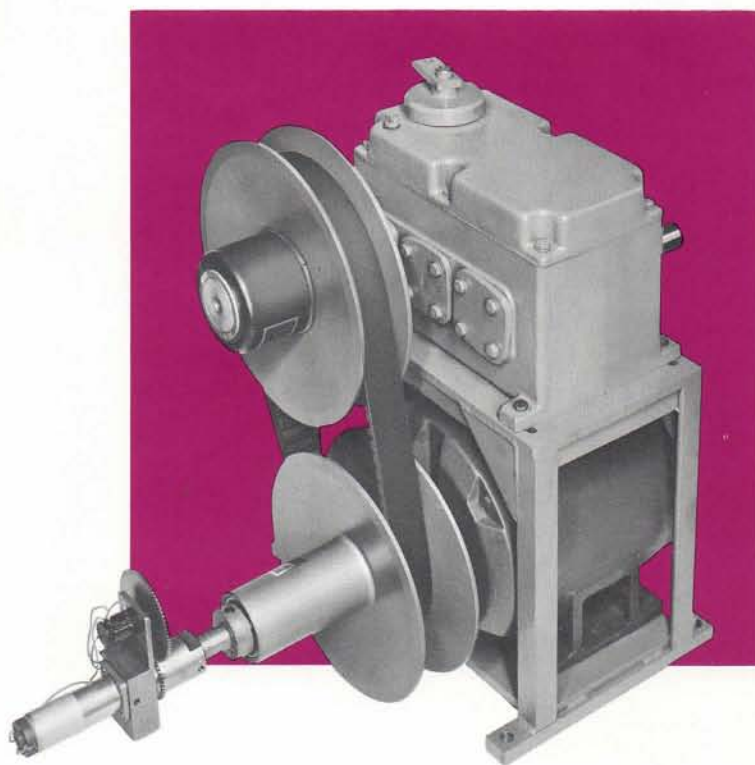


CLEAN AS A WHISTLE

This view reveals the unique, simple design of the drive system gearing for the heavy cut power range that has been built into the new type transmission atop the motor base. The result? Vibration and heat build-up have been removed from the headstock to give you optimum spindle performance.

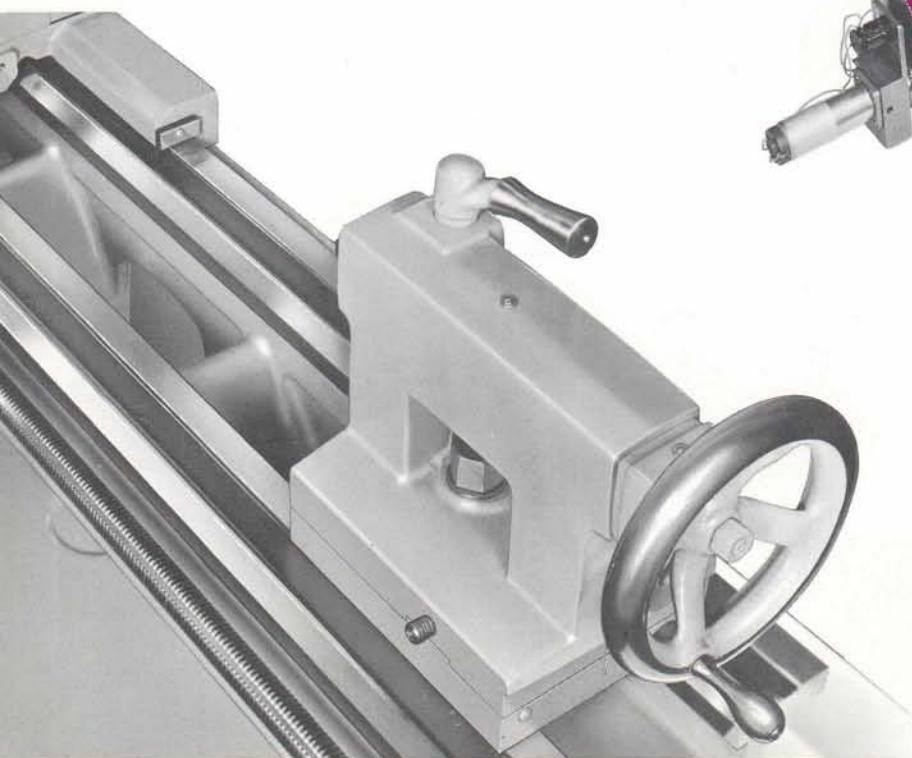
No Matter How You Cut It

...this new 14" South Bend lathe will do it quicker and easier



POWER PACKAGE

Here is the variable speed drive with its two anodized aluminum, polyurethane impregnated sheaves which deliver full power from the 3 hp motor. The drive never has to be lubricated.



HUSKY

The spindle in this husky tailstock can't bind when fully retracted because of a special non-freeze feature. Note the heavy flame hardened bedways and "chip-shoot" construction that sends chips out the back of the machine.



OPERATOR'S EYE VIEW

The crossfeed and compound direct reading micrometer dials feature a satin chrome finish. Apron design includes an interlock to prevent simultaneous engagement of the threads and feeds.

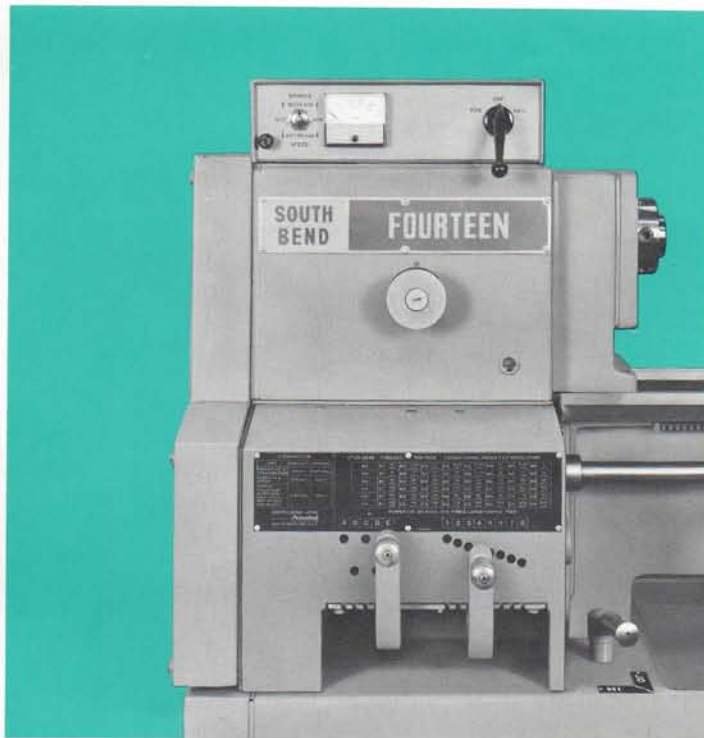
HANDY

You move only a single lever to shift from the high to low speed ranges . . . and there is no gap between them. Furthermore, you never have to run this lathe through its speed range to prevent sticking of the variable speed drive.



SPACE-AGE CONTROLS

Electronic speed selector is sure and precise — with only one simple control. The direct reading speed indicator is also electronic. And, of course, all the controls are in front of the machine so you never have to reach across the chuck or workpiece.



SPECIFICATIONS

CAPACITY

Swing over bed and saddle wings	14 1/8"
Swing over cross slide	8 1/4"
Swing over cross slide with taper attachment	8 1/4"
Center distances	28", 40"

HEADSTOCK

Capacity through spindle	1 1/32"
Maximum collet capacity	
Drawbar type	1 1/16"
Spindle nose collet type	1 3/8"
Cam lock spindle nose	3" - D1
Size of center, Morse taper	#3

SPINDLE SPEEDS

Spindle speeds	variable
Spindle speeds range (high)	300 - 1800 rpm
Spindle speeds range (low)	50 - 300 rpm
Motor size	3 H.P.

GEAR BOX — THREADS AND FEEDS

Number of threads and feeds	48
Range of threads per inch	4 - 224
Longitudinal feeds per spindle revolution	.0015 - .0841
Cross feeds per spindle revolution	.00056 - .0315
Lead screw, diameter and threads	1" - 6 acme

COMPOUND REST

Cross feed travel	8 3/4"
Cross feed travel with taper attachment	8 1/8"
Angular hand feed of top slide	3 1/8"
Tool post opening for tool holder shank	1/2" x 1 1/8"

TAILSTOCK

Size of center (Morse taper)	#3
Spindle travel	4 1/4"
Set over of top for taper turning	1 1/16"

SHIPPING WEIGHT (approx.) 1300 lbs.

STANDARD EQUIPMENT

Included as standard equipment are: motor and drum switch control, two centers, tool post assembly, small face plate, thread dial indicator, spindle sleeve, wrenches, installation plan and manual.

MODELS

CL146RP	28" center distance, 208 Volts
CL146RD	28" center distance, 230 Volts
CL146RF	28" center distance, 460 Volts
CL146FP	40" center distance, 208 Volts
CL146FD	40" center distance, 230 Volts
CL146FF	40" center distance, 460 Volts

All above models wired for 3-phase, 60 Hz. (cycle) AC supply.

ACCESSORIES

Push button station, in lieu of standard drum switch:

*ES842P	3 phase, 60 cycle, 208 volts, with 3 HP-1800 RPM Motor
*ES842DF	3 phase, 60 cycle, 230/460 volts, with 3 HP-1800 RPM Motor
Electric motor brake for 3 HP-1800 RPM Motor:	
*CE2635P	3 phase, 60 cycle, 208 volts
*CE2635DF	3 phase, 60 cycle, 230/460 volts
*CE1401	Fused disconnect
*CE1402	Non-Fused disconnect
CC3506	3 Jaw Chuck, 6"
CC3508	3 Jaw Chuck, 8"
CC3510	3 Jaw Chuck, 10"
CC4206	4 Jaw Chuck, 6"
CC4208	4 Jaw Chuck, 8"
CC4210	4 Jaw Chuck, 10"
CC5206TT	Handlever Collet Attachment
CC4306TT	Handwheel Collet Attachment
CC2180TT	Large Face Plate
CC2175TT	Small Face Plate
CL2250T	Thread Cutting Stop
CL2400TT	Steady Rest
CL2395TT	Follower Rest
*CLF1545TT	Telescopic taper attachment with hardened and ground cross feed and compound rest screws (supplied fitted to lathe)

*CL2032T	Hardened and ground cross feed and compound rest screws, in lieu of regular
*CL2027TT	Double tool cross slide with hardened and ground cross feed screw
*CL3870TT	Hardened tailstock spindle, in lieu of regular
*CL2620TT	Power feed bed turret
CL3375TT	Square turret for compound rest cross slide
CL3376T	Square turret for double tool cross slide
CC6309TT	Step chuck closers for 3" and 4" chucks
CC6311TT	Step chuck closers for 5" and 6" chucks
CL1955TT	Metric transposing gears (with lathe)
CL968TT	Micrometer carriage stop
CE1770Q	Collet Rack
CL2680T	Milling Attachment
*CL4021	Preparing lathe for coolant
CL501TT	Coolant — 1 phase, 60 cycle, 115 volts
CL503TT	Coolant — 3 phase, 60 cycle, 230/460 volts
CL2185T	Four position carriage stop
CL2795RT	Dial indicator carriage stop
CL2061B	Splash pan (for lathe with 28" center distance)
CL2061C	Splash pan (for lathe with 40" center distance)
*CL3308TT	Fine feed handwheel (in lieu of regular)
*CE5522	Special Paint Colors

*Should be specified when ordering lathe.



SOUTH BEND LATHE....

offers you a complete line of metalworking
PROFIT MAKERS... including

- Precision Lathes, 10" to 17"
- 1307 Super Precision Toolroom Lathes
- Vertical Milling Machines
- Bench Shapers
- Drill Presses
- Deka Drill® Automatic Multiple Spindle Drilling and Tapping Machines
- Johnson® Mechanical Power Presses
- South Bend-Ingersoll Electrical Discharge Machining Equipment

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Because our Users do! Need we say more?

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