

Topics

12
SPINDLE
SPEEDS

SHAVED AND
HARDENED
GEARS

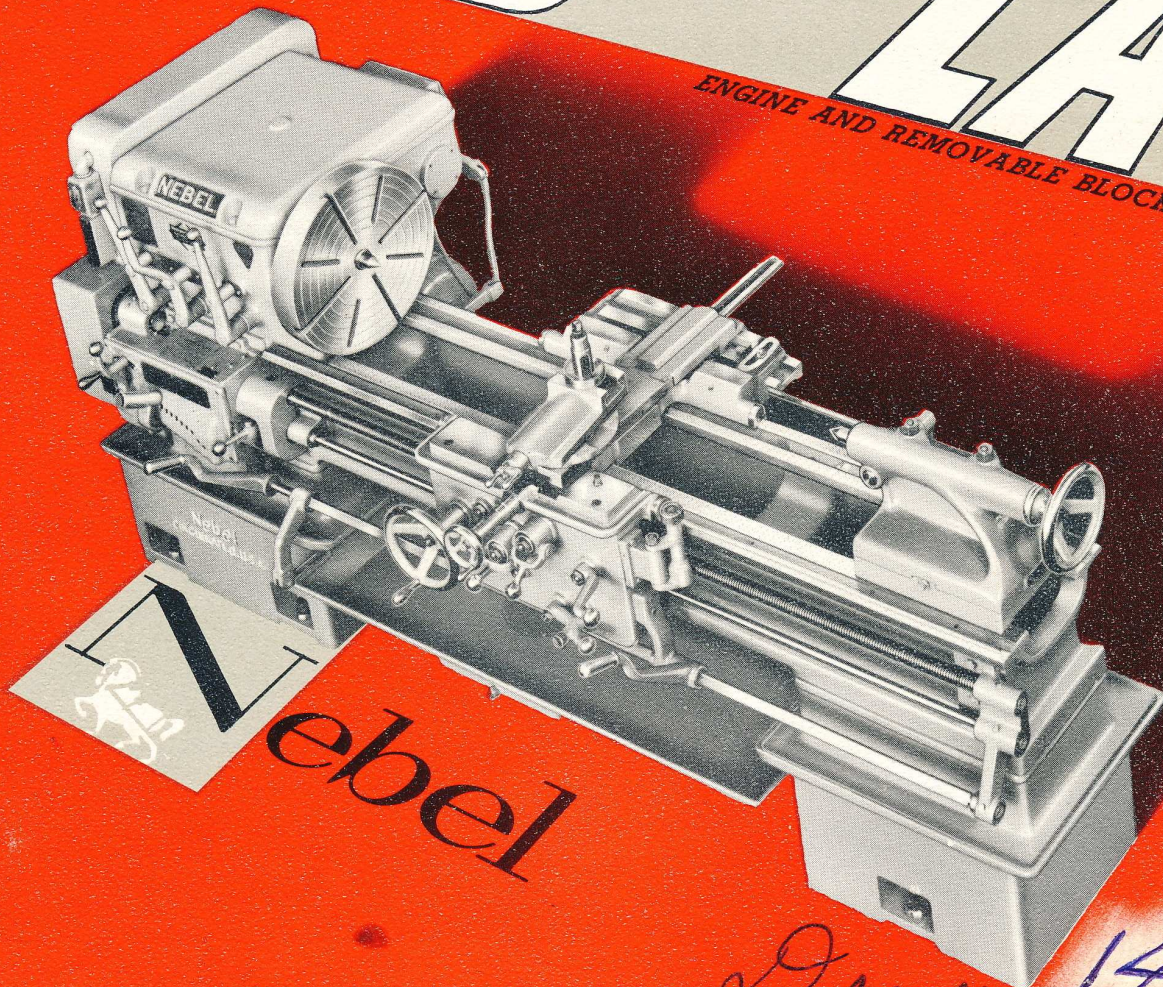
HEAVY,
DURABLE

Lathe (General)

Drawer 14

NEW 16" Nebel LA

ENGINE AND REMOVABLE BLOCK GAP LATHE



nebel

Drawer 14



the new

designed for the shop that needs speed, precision and production

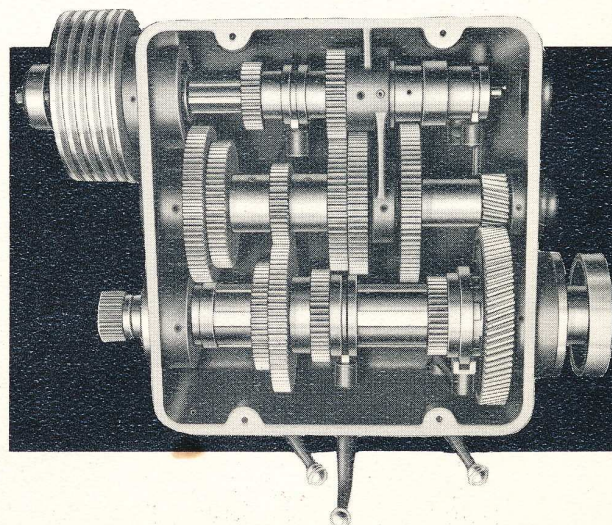
The new Nebel LA series is a low price lathe with many refinements normally found only in more expensive lathes, such as:

- ★ 12 spindle speeds up to 750 rpm
- ★ Shaved and hardened steel gears throughout headstock
- ★ Hardened steel gears throughout apron and quick change box
- ★ Built heavy, solid and substantial
- ★ Long taper spindle nose at no additional charge

The advanced design, construction and operating features built into the new LA series . . . that offer more speed, power, precision and production . . . shown here and throughout this brochure . . . apply equally to the standard engine and the removable block gap models.

POWERFUL GEARED HEADSTOCK

The headstock gears are husky, wide-faced, and all are shaved and hardened. Helical drive gears assure smooth, quiet drive. Spindle rolls effortlessly on Timken anti-friction bearings. Twelve spindle speeds obtained through sliding gear combinations and large multiple tooth clutch. Positive type oil seals. A new dynamic brake motor—that stops spindle instantly—is available at additional charge.



ICATIONS

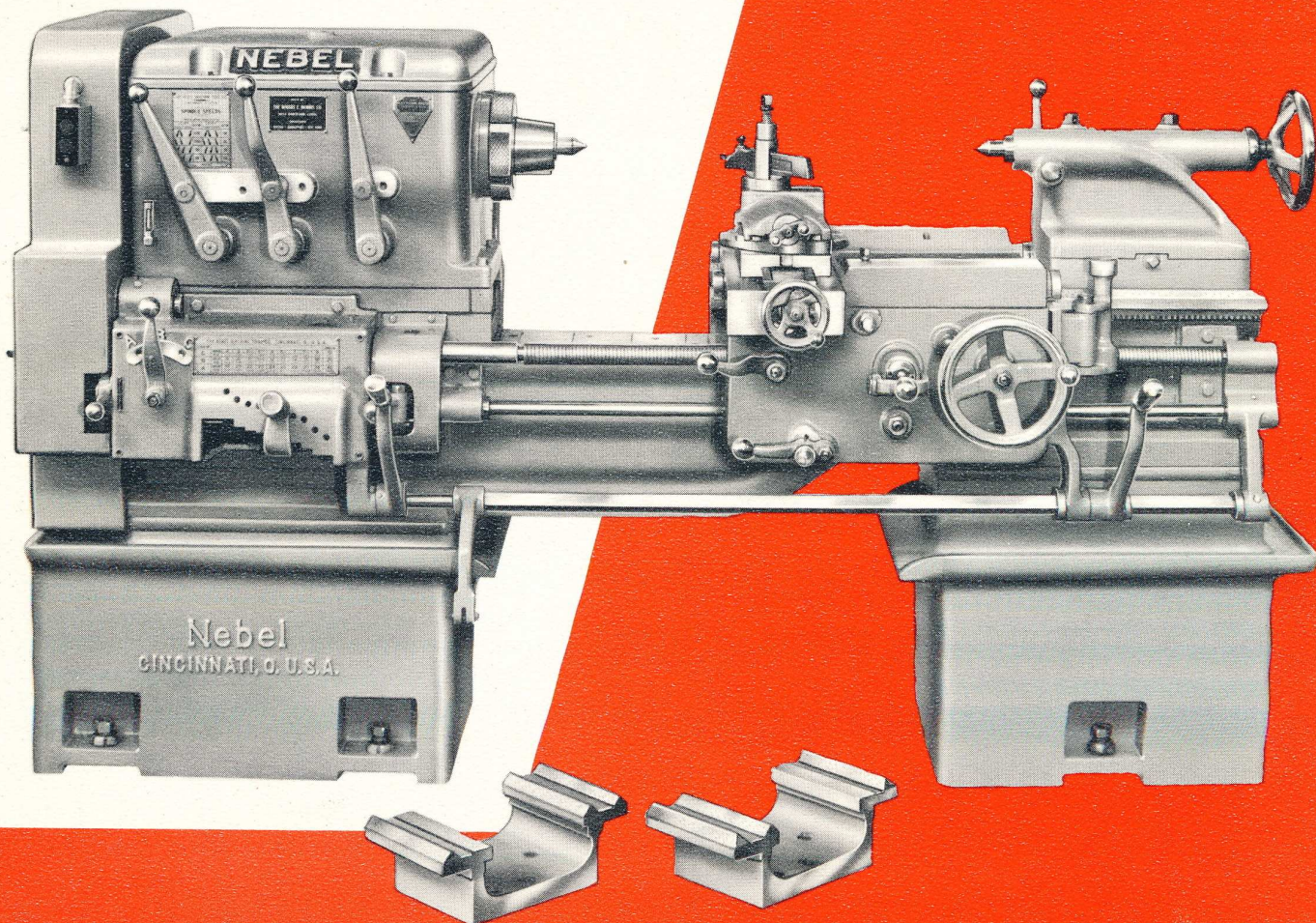
**new LA has
everything!**

The removable block gap model gives all the advantages of the standard engine lathe plus the additional swing capacity of a gap lathe. The removable block comes in two sections, further widening the range of work possibilities. Furnished with threaded eye-bolt.

Swings over ways.....	18½"
Swings through gap.....	27½"
Maximum width of gap.....	15"
Width of each block.....	7½"
Distance from face plate to end of gap.....	11"
Face plate diameter, standard.....	18"
Face plate diameter, extra equipment.....	24"
Weight crated, 6 ft. bed.....	4400 lbs.
Weight crated, each additional 2 ft.....	320 lbs.
Weight boxed, 6 ft. bed.....	5050 lbs.
Weight boxed, each additional 2 ft.....	520 lbs.

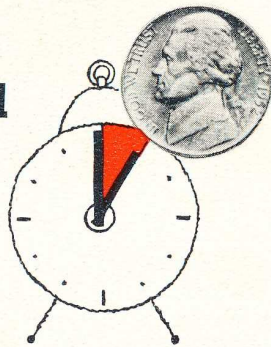
- ★ 12 spindle speeds standard; 24 with 2-speed motor
- ★ shaved and hardened steel gears throughout headstock
- ★ hardened steel gears in apron and quick change gear box
- ★ 30 feed and 28 thread changes standard
- ★ 48 feed and 46 thread changes with 20/40 compounding gears
- ★ heavy bed
- ★ oversize apron and carriage
- ★ wide carriage bridge, heavy compound
- ★ tailstock with 3" diameter spindle
- ★ long taper spindle nose at no additional charge

16"/27" removable block gap lathe



LA

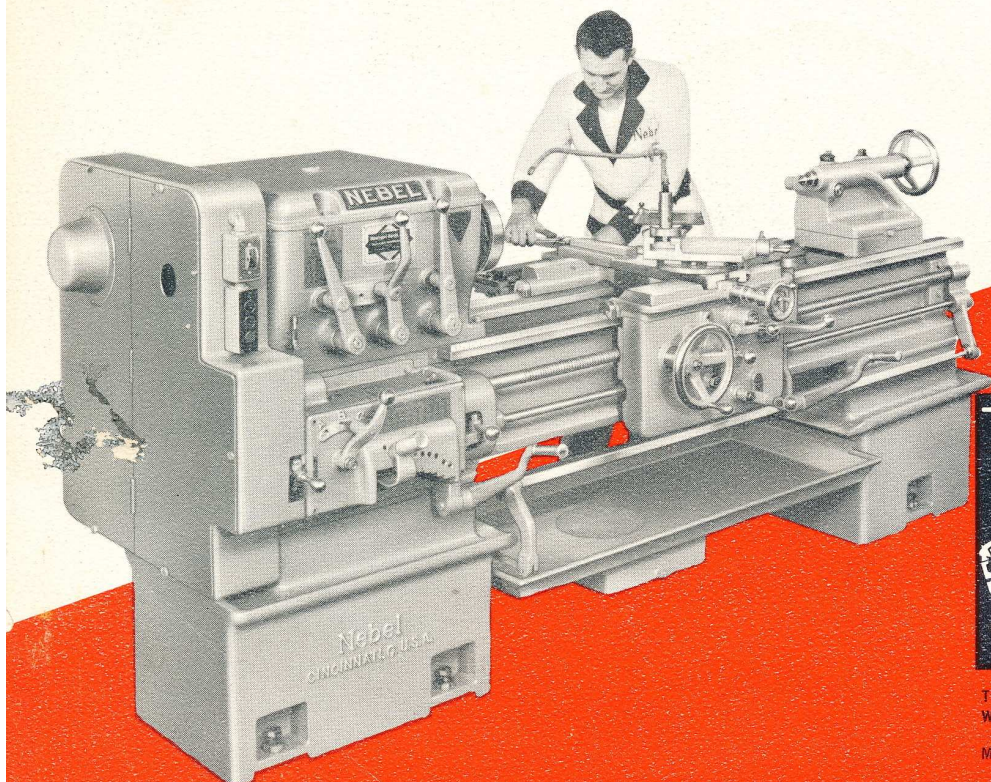
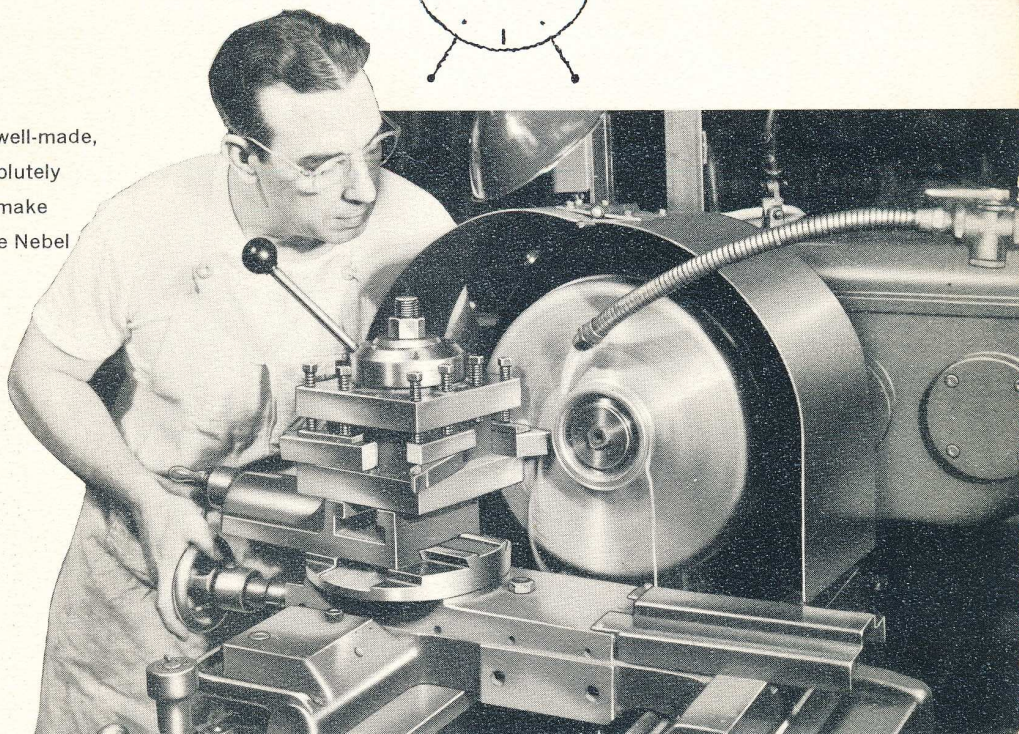
**takes heavy cuts for
less than a nickel
an hour!**



The LA is an economical lathe to own. It's a well-made, basic lathe . . . designed to include only absolutely essential equipment. And yet you can easily make it a production lathe by adding as many of the Nebel accessories and attachments as you wish.

As a production lathe or as a maintenance lathe it's still the most economical lathe to own . . . and certainly the most economical to operate. From the well-lubricated, Timken-equipped headstock to the tip of the tailstock, Nebel lathes are designed for lowest cost operation and maintenance.

Add your original costs to your operating and maintenance costs. Divide by the productive hours of use and you'll find your Nebel LA costs you less than a nickel an hour!



Nebel

THE NEBEL MACHINE TOOL CO., CINCINNATI 25, OHIO, U.S.A.
WORKHORSE OF THE METALWORKING INDUSTRY SINCE 1899

Member the National Machine Tool Builders' Assn.

16" Nebel LA medium duty lathe

APRON

Double wall construction gives rack gear and studs double support: front and rear. All gears are hardened steel . . . with ground alloy shafts. Bronze bushings. Oil reservoir—filled from top of carriage—lubricates all bearings.

Reversing mechanism for length feed in either direction, or for cross feed, without changing direction of spindle rotation. Half-nuts are adjustable for wear and have long bearings solidly cast in apron. Length and cross feed transmitted through large diameter cone friction clutches of quick-acting lever type. The cross feed on the gap lathe is operated by a sliding gear and knob.

CARRIAGE

Travels on 2 vee-ways...and is 26" long. Carriage can thus take the full thrust of the cutting tool without budging. Two pairs of shear wipers keep out chips, prevent scoring. Wide cross bridge provides a broad bearing for the compound rest. Carriage is gibbed to the bed with locking bolt for cross feed work.

LEADSCREW AND FEED ROD

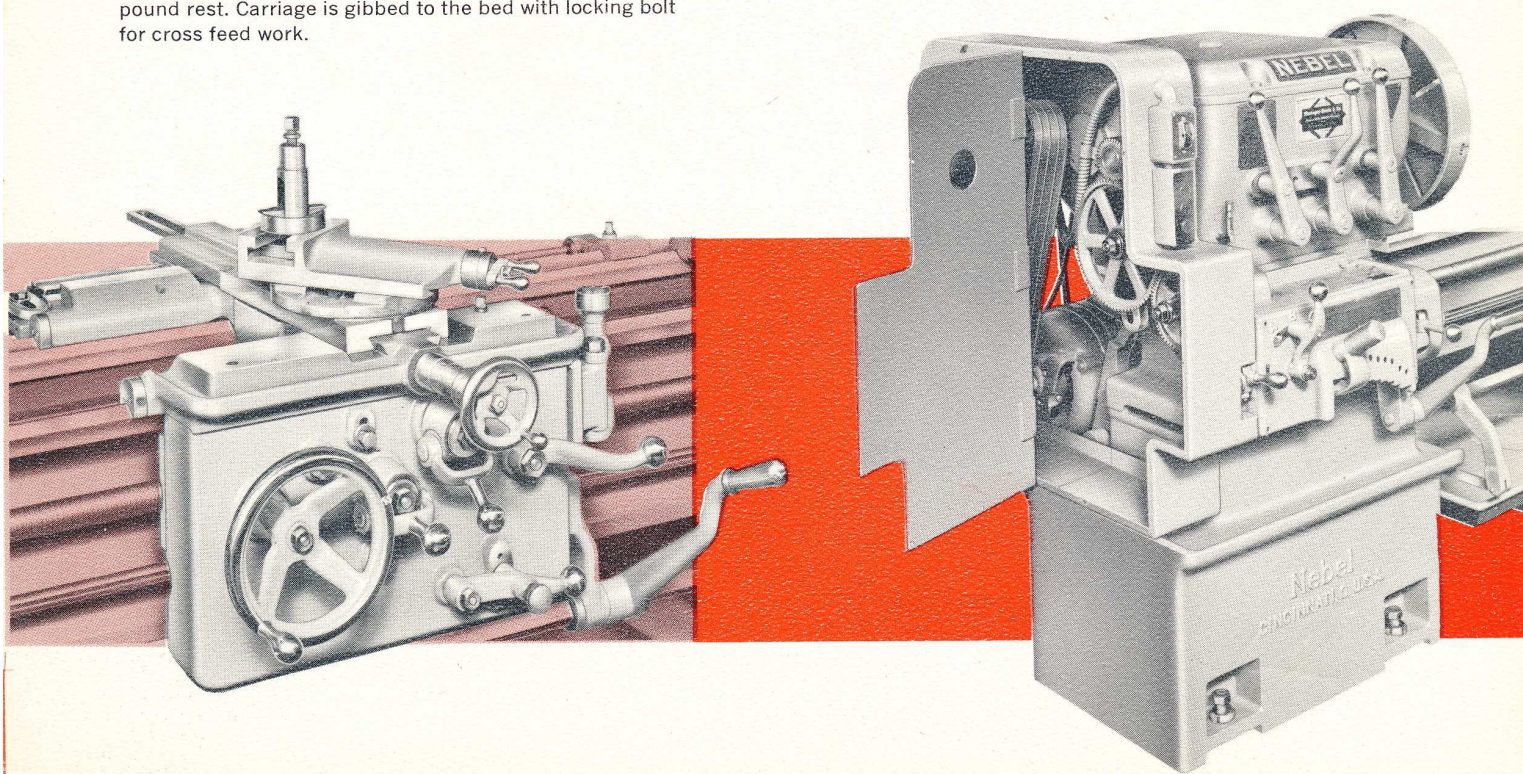
The 16" LA is one of the few lathes in the low price field equipped with both leadscrew and feed rod. This assures double-life accuracy of both control rods.

HINGED END COVER

This convenient arrangement makes end gearing, clutch and pulleys instantly accessible . . . without the necessity of removing the entire cover.

QUICK CHANGE GEAR BOX

Offers a range of 30 feeds and 28 threads. With 20/40 compounding gears, a total of 48 feeds and 46 threads are obtained. All gears are hardened steel mounted on alloy steel shafts. Bronze bushings. Index plate shows position of levers for all feeds and threads. Changes may be made while lathe is running.



more power
more performance
more capacity
more lathe

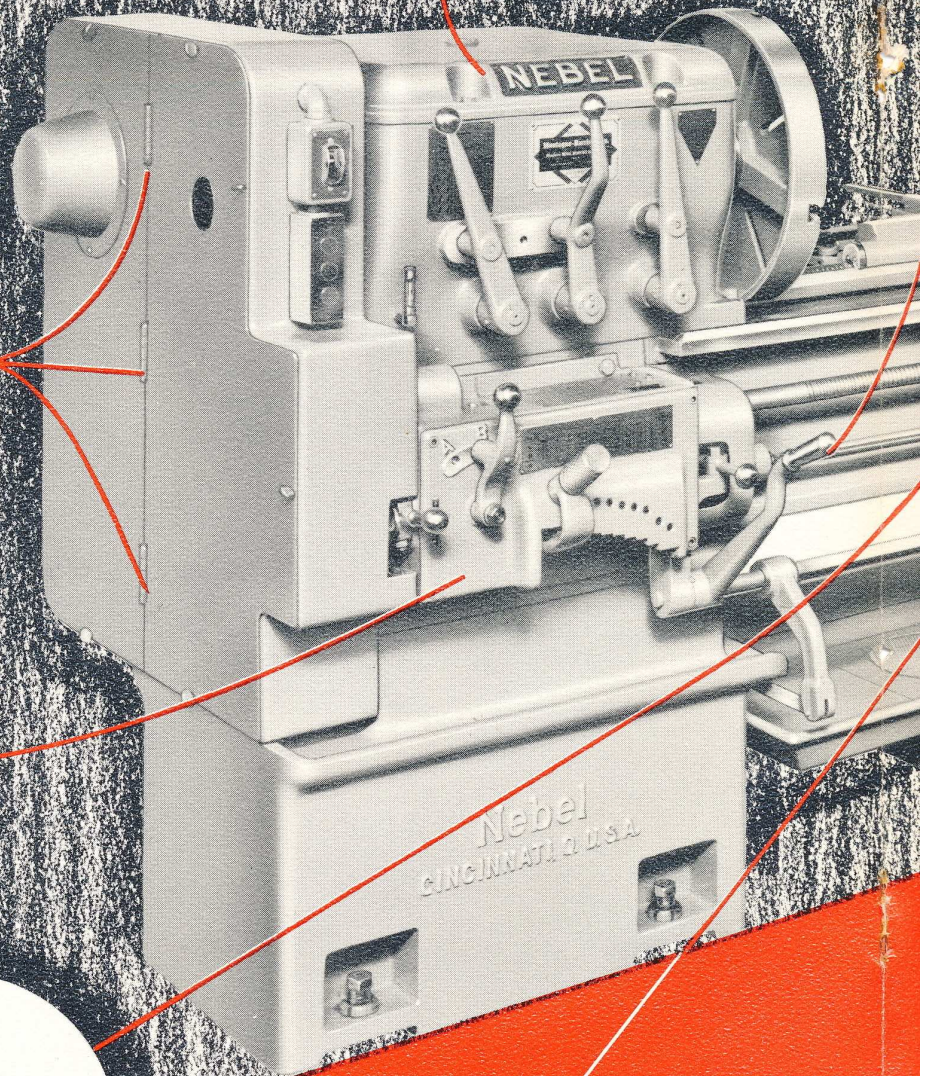
Powerful
12-speed
headstock with
shaved and
hardened
gears

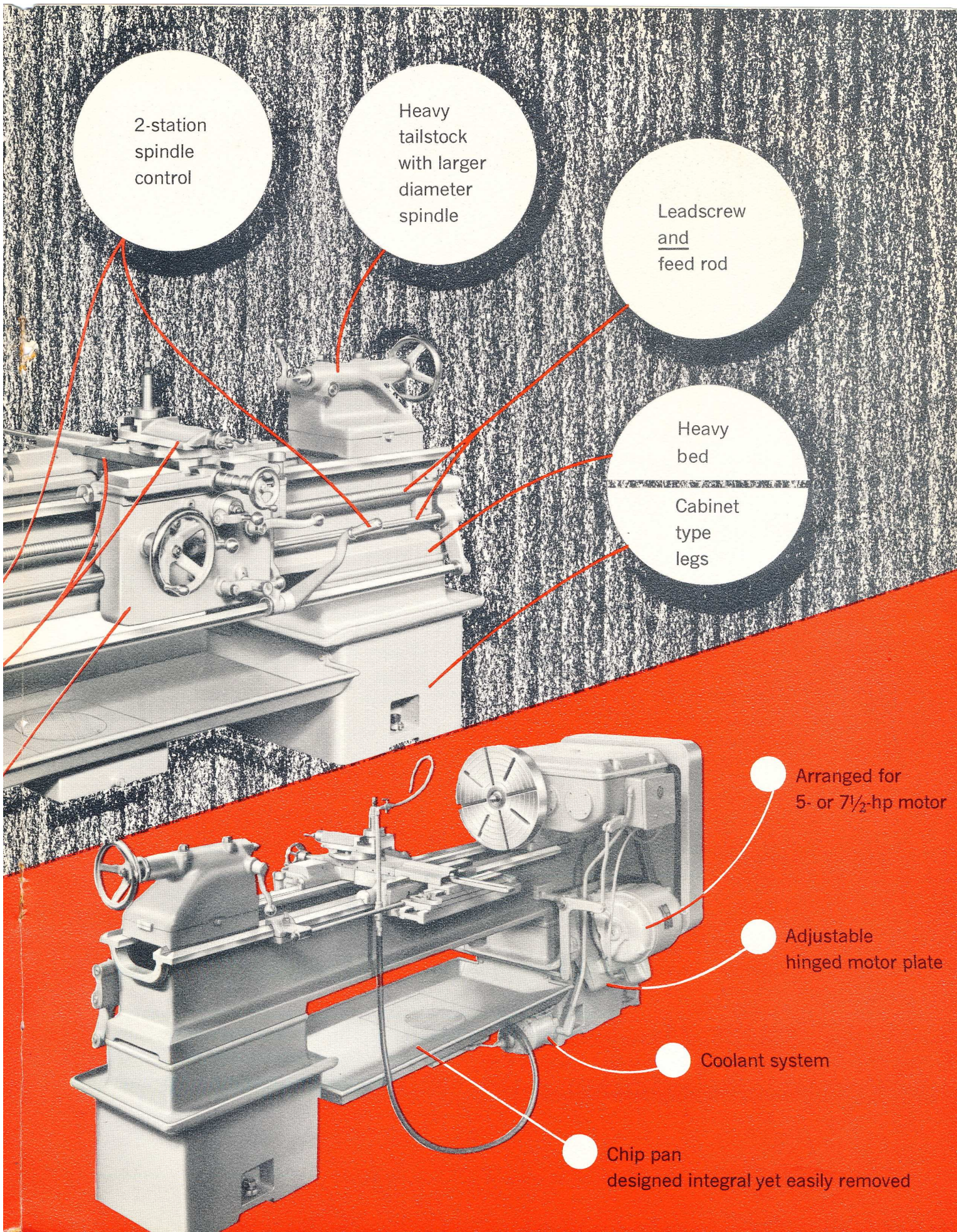
Hinged
end cover

Quick
change
gear box
with
hardened
gears

Wide
bridge
heavy
compound

Oversize
apron
and carriage;
apron has
hardened
gears





2-station
spindle
control

Heavy
tailstock
with larger
diameter
spindle

Leadscrew
and
feed
rod

Heavy
bed

Cabinet
type
legs

Arranged for
5- or 7½-hp motor

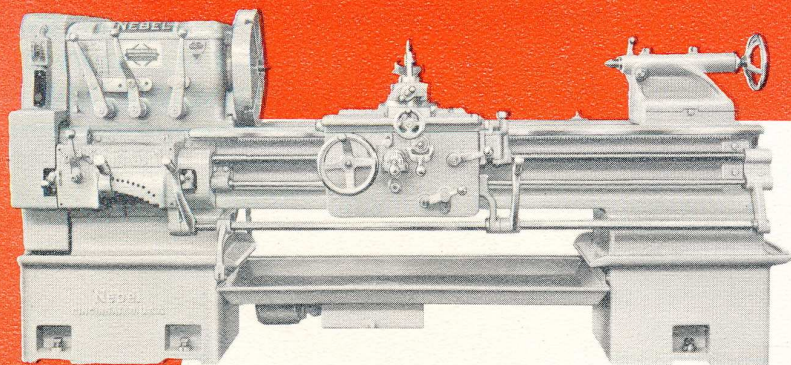
Adjustable
hinged motor plate

Coolant system

Chip pan
designed integral yet easily removed

NEW 16" NEBEL LA SERIES MEDIUM DUTY LATHES

S P E C I F



16" engine lathe

CAPACITY

Swings over ways	18½"
Swings over carriage	12½"
Swings over compound rest slide	11"
Distance between centers, tailstock flush (6 ft. bed)	24"
Size of tools	⅝" x 1⅜"
Steady rest capacity	6"
Face plate diameter	18"

HEADSTOCK

Spindle speeds, number	12
Spindle speeds, standard, range, rpm	13 to 400
Spindle speeds, optional, range, rpm	24 to 750
Spindle speeds with 2-speed 1800/900 rpm motor, number	24
Spindle speeds with 2-speed 1800/900 rpm motor, range, rpm	12 to 750

Driving sheave, pitch diameter	13.1"
Width of sheave (5 V-belts)	4"
Speed of driving sheave, rpm	412
Center, Morse	No. 4
Hole through spindle	1¾"

BED

Width of bed, top	15½"
Depth of bed	12"
Length of bed 6 ft. and multiples of 2 ft. up to	20 ft.

CARRIAGE

Carriage length on bed	26"
Compound rest travel	6"

QUICK CHANGE GEAR BOX

Feed changes, standard, number	30
Feeds, standard, range	.005" to .048"
Threads, standard, number	28
Threads per inch, standard—4, 5, 5½, 5¾, 6, 6½, 7, 7½, 8, 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 23, 24, 26, 28, 30, 36, 40	

WITH 20/40 COMPOUNDING GEARS

Feed changes, number	48
Feeds, range	.0025" to .096"

Threads, number	46
Threads, per inch—2, 2½, 2¾, 2⅞, 3, 3¼, 3½, 3¾, 4, 4½, 5, 5½, 5¾, 6, 6½, 7, 7½, 8, 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 23, 24, 26, 28, 30, 32, 36, 40, 44, 46, 48, 52, 56, 60, 72, 80	

Leadscrew threads per inch, Acme R. H.	4
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TAILSTOCK

Tailstock spindle diameter	3"
Tailstock spindle traverse	8½"

TAPER ATTACHMENT

Taper attachment telescope or plain—maximum taper per ft.	4"
Taper attachment telescope or plain—turns at one setting	18"

MOTOR

Motor for standard speed range 13 to 400 rpm	5-7½ hp, 1200 rpm
Motor for optional speed range 24 to 750 rpm	5-7½ hp, 1800 rpm
Motor (2-speed) for optional speed range 12 to 750 rpm	5-7½ hp, 1800/900 rpm

SHIPPING WEIGHT

Weight crated, 6 ft. bed	4125 lbs.
Weight crated, each additional 2 ft.	320 lbs.
Weight boxed, 6 ft. bed	4850 lbs.
Weight boxed, each additional 2 ft.	520 lbs.
Dimensions of case, 6 ft. bed	4'-4" x 5'-2" x 8'-6" or 190 cu. ft.
Length of case, each additional 2 ft., add	2'-0"

STANDARD EQUIPMENT—Face plate (18" diameter), compound rest, tool post, chasing dial, quick change gear box, cabinet legs (center leg on beds 12 ft. and longer), steady rest, driver plate, centers and wrenches. No. LI taper nose spindle. (Threaded nose optional at no extra cost.)

EXTRA EQUIPMENT—All electrical equipment, hardened steel bed way inserts, taper attachments, collet chuck and collets, milling and keyway attachment, turret on carriage, 4-way tool rest, chip pan, pump and piping, follow rest, special capacity steady rests, micrometer carriage stop, ball bearing centers, pipe centers, lathe tools and dogs, chucks and chuck plates, metric transposing gears. Dynabrake motor.