

NeBEL

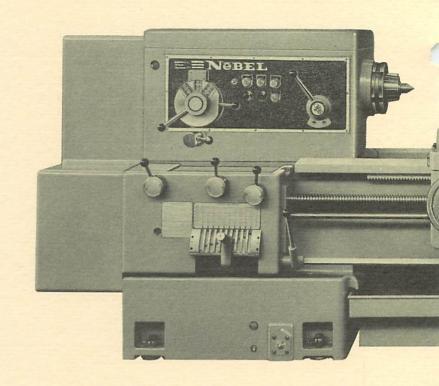
HID 2516-20

HEAVY DUTY ENGINE LATHE

Nebel Lathe Division . Nebel Machine Tool Corp. . CINCINNATI 15, OHIO

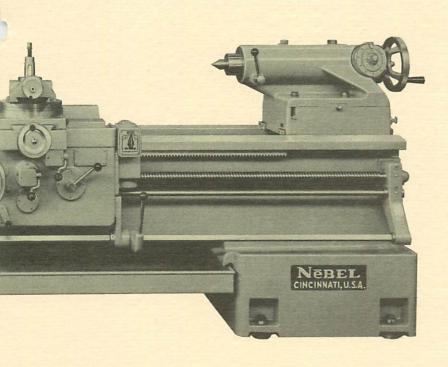
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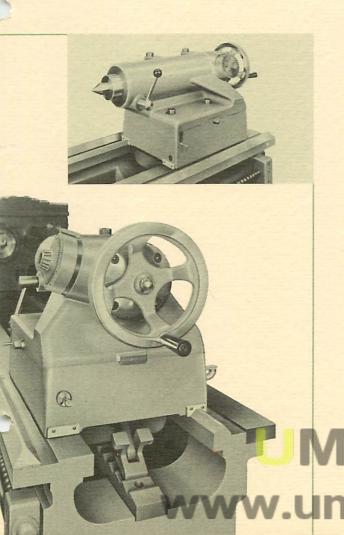


model HD 2516-20 TEBETA heav





luty engine lathe



power traverse tailstock

Heavy duty tailstock, with a large diameter hardened and ground spindle and a hardened insert tang slot, moves under power from the longitudinal feed mechanism by engaging the carriage through an interlock. The tailstock is equipped with a single speed traverse screw and a direct reading traverse indicator providing accurate depth control. Rapid traverse is approximately 200" to 250" per minute. Alternate manual traverse is obtained with the apron handwheel. A heavy duty thrust lock, engaging a rack located in the bed, prevents the tailstock from moving on the bedway under heavy loads. Four clamping bolts and two saddle clamps insure proper clamping to the bedways. One shot lubrication to tailstock ways with oil reservoir located in the base.

box girth design rigid bed

Nebel bed design of box girth provides greater rigidity, longer life and precise accuracy by withstanding extreme stress and strain. The front "V" way guarantees alignment and the rear flat way, with its wide bearing surface, provides ample bearing support to the carriage and all component units. The front "V" way and the rear flat way are equipped with hardened and ground replaceable steel bedways.



MODEL HD 2516-20 HEAVY DUTY ENGINE LATHE also available as removable block gap lathe in Model HDB 2516-20/44

Standard Equipment...

Hardened and ground cross feed screw Bronze compensating cross feed nut Two way power rapid traverse Hardened and ground replaceable steel bedways, front and rear Cabinet legs

Compound rest with hardened and ground feed screw and hinged dirt guard

Extra Equipment . . .

Ball bearing center

Hydraulic duplicating attachment (fixed 45 degree, front swivel mounted or universal longitudinal type)
Telescopic taper attachment
Coolant pan
Coolant pump and equipment
Steady rest
Follow rest
25" diameter face plate
Four way tool block
Connected rests
Plain block rests
Metric translating gears
Micrometer carriage stop

12" diameter driver plate
Single screw tool post assembly
Chasing dial
Hardened and ground tailstock spindle with hardened
insert tang slot
Direct reading tailstock spindle traverse indicator
Shear wipers on carriage and tailstock ways
Centers and necessary wrenches

Multiple carriage stop, six position, with adjustment screws for use on either side of carriage
Single or multiple position cross feed stop for inside and outside location when turning or boring
Two speed tailstock with direct reading spindle traverse indicator
Anti-friction tailstock spindle
Collet chuck attachment and collets
Revolving ball bearing pipe centers
Electric clutch and brake
Hardened and ground cross slide ways
Hardened and ground lead screw
Additional special accessories available on request

Capacity

Swing over bedways and carriage wings Swing over compound rest or cross slide	30¾ " 20½ "
Distance between centers, base length	48"
Center distance increases in increments of	24"
Size of tool	3/4" x 15/8"
Steady rest capacity	1/2" - 7"
Follow rest capacity	1/2" - 51/2"
Face plate, diameter	25"
Driver plate, diameter	12"
Headstock	10
Spindle speeds, number, single speed motor	18
two-speed motor	36
Spindle speed range, 1200 RPM motor	11 - 666
1800 RPM motor	16 - 1000
1800 RPM motor	24 - 1500
1200/600 RPM motor	5½ - 666
1800/900 RPM motor	8 - 1000
1800/900 RPM motor	12 - 1500
Spindle bearings, number	3
Journal diameters:	1000
Front	4"
Center	31/4 "
Rear	23/4 "
Front spindle bearing, precision, tapered roller:	
Outside diameter	7½"
Radial load, 100 RPM, pounds	26,400
Thrust load, 100 RPM, pounds	17,500
Center spindle bearing, precision, tapered roller:	400
Outside diameter	63/8 "
Radial load, 100 RPM, pounds	18,600
Thrust load, 100 RPM, pounds	12,500
Rear spindle bearing:	
Outside diameter	5"
Radial load, 100 RPM, pounds	13,000
Spindle size of hole, straight	21/32"
Spindle size of tapered hole, (American Standard)	#250
Spindle size of center, Morse No	5
Spindle nose, long taper key, size No	L-2
Camlock	8" —D-1
Headstock length on bed	37"

Bec

Length, base length	10'-5"
Length increases in increments of	24"
Width across ways	223/8"
Depth, standard bed	171/2"
Carriage	
Length on ways	29"
Bearing surface square inches	146"
Cross slide, travel with or without taper attachment	16"
Compound rest travel	7"
Bridge width	11½"
Lubrication type.	one shot
Rapid traverse travel—in./min	240"
Feeds & Threads	
Feed changes, number	60
Range in gear drive.	.0027"195"
Thread changes, number	60
Threads per inch, range	1 - 72
Leadscrew diameter	13/4 "
Leadscrew threads per inch	2
Taper Attachment (telescopic)	41/ "
Maximum taper per foot	4½"
Turns at one setting	24"
Tailstock	
Spindle diameter	4"
Center, Morse No. (American Standard)	5
Spindle travel	101/2 "
Spindle set over, right or left	1"
Length on ways	18½"
Main Drive Motor	
Motor capacity, 1200 rpm	20 HP
1800 rpm	25 HP
Weight and Dimensions	
Domestic shipping weight, pounds	11,900
Net weight, each additional 24" length, pounds	640
Floor space required, base length	
Distance, spindle center to floor.	461/4 "
Distance, opinion content to modify the first termination of	