STANDARD-MODERN LATHES
Produced by Kestrel Machine Tools Inc.

17 1/2" SWING INCH ONLY

MADE IN NORTH AMERICA

1754 THE VERSATILE LATHE

The Model 1754 is one of a modern generation of standard engine and toolroom lathes, ideally suited for toolroom, maintenance and production. The lathe is designed and built in North America, and has the important plus features for all turning jobs in your shop.

Standard-Modern lathes have gained a wide reputation for Quality and Reliability and now with more Versatility are THE COMPLETE LATHES.

★ 7-1/2 H.P. Main Drive Motor
★ 16 Speeds
★ Reversible Leadscrew
★ Electric Brake
★ D1-6 Camlock Spindle Nose
★ 2-1/16" (52mm) Hole Through Spindle
★ Hardened & Ground Bedways
★ Exclusive “Dial In” Feedback
★ Optional 30" Between Centers

2 YEAR WARRANTY

www.OzarkToolManuals.com
FEATURES AND SPECIFICATIONS

RATED CAPACITY
Swing over bed and saddle wings ........................................... 17 1/2"
Swing over cross slide ......................................................... 11 1/2"
Distance between centers ................................................... 30", 54"
Main drive motor .................................................................... 7 1/2 H.P.

SPECIFICATIONS
HEADSTOCK
Eight speed gear train with dual speed drive
Number of spindle speeds ......................................................... 16
R.P.M. slow range .................................................................... 30, 48, 80, 127
......................................................... 210, 340, 570, 900
R.P.M. high range ..................................................................... 60, 96, 160, 254
......................................................... 420, 680, 1140, 1800
Spindle nose ............................................................................ D1-6 Camlock
Through hole in spindle ........................................................... 2 1/16"
Taper in spindle nose ................................................................ 750"/ft
Spindle center taper ................................................................... No. 4 Morse

TAILSTOCK
Spindle dia. and length ........................................................... 2 7/16" x 10 1/2"
Taper hole in tailstock spindle .................................................. No. 4 Morse taper
with Tang drive
Spindle travel ............................................................................ 5"
Set over right or left ................................................................. 1"
Length on bed ......................................................................... .9 3/4"

SADDLE
Length on bed ........................................................................... .19"
Width on bridge and cross slide ............................................... .7"
Length of cross slide ................................................................ .22"
Cross slide travel ..................................................................... .9 1/2"
Compound rest travel ............................................................... .3 3/4"
Distance from top of compound slide to center
line of spindle .......................................................................... 2 1/8"
Round tool post for #2 tool holder
Size of shank ............................................................................ .5/8" x 1 3/8"

BED
Width at top ............................................................................. .11 3/4"
Depth ....................................................................................... .10"
Width of front Vee .................................................................. .1 1/2"
Ways, induction hardened vees and flats

THREADS AND FEEDS
Number of changes .................................................................. 60
Range of U.S. standard threads ................................................ 2 to 120 T.P.I.
Range of feed rates per rev. of spindle .................................... .0018" to .112"
Longitudinal and cross feeds are identical
Leadscrew .............................................................................. 1 3/16" dia. x 4 T.P.I. Acme

OPTIONAL ACCESSORIES
Steady Rest .............................................................................. .6"
Follow Rest ............................................................................. 2 1/2"
Taper Attachment .................................................................... .12" stroke
Change gears for metric threads

Approx. shipping weight ......................................................... 3200 lbs.

HEADSTOCK
The headstock is styled to provide centralization of all shift levers on
the front face. The main spindle, over 3" in diameter, is mounted
on Timken Precision tapered roller bearings and provides for a
through hole in the spindle of 2 1/16". This spindle diameter con-
tributes substantially to increased rigidity at the spindle nose.
Sixteen spindle speeds are readily available from the geared head
and dual drive mechanism through the belt speed selector mounted
on the front of the headstock. A conventional direct reading 4 posi-
tion shifter in conjunction with a high-low selector assures conve-
nience and simplicity.
A selective neutral position provides free spindle rotation for set-up
operations. All power train gears are hardened.

APRON AND SADDLE ASSEMBLY
A single ball lever operating in the vertical plane engages longitudi-
ナル feed in the "UP" position and crossfeeds in "DOWN" position.
Through shifting is prevented by a side movement of the lever in
the neutral position.
The threading control lever is conveniently located in relation to the
built-in threading dial and is provided with a safety interlock which
prevents feed operation when half nuts are engaged for threading
or vice-versa. A further refinement which contributes greatly to ease
of control is the use of anti-friction bearings on both the rack-pinion
shift and handwheel shaft. This results in a very free and sensitive
movement of the saddle, which effectively eliminates wear at these
two vital points. This free movement of the saddle together with a
counterbalanced handwheel combines with the precision lead
screw to produce extreme accuracy.

Lubrication of the apron mechanism is provided from a large oil
sump in the lower half of the double walled apron casting. All dials
are satin finished for easy reading and the divisions are machine
graduated.

DIAL IN FEED GEAR BOX
A totally enclosed feed gear box with flood lubrication. This unit
provides 60 rates of power feed or 60 threading leads, all instantly
available through dial selectors. Threading range is 2 to 120 threads
per inch, including 27 T.P.I. The feed range is .0018" to .112" per
revolution of spindle. The ten feed selections may be changed
through the handwheel while the machine is running. Longitudinal
and cross feeds are identical and exactly as indicated. The leads-
screw is 1 3/16" dia. x 4 per inch Acme. The two directional thrust
is taken by double row angular contact ball bearings. A brass shear
pin prevents accidental twisting of the lead screw.

SPINDLE NOSE
The large D1-6 camlock spindle nose allows a 2-1/16" dia. hole
through the spindle and provides maximum rigidity for chuck, face-
plate or collet mounting.

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