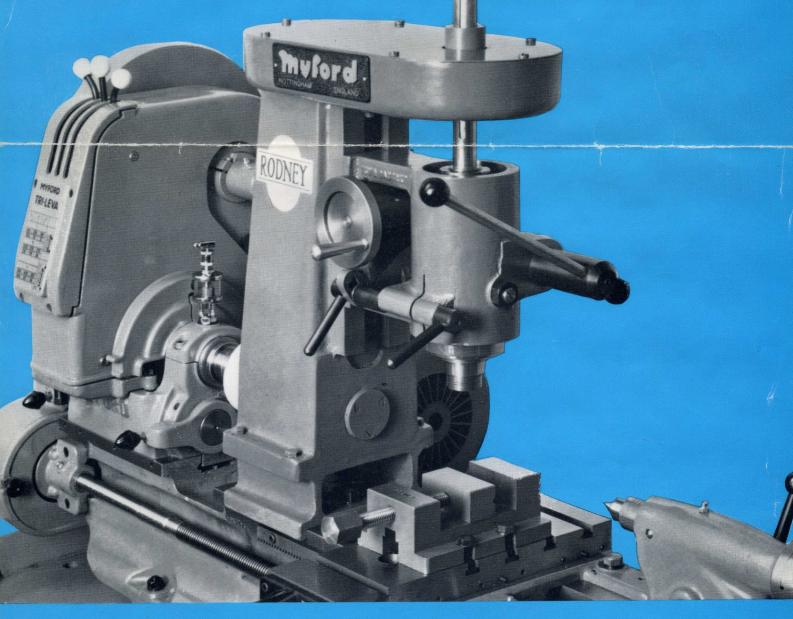
### Mill and Drill with

# Merico Total

### ML7 AND SUPER7

Converts ML7 & Super 7 lathes to vertical miller & drilling machine. Can be added at any time. Mounting only takes minutes. Uses full lathe speed range.

Fine vertical milling down feeds through worm & wormwheel handwheel. Sensitive lever down feed for drilling.



RODNEY

vertical milling & drilling attachment

20/140

## No. 20/140 vertical milling attachment

The 20/140 attachment will greatly increase the capability of any ML7 or Super 7 lathe in milling and drilling operations.

No machine modifications are required and mounting is accomplished in minutes! Thrust screws ensure alignment of input shaft with headstock spindle and two clamp bolts are arranged to secure the unit rapidly and positively to the lathe bed.

The aligning gear-type nylon coupling transmits the whole range of lathe headstock speeds via bevel gears, vertical shaft and adjustable vee-belt to the main spindle which is mounted in heavy duty angular contact ball bearings.

The bevel gears are oil-bath lubricated, and the drive shaft bearings etc. are sealed for life.

Rough setting for height is obtained by raising or lowering the spindle bracket on the column. Fine settings or vertical milling feeds are by handwheel through a 50:1 worm/wormwheel reduction.

A lever operated down-feed is provided for sensitive drilling, for which purpose the worm can be disengaged by releasing a clamp lever. To improve capacity, drills above 4" diameter should be held in a No. 1031 collet.

The attachment is supplied complete with flexible coupling including adaptor (No. 2 M.T.), with drawbar for headstock spindle and open ended key (to prevent rotation of spindle when tightening or releasing nose cap etc.).

The upper and lower illustrations show the RODNEY machine vice (20/141). This is attached to the cross slide using 4 A9861 tee bolts with hexagon nuts and washers. Jaw width  $2\frac{1}{4}$ " (57 mm), jaw height 1" (25 mm), maximum opening  $1\frac{15}{16}$ " (50 mm), overall height app.  $1\frac{15}{16}$ " (app. 50 mm).

#### **Specification**

	inches	mm
Throat depth to face of slide	43/8	110
to bevel box cover	4 3	120
Max height above cross slide		
to spindle nose	6	152
to front of 1031 collet	5 <del>1</del>	140
to end of $\frac{1}{2}$ " collet in		
Clarkson Autolock collet chuck	21/4	57
to ¼" cap. 1A Jacobs drill chuck	31/4	82
Adjustment of spindle bracket on column	31/4	82
Movement (feed) of quill	3	76
Taper in spindle	No. 2 M.T.	
Spindle nose, thread	1 1 x 12 T.P.I. ) As ML7 &	
register diameter	1 1/4"	Super 7
Nett weight, approx.	60 lbs	27 Kg

The **upper** illustration shows the milling of a cast iron clamp plate. This was machined all over, from the solid including the central slot. Cutters used were a  $\frac{1}{2}$  in. diameter parallel shank end mill held in the 1031 collet and a  $\frac{5}{8}$  in. diameter end mill with No. 2 M.T. shank held in with a draw bar.

**Centre.** Showing the 1495 dividing attachment mounted on the cross slide with a  $\frac{1}{2}$  in. diameter end mill held in the 1031 collet in the milling spindle. The dividing attachment spindle is  $2\frac{3}{4}$  in. (70 mm) above the lathe bed and the maximum height from milling spindle nose to dividing attachment spindle  $4\frac{11}{16}$  in. (120 mm).

**Lower** 1, locking nut for jockey pulley spindle, for belt tension adjustment. 2, securing nut for spindle bracket. 3, flexible coupling (steel gear and nylon muff). 4, oil filler plug and 5, oil level plug for bevel box. 6, nut for clamp plate for securing to lathe bed (one at each end). 7, thrust screws.

Illustrations not binding in detail. Designs and specifications subject to change without notice.

IOM/11/74



TELEGRAMS: MYFORD BEESTON NOTTINGHAM