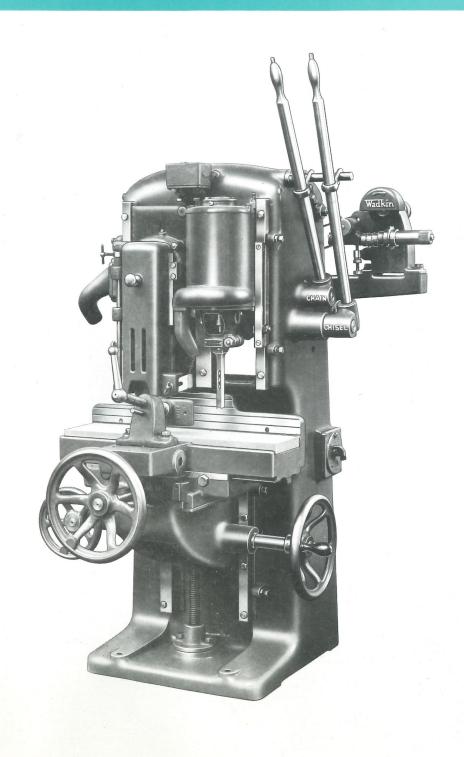
# Wadkin

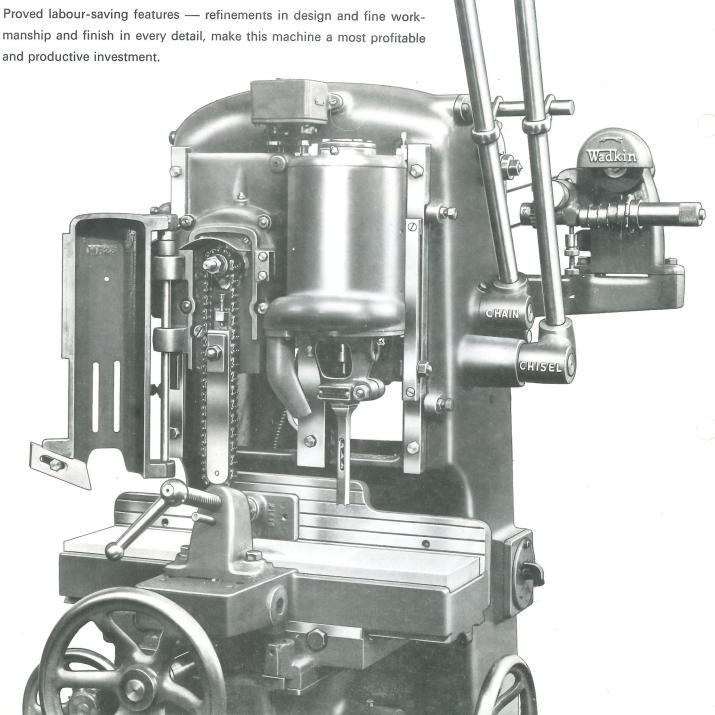
## **Chain and Chisel Mortiser**



## MF Chain and Chisel Mortiser

This combined Chain and Chisel type of Mortiser is designed to meet every mortising requirement with either chain or square hollow chisel. It is a most popular type of Mortiser in the Building and Joinery Trades, and with all who need a strong robust tool, capable of standing hard usage, and producing clean, accurate work.

Proved labour-saving features — refinements in design and fine workmanship and finish in every detail, make this machine a most profitable



- Heavy rigid construction to withstand hard usage, and give reliable working under all conditions.
- 2 Chain and chisel headstocks side by side and each instantly available; no time lost changing from chain to chisel or vice versa.
- 3 Headstocks are direct motorised and automatically controlled. Tools start running just before entering the timber and stop immediately on withdrawal.
- 4 Chips from the chain are collected by built-in fan and exhausted at the side of the machine. Blower removes chips from chisel and keeps marking-out lines always visible.
- 5 Conveniently placed and adjustable hand levers, and large handwheel control to table provides for fast, easy operation.
- 6 Provision made for mortising with chain either in line or offset with chisel.
- 7 All gears for raising and lowering table are enclosed to ensure free movement.
- 8 Provision is made for maintaining chains in good condition by means of a built-in chain grinder. Ratchet device on grinder locates automatically each link under the grinding wheel.

THE MACHINE. The Machine is of substantial construction throughout and is built to precision standards of engineering.

THE TABLE. The Table is rigidly supported on a heavy bracket, carried on wide machined slides. The rise and fall movement is obtained by powerful handwheel operating gear which is protected against dust. Table has longitudinal movement by handwheel and rack and pinion, also cross traverse by handwheel and screw. The weight of the table is taken by a ball thrust bearing and all movements designed for easy operation.

THE CLAMP. The hand-operated Clamp is both quick and powerful in action. Clamping action is downwards to prevent timber lifting and check rod keeps clamp face always square with the job. If required, a clamp operated by compressed air can be supplied at increased

THE CHAIN HEADSTOCK. The Chain Headstock moves in machined slideways and is controlled by adjustable right-hand lever. Motor is an integral part of the headstock and built on to the mortising spindle. Selfadjusting, hinged, chain guard and chipbreaker, together with exhaust fan to discharge chips, are all embodied on the headstock. Adjustment is provided to the hardwood thrust block in the chipbreaker to give the correct position for all widths of the chain.

Provision is made whereby the mortise chain can be set dead in line with the chisel or adjusted for making off-set mortises. An adjusting screw is provided above chain guide bar for taking thrust, and for regulating the length of the chain.

THE HOLLOW CHISEL HEADSTOCK. The Hollow Chisel Headstock is mounted on rigid slideways alongside the chain headstock. Motor is built on and the chuck for the boring bit mounted directly on the motor spindle. Chisels are held in the headstock by a powerful split grip, providing the utmost rigidity to the chisel.

**DEPTH STOPS.** Depth Stops are provided on both headstocks to regulate the depth of mortising. They are quickly adjustable to give any depth of mortise.

SEMI-AUTO CHAIN GRINDER. Semi-Auto Chain Grinder as shown in the illustration opposite is included with the machine. The ratchet feature ensures correct sharpening of each link, and makes re-grinding an easy and fool-proof operation.

THE MOTORS. The Motors are of special mechanical construction using rotor and stator units, and are supplied for alternating current only, of two- or three-phase, 50 or 60 cycles. They are mounted directly on the chain and chisel spindles giving the maximum power to the cutting tools with the minimum of transmission losses. Belts are entirely abolished. Each motor is of the ball bearing type and of ample power for taking the maximum cuts in hard and soft wood.

CONTROL GEAR. Control Gear is of the automatic contactor type and built into the machine in a dust-tight recess in the main frame. The control gear is provided with overload releases, and inherently gives novolt protection. Each motor is automatically started when the hand levers are disengaged from the catch, and stop running when the hand levers are returned to their original position. This feature increases the life of the cutting tools, eliminates any risk of danger to the operator and also prevents any possibility of the work being damaged when being placed in position or removed.

The starting and stopping is effected by the headstocks operating a control which opens and closes the main contactor. A switch placed in a convenient position on the machine body isolates the motors and prevents them being started when making adjustments.

### MF Chain and Chisel Mortiser



PATENT AUTOMATIC STOP ATTACH-MENT. This attachment, by its unique design, will be found to speed up production enormously. It dispenses entirely with marking out, and not only automatically gives the exact position of each mortise, but by means of our patented stop attachment mounted on the side of the table, mortises of different lengths can be cut in any one piece of timber.

Four stops are attached to the holder, giving four different lengths.

These are set for the correct length, and by turning the holder after each complete mortise is cut, each stop is brought into position to engage with a dead stop. We supply six spring stops attached to the long bar, but additional ones can be supplied if desired.

The machine is prepared to receive this attachment. It may therefore be supplied complete with the machine or sent on at a later date. It can be put on or taken off the machine in two minutes.



Machine fitted with Patent Automatic Stop Attachment.

#### DETAILS INCLUDED WITH THE MACHINE

One chain cutter grinder, complete with emery wheel 4" diameter.

Three pairs of sprockets to carry chains of 0.54", 0.62", 0.89" pitches.

One set of adapter bushes, comprising one each  $\frac{3}{16}$ ",  $\frac{1}{4}$ " and  $\frac{3}{8}$ " for bits and  $\frac{13}{16}$ " and  $1\frac{3}{16}$ " for chisels.

One set of depth stops.

One driving belt for cutter grinder.

One set of spanners.

One lubricating pump and tin of ball bearing lubricant.

#### **SPECIFICATION**

Will take timber up to		 	 	 	305 x 230 mm.	12" deep x 9" wide
Maximum size of mortise using	chain	 	 	 	38 x 75 x 150 mm.	1½" x 3" x 6" deep
Maximum size of chisel		 	 	 	25 mm.	1"
Will bore up to		 	 	 	25 x 140 mm.	1" dia. x 5½" deep
0' (. 11		 	 	 	685 x 200 mm.	27" x 8"
Minimum height of table from	floor	 	 	 	500 mm.	19 <u>1</u> "
		 	 	 	270 mm.	10½"
		 	 	 	610 mm.	24"
		 	 	 	110 mm.	41"
Horsepower of motor on chain	spindle	 	 	 	4	4
Horsepower of motor on chisel			 	 	2	2
Speed in r.p.m. of both motors			 	 	3,000	3,000
Speed in r.p.m. of both motors			 	 	3,600	3,600
Floor space with maximum mo			 	 	1300 x 1070 mm.	4' 3" x 3' 6"
Natural mbt		 	 	 	680 kg.	1510 lb.
		 	 	 	840 kg.	1850 lb.
Shipping measurements in cub		 	 	 	1.6 m. <sup>3</sup>	59
Stubbing measurements in cap	10 1001	 				

Wadkin Ltd.

GREEN LANE WORKS, LEICESTER, LE5 4PF, ENGLAND Telephone: 0533 769111

TELEGRAMS: CABLES: TELEX: 34646 (WADKIN, G)

and at YORK HOUSE, EMPIRE WAY, WEMBLEY, MIDDX., HA9 0PA Telex: 262210 Telephone: 01-902 7714

AGENTS IN ALL COUNTRIES THROUGHOUT THE WORLD



As our policy is constantly to improve the design of Wadkin woodworking machinery the details given in this leaflet are not to be regarded as binding.