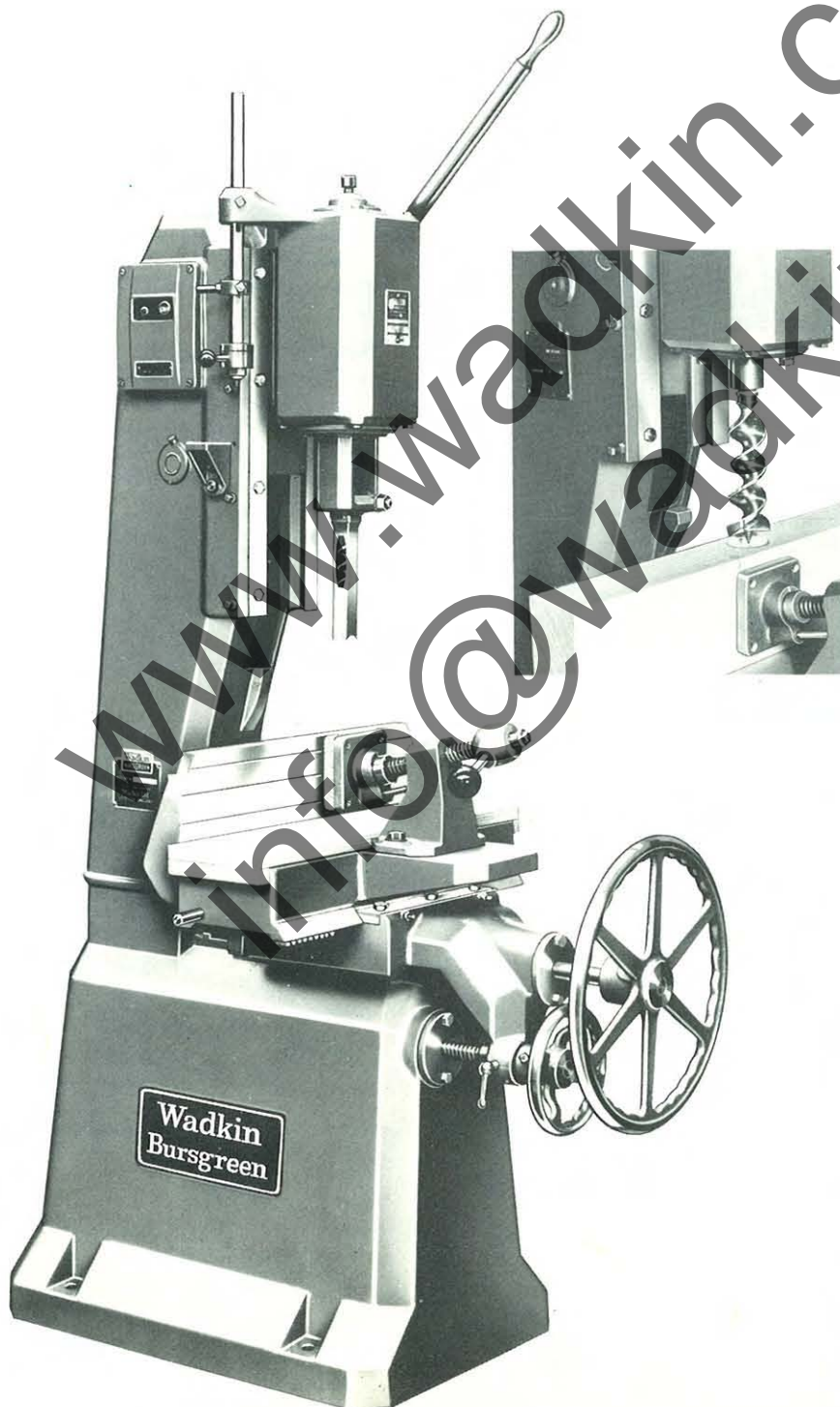


**Wadkin  
Bursgreen**

# MODEL DM

## Hollow Chisel Mortiser



### Hand Operated Type DM

This is a dual purpose, space saving machine, which is an essential part of all woodworking plants. Although the initial outlay is comparatively small, it is a large capacity machine designed to produce clean, accurate work and give long, continuous service at economical running costs. Built to high engineering standards, it combines strength with rigidity, and the large base area gives perfect stability. All controls and adjustments are conveniently placed so that fatigue of the operator is reduced to a minimum during long periods of work.

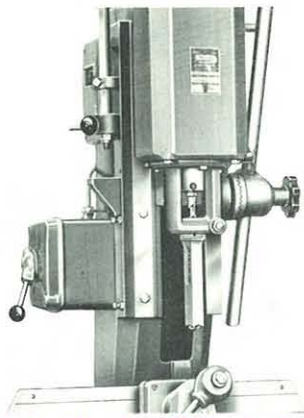
Mortises up to 25 mm (1 in) square can be cut in soft woods and up to 20 mm (3/4 in) square in hardwoods.



Photograph (left) reproduced by courtesy of the Reinforced Safety Ladder Co., Perivale.

The machine can be speedily converted for boring up to 50 mm (2 in) diameter.



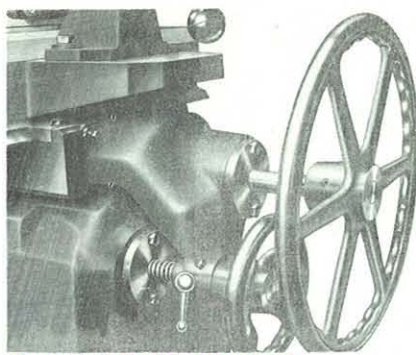


### The Mortising Head and Control

The mortising head consists of a built-in 1.5 kW (2 hp) motor which gives direct drive to the chisel unit. Control is by start and stop push buttons with no-volt and overload releases. The head is mounted on precision machined vee slideways and the spindle bearings run in dust proof housings. A chisel holder bracket is fitted to ensure perfect alignment of the chisel in relation to the table. The head will accept chisels up to 25 mm (1 in) square and incorporates a split type locking device. An adjustable stop bar is fitted to regulate the depth of mortise and also to enable haunching operations to be performed more easily. The head is raised and lowered by means of a hand-lever through rack and pinion gearing in conjunction with a spring loaded cam which gives constant balance throughout the stroke. The hand-lever is adjustable for both angle and length to suit the application and operator.

### Boring Spindle Attachment

This attachment illustrated on the right eliminates the need to remove the chisel holder bracket for boring page 1. It is designed for insertion through the chisel holder onto the spindle and it is only a matter of seconds to change from mortising to boring. It takes boring tools up to 50 mm (2 in) diameter.



### The Work Table Controls

The table moves on machined slides to ensure accurate, smooth and easy movement, and is provided with compound movements. Longitudinal motion is by rack and pinion gearing, and lateral motion by screw. Both movements are controlled by conveniently placed handwheels at the front of the machine, placed in such a position that the operator may work either the handwheels or the head lever without moving from his normal operating position. The lateral motion may be locked if required in a fixed position.

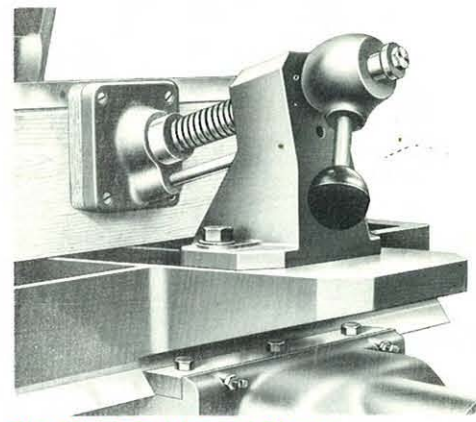


### Turret Stop Arrangement

This arrangement controls 3 different prefixed lengths of mortises. It consists of spring loaded stops and adjustable collars on three short circular stop bars attached to the table slide.

### Optional Extras

Single phase electrical gear: Isolating switch: Spot light equipment: Setting out attachment: Special boring spindle attachment: Air operated clamp: A selection of chisels and bits (details available on request).  
Model DM/V available with vibratory Head.



### The Work Table and Clamp

The work table is an accurately machined casting mounted on the main frame, it is provided with a rear face against which the timber is located perfectly square with the chisel. A stop bar for regulating the length of mortises is incorporated in the table, and when used in conjunction with the depth stop on the mortising head, completely eliminates the marking out of individual mortises.

A specially designed clamp is attached to the table for holding the work while the mortising operation is taking place. A hand operated quick acting screw forces the timber in a downwards action against the rear table face, thereby preventing any movement of the work at all times. The front clamp pad is drilled to receive a wooden plate to prevent possible marking of work.

### Setting Out Attachment

This attachment positions the mortises in relation to the end of the timber. It consists of a long bar attached to the back of the table which carries turn over stops to locate the mortises.

Thus the combination of the turret stop arrangement and the setting out attachment permits a wide choice of accurate mortises to be cut without the need for marking out, with appreciable saving in time, and the elimination of the risk of errors inherent in the marking out process.

### Specification

Largest chisel which can be used in soft wood  
Largest chisel which can be used in hard wood  
Timber capacity of machine with 100 mm (4 in) chisel  
Timber capacity of machine with 165 mm (6 1/2 in) chisel  
Size of table  
Longitudinal movement of table  
Lateral movement of table  
Speed of mortising head spindle  
Horse power of driving motor (three phase)  
Horse power of driving motor (single phase)  
Approximate floor area (with maximum movements)  
Approximate net weight  
Approximate gross weight  
Shipping dimensions

25 mm		1 in square
20 mm		3/4 in square
250 mm x 200 mm		10 in deep x 8 in square
190 mm x 200 mm		7 1/2 in deep x 8 in wide
560 mm x 150 mm		22 in x 6 in
480 mm		19 in
100 mm		4 in
3000 rev/min (50 hertz)	OR	3600 rev/min (60 hertz)
1.5 kW		2 hp
0.75 kW		1 hp
860 mm x 1570 mm		34 in x 62 in
305 kg		672 lb
380 kg		840 lb
1.36 m <sup>3</sup>		48 ft <sup>3</sup>

Details included with machine: Motor and control gear. Set of three adaptor bushes for bits and adaptor bushes for chisels. Length and depth stops. Set of spanners. Tin of lubricant.

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

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