

Wadkin

24" Panel Planing and Thicknessing Machine, R.E.



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Wadkin

24" Panel Planing and Thicknessing Machine, R.E.

This Panel Planing and Thicknessing Machine represents a big advance on previous machines of this type.

It is designed on unusually robust lines to provide the necessary stability on which the production of high-grade work so largely depends.

If necessary, it will take cuts up to $\frac{1}{4}$ " deep and

no matter how deep the cut, the work leaves the machine in a finished condition.

It is an exceptionally easy machine to operate. All controls and adjustments are handy for the operator, all mechanism is thoroughly protected to prevent chips and dust interfering with the free operation of the various movements and adjustments in the machine.

Specification

The Frame

The frame is exceptionally heavy to withstand the strain of the heaviest cuts.

The Table

The table is a heavy casting of specially hard, close-grained metal. Its unusual strength eliminates all vibration and easily resists the strain and pressure involved in planing at fast feed speeds. It is raised and lowered 9" on broad slides by means of screws operated by chain and hand-wheel, the latter being placed conveniently to the operator's hand. Anti-friction ball thrust washers take the weight of the table and permit quick and easy rise and fall motion. All mechanism is protected from harmful dust and chips. Index scale registers exact thickness being planed.

Feed Mechanism

Feed mechanism embodies oil bath, totally enclosed gear box giving feed speeds of 20, 30 and 46 feet a minute. All gears are steel with machine-cut teeth. The drive to the rollers is by heavy bushed roller chain giving a steady and positive drive. Feed speeds can be varied whilst the machine is running or stopped and started at will. Electric interlock prevents feed mechanism from operating except when cutterblock is running.

Power Feed Rollers

Power feed rollers are steel and of large diameter. The feeding-in roller is grooved, and the feeding-

out roller is plain. All bearings are provided with an oil chamber, making them self-oiling. The feed rollers are controlled by adjustable springs, and fitted with stops to prevent them being lifted into the cutters.

Table Rollers

Table rollers are arranged with a small vertical adjustment which is operated by a handwheel at the feeding end of the table. This is a very desirable feature enabling the rollers to be quickly set in relation to the table surface to suit the condition of the timber.

The Pressure Bars

The pressure bars are mounted close up to the cutterblock in order to hold the timber perfectly solid on the table. Both pressure bars are of steel, giving tough wearing surfaces. The opening between the pressures and the cutterblock has been kept as narrow as possible to enable short pieces to be planed with safety.

The Cutterblock

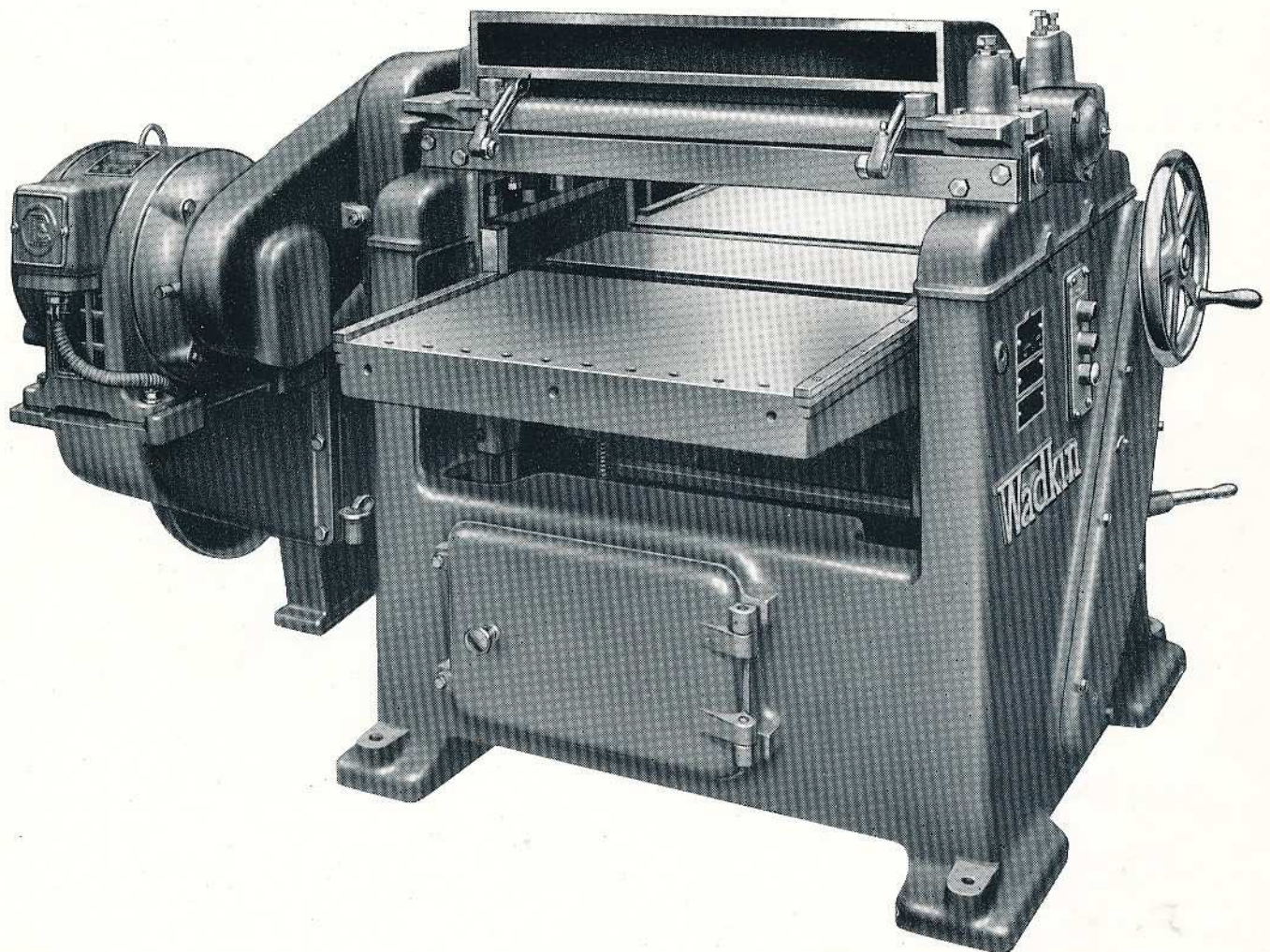
The cutterblock is of the two-knife square skew type designed to give a shearing cut. It is provided with dovetail slots running the full length of the block for fixing moulding cutters, and these can be used without upsetting the planing knives.

It revolves in heavy ball bearings, enclosed in dustproof housings. The cutting circle is 5" diameter. A cutter setter is incorporated.



Features

1. Heavy rigid design to ensure freedom from vibration, essential for producing a high grade finish.
2. Oil bath gear box and heavy noiseless bushed roller chain drive ensuring the steady and powerful feed necessary for good work.
3. All vital mechanism protected from dust and chips to ensure easy adjustment, convenient working and large output.
4. Table precision ground to a mirror like finish to ensure smooth feeding and a perfectly true face.
5. Vertical adjustment to the table rollers by one handwheel, enabling the machine to be set instantly to suit the condition of the timber.
6. Built-in control gear, with push button control. Cutterblock and feed motor interlocked to prevent feed operating against a stationary cutterblock.





Specification (Contd.)

Guards

Particular care has been taken to protect the operator and to guard every rotating and working part that would be likely to cause trouble through chips either getting into the mechanism or falling on to the work during its progress through the machine.

Electric Drive

Both cutterblock and feed are driven by multiple vee belts from separate motors built on to the machine. The motors are at the side of the machine out of the way of dust and chips falling from the table. Efficient guards cover the driving belts.

The above arrangement is suitable for alternating current of 2 or 3 phase, 40, 50 or 60 cycles, and for direct current. The machine can also be

supplied with an electric drive suitable for single phase alternating current.

Control gear in the case of alternating current is of the automatic contactor type, and all control operations are performed at the feed-in end from a push button station. A master stop button shuts down both motors simultaneously. A unique "lock-out" feature embodied in the stop button prevents the machine being started accidentally or by inexperienced employees. For direct current, a hand-operated starter is standard, but push button control can be supplied to order.

Belt Drive

The necessary countershaft runs in ball bearings. It is fitted with fast and loose pulleys and striking gear. The loose pulley is also mounted on ball bearings.

Principal Dimensions and Capacities

Planing and thicknessing capacity	...	...	...	...	...	...	...	...	...	...	24" x 9"
Maximum depth of moulding without removing pressure bars	...	...	...	...	...	...	...	...	...	...	5"
Maximum depth of moulding with pressure bars removed	...	...	...	...	...	...	...	...	...	...	1 1/4"
Length of table	...	...	...	...	...	...	...	...	...	...	3' 9 1/2"
Rates of power feed in feet per minute	...	...	...	...	...	...	...	...	...	...	20, 30, 46
Speed of cutterblock in revolutions per minute	...	...	...	...	...	...	...	...	...	...	4200
Diameter of cutting circle	...	...	...	...	...	...	...	...	...	...	5"
Diameter of feed rollers	...	...	...	...	...	...	...	...	...	...	3 1/4"
Electric Drive.											
Horse power of cutterblock motor	...	...	...	...	...	...	...	...	...	...	7 1/2
Horse power of feed motor	...	...	...	...	...	...	...	...	...	...	1
Floor space	...	...	...	...	...	...	...	...	...	...	5' 2" x 4' 0"
Net weight in cwts.	...	...	...	...	...	...	...	...	...	...	25 (2,800 lbs.)
Gross weight in cwts.	...	...	...	...	...	...	...	...	...	...	29 (3,248 lbs.)
Shipping dimensions in cubic feet (alternating current machine)	...	...	...	...	...	...	...	...	...	...	95
Code Words (Add particulars of supply)	...	...	...	...	...	...	...	...	...	...	Ralee
Belt Drive.											
Speed of countershaft in r.p.m.	...	...	...	...	...	...	...	...	...	...	850
Fast and loose driving pulleys	...	...	...	...	...	...	...	...	...	...	10" x 4 1/4"
Horse power required	...	...	...	...	...	...	...	...	...	...	9 1/2
Net weight in cwts.	...	...	...	...	...	...	...	...	...	...	24
Gross weight in cwts.	...	...	...	...	...	...	...	...	...	...	28
Shipping dimensions in cubic feet	...	...	...	...	...	...	...	...	...	...	95
Code Words...	...	...	...	...	...	...	...	...	...	...	Rebte

Details included with the machine.

Motors and control gear for electric-driven machine.

Ball bearing countershaft with striking gear for belt-driven machine.

One pair of high-speed steel cutters.

One set of spanners.

Lubricating pump and tin of special ball bearing lubricant.