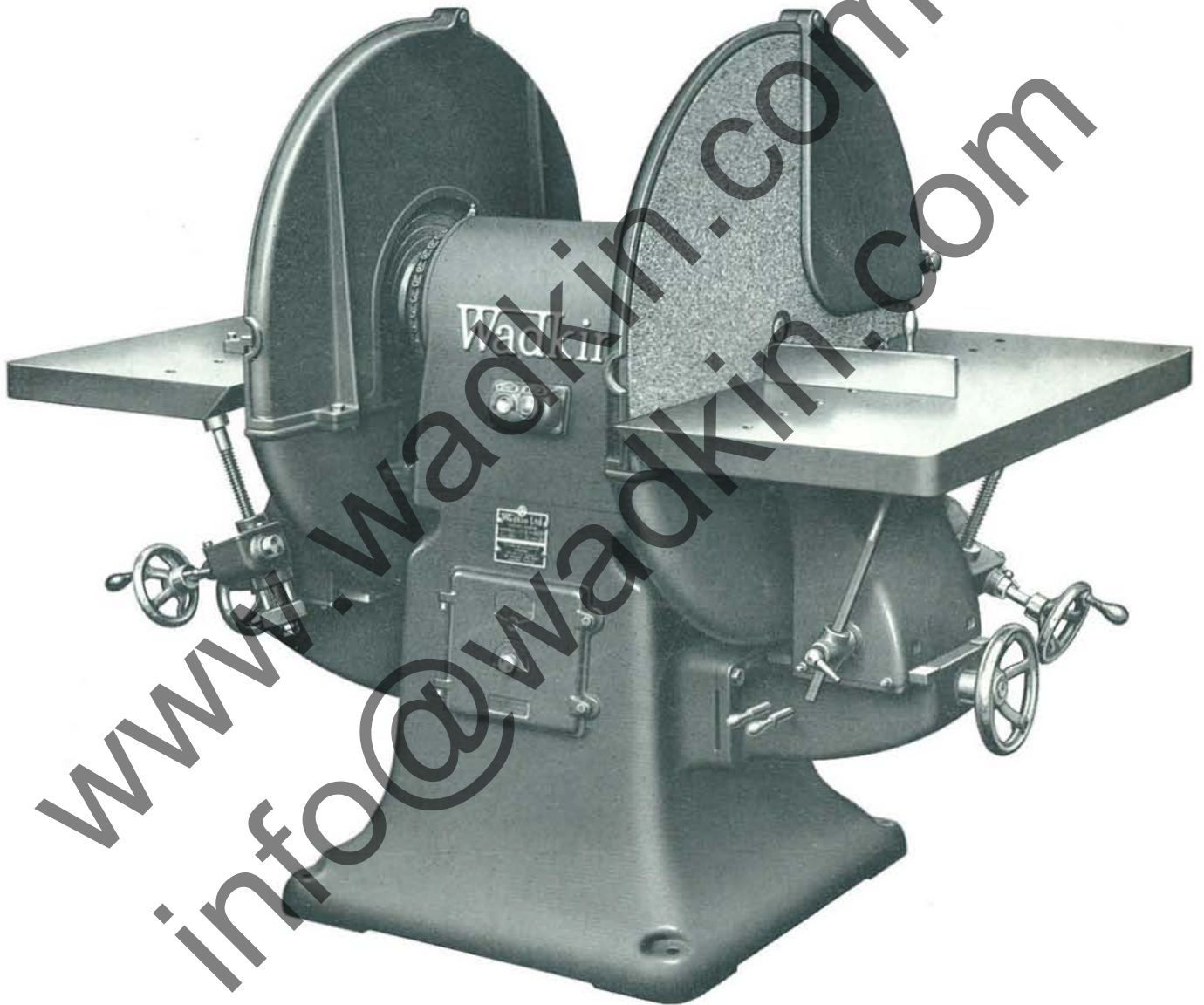


# Wadkin

30" and 36" Double Disc Sanders  
J.V. and J.W.



Telegrams: Woodworker-Phone-Leicester  
Telephone: Leicester 68151 (7 lines)

**Wadkin Ltd.**  
Green Lane Works, Leicester

London Office:  
Brookfield House, 62-64 Brook Street, W.1  
Telephones: MAYfair 7048 & 9

# Wadkin

## 30" and 36" Double Disc Sanders, J.V. and J.W.

The Disc Sander is undoubtedly one of the most useful of labour-saving machines, and indispensable in any engineer's pattern shop. It is also an invaluable Sanding Machine for any wood-working shop where smooth and perfectly square or bevelled faces are required on the work, as in high-class cabinet making, joinery work, shop-fitting, etc.

The machines described herein are an entirely new design, and embody the very latest engineering practice. The electric motor providing the motive power is mounted directly on to the disc spindle,

which forms the most compact and efficient drive possible.

Clean and accurate work requiring no hand finishing is ensured by the Wadkin method of construction and mounting of the sanding discs. With the table in the horizontal position, a perfectly smooth face is obtained dead square to the face of the work. With the work tables canted, bevelled edges at any angle may be obtained, and in case of pattern work the necessary draught or taper can be given to the patterns.

### Features

1. The machine is entirely self-contained electrically driven, with discs mounted directly on to the motor shaft.
2. Heavy type ball and roller bearings to disc spindle.
3. Work tables cant above and below the horizontal.
4. Fences are of the swivelling type with scales for convenience in setting.
5. The canting motion to the tables is by handwheel and machine-cut spiral gears.
6. The sand paper is glued to the discs, ensuring a dead flat surface.
7. The discs are turned steel.
8. Guards over sanding discs.
9. Efficient self-contained dust-collecting system fitted as required.

### Specification

#### The Main Frame

The main frame is well proportioned, having a large base area to ensure the steady running essential in a Disc Sander.

#### The Disc Spindle

The disc spindle is of steel of 45 tons tensile and is mounted direct in the electric motor. It revolves in heavy type ball and roller bearings, while the ends are taper turned to receive the disc flange plates.

#### The Sanding Discs

The sanding discs are of steel accurately turned and balanced and recessed for quickly locating on to the driving flange plates. They are held in position by screws which are readily removed when changing the discs. The driving flanges are mounted on tapered spindle ends, thereby ensuring accuracy and true running.

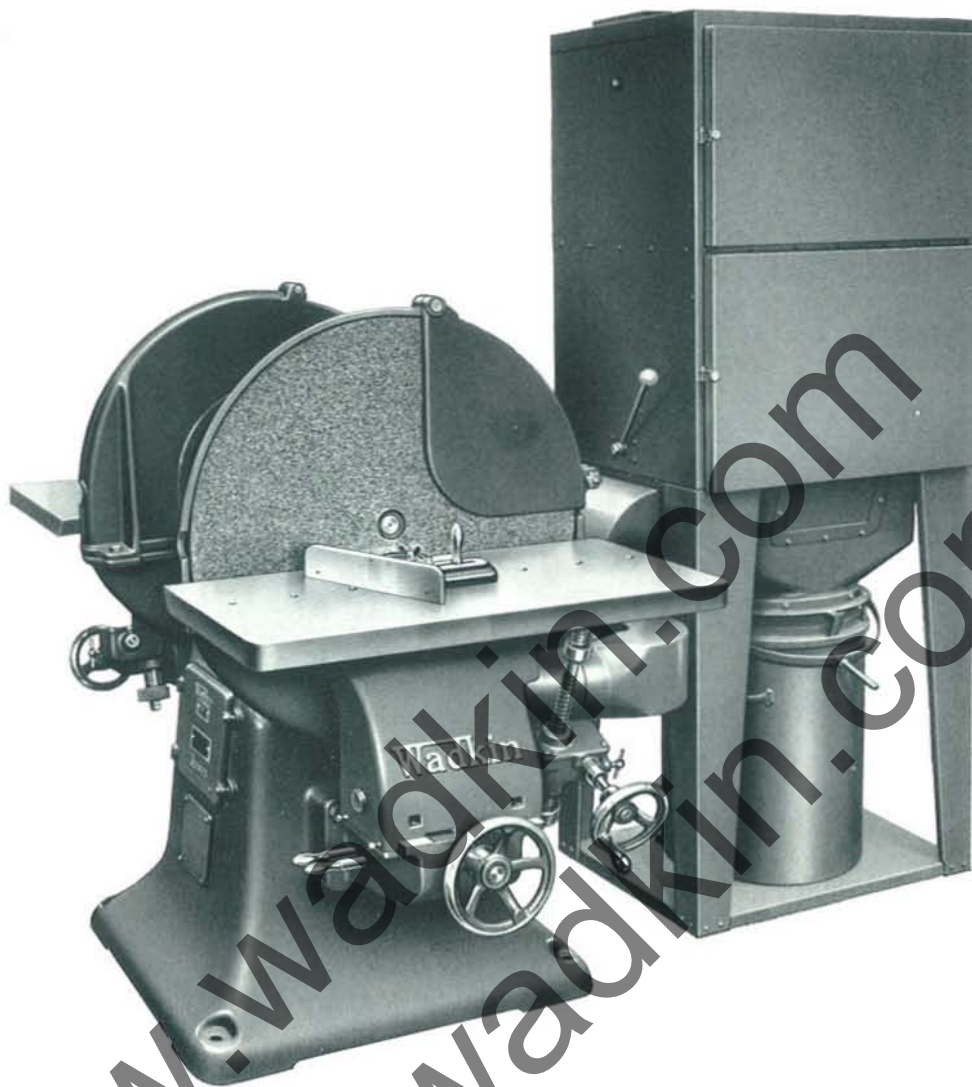
The sand paper is glued to the discs, and a

press, illustrated on page 4 is supplied with the machine for this purpose.

Hoods are provided below the tables for collecting the dust with outlets arranged to connect to an exhaust system. Suitable guards attached to the hoods cover the top portions of the sanding discs.

#### Dust Collecting Arrangement

A compact self-contained dust collecting unit can be supplied to special order as illustrated on page 3. The unit embodies a quickly detachable dust storage bin of three cubic feet capacity. The exhaust fan is housed inside the unit and driven by a totally enclosed motor. The dust laden air is filtered by a series of flame-proof fabric sleeves, while a shaking mechanism for periodic shaking prevents the accumulation of excessive dust. Should a main dust extracting system be available, a separate dust unit may not be required, in which case the machine hoods are connected direct to the main suction piping.



### Specification (Contd.)

#### The Work Tables

The work tables will cant to 45 degrees below and 10 degrees above the horizontal. The canting motion is controlled by a handwheel and screw operating through totally enclosed machine-cut spiral gears, as seen in the illustration above. The horizontal position is definitely located. A horizontal adjustment is provided, operated by a handwheel and screw in order that the tables can be adjusted to or from the sanding discs, to facilitate removal of the discs and for use in conjunction with the canting mechanism.

#### The Fences

The fences are of the universal swivelling type and are slidable across the entire width of the

table. They can be reversed to suit either right or left-handed work. Scales are fitted for convenience in setting for angular work.

#### The Motor

The motor is an integral part of the machine, the sanding discs being mounted directly on the motor shaft extensions. As will be seen from the illustration, this arrangement of drive not only makes the machine compact and self-contained, but provides the most positive method of driving possible. In the case of the standard alternating current machine, the motor is built up from rotor and stator units.

A built-in drive is available on direct current machines, also a separate motor drive for single-phase alternating current.



Specification (Contd.)

**Control Gear**

Control gear for alternating current, two and three-phase, is of the automatic contactor type, controlled by push buttons. The contactor gear is housed in a recess in the main frame and carried on the hinged cover of the recess for ease of inspection. The push button gear is also mounted flush with the main frame, as clearly seen on page 1. Full protective features are provided.

**Belt Drive**

This machine can be supplied as a belt-driven machine, in which case it is arranged with fast and loose pulleys complete with striking gear, which is self-locking. The loose pulley revolves on ball bearings mounted on a separate sleeve and not on the disc spindle itself, to prevent any possibility of the spindle creeping round due to the pull of the belt.

**Disc Fixing Arrangement**

The Wadkin method of fixing the sand paper to the discs ensures dead flat surfaces, which is essential for accurate work on patterns and at the same time prevents any possibility of the sand paper being torn off.

To simplify the renewal of abrasive discs, we include a press as illustrated. This not only makes the work of fixing discs an extremely easy and simple matter, but ensures a dead flat face on the discs, and consequently more accurate sanding.

After the special glue has been applied to the discs and the sand paper placed in position, the discs are placed face to face and clamped tightly together by the lever handle.



**Details included with the machine:**

- Motor and control gear.
- Two sanding discs fitted to machine.
- Press, with two spare steel discs.
- Two universal swivelling fences.
- Two dust-collecting hoods.
- Guards over sanding discs.
- Set of spanners.
- Lubricating pump and sample tin of lubricant.

**Dimensions and Capacities**

	30" (762 mm.) J.V.	36" (914 mm.) J.W.
Diameter of sanding discs	30" (762 mm.)	36" (914 mm.)
Size of work tables	2' 10" x 1' 5" (864 x 432 mm.)	3' 4" x 1' 7" (1016 x 483 mm.)
Table cants 45° below and 10° above the horizontal		
Height of tables from floor level	2' 10 3/4" (879 mm.)	2' 10 3/4" (879 mm.)
Floor space without fan and piping	2' 10" x 5' 4" (864 x 1626 mm.)	3' 4" x 5' 8" (1016 x 1727 mm.)
Net weight (machine only)	18 1/2 cwts. (2,100 lbs.) (952 kilos)	20 cwts. (2,240 lbs.) (1016 kilos)
Gross weight (machine only)	22 cwts. (2,450 lbs.) (1118 kilos)	23 cwts. (2,475 lbs.) (1168 kilos)
Shipping dimensions in cu. ft.	83 (2.35 cu. m.)	89 (2.52 cu. m.)
<b>Electric Drive</b>		
Horse power of motor	5	5
Speed of motor in r.p.m. for 50 cycles supply	1,000	1,000
Speed of motor in r.p.m. for 60 cycles supply	900	900
<b>Belt Drive</b>		
Speed of disc spindle in r.p.m.	950	950
Size of fast and loose pulleys	10" x 4 1/4" (254 x 108 mm.)	10" x 4 1/4" (254 x 108 mm.)
Horse power required	5	5
<b>Code Words</b> Electric machine*	Jelev	Jemow
Belt driven machine	Jabev	Jebaw
If dust collector required add		Juduv

\*Please add full particulars of electric supply.