Woodworking machinery

Catalogue No. 790/1

Wadkin

Woodworking Machinery

Wadkin Ltd.

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Leicester, England

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Incorporating:—

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BURSGREEN (COLNE) LTD.
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Introduction

It is the privilege of the Woodworking Machinery Engineer to serve a wide field of industry. In this Wadkin Catalogue will be found most of the machines in common use in Saw Milling, Joinery Manufacture, Cabinet Making, Railway Workshops, Engineers' Pattern Shops and Technical Schools. The qualities demanded in a Woodworking Machine differ with each class of user. Such questions as fast production, accuracy, dependability, speed, simplicity of operation, technical advice and service, assume varying degrees of importance, and the economic success of the machinery manufacturer is the measure of his ability to meet these varying requirements.

From a modest beginning in 1897, Wadkin Ltd. have grown to be the world's largest manufacturers of high grade Woodworking Machinery. The firm and its subsidiary Companies now employs more than 1,000 people, and every year upwards of 5,000 Woodworking Machines produced within the Wadkin Group of Companies are sent to all parts of the United Kingdom as well as overseas.

Green Lane Works, Leicester, are recognized as the most modern and best equipped of their kind in the country. A cordial invitation is extended to all users of Woodworking Machinery to visit the works, and see for themselves how Wadkin Machines are produced. Such a visit, we believe, would be interesting, and convey better than is possible by the printed page, not only the quality of the machines we are producing, but the standing of the organization behind them.

Green Lane Works
Leicester
The home of Wadkin
Woodworking Machinery

Wadkin

A Heavy Machine Bay

One of the bays in the machine shop. Note the quantities of each part going through. By producing on a repetition basis, extensive use of jigs and fixtures is economically possible, which reduces manufacturing costs and enables improvements to be included, the cost of which would otherwise be prohibitive.

Wadkin

A Light Machine Bay

Wadkin Machines are produced under ideal workshop conditions. All departments are equipped on up-to-date lines with modern electric driven machine tools. An exacting system of inspection after every machining operation ensures the maintenance of high engineering standards.

Wadkin

Erecting Shop

One of the bays in the erecting shop. A high standard of accuracy is demanded in the fitting of the machines, which are handled in batches thus systematizing the work.

Wadkin

Testing Department

Before any Wadkin machine leaves our works, it must first pass exacting tests, both mechanically and electrically and finally undergo extended running tests at the hands of expert machinists. The necessary electrical plant is provided to enable all electrically driven machines to be tested on a supply identical with that on which the machines will operate in service.

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List of Wadkin Agents

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Wilco Machine Works, Inc., Municipal Airport, P.O. Box 3722, Memphis 14, Tennessee.

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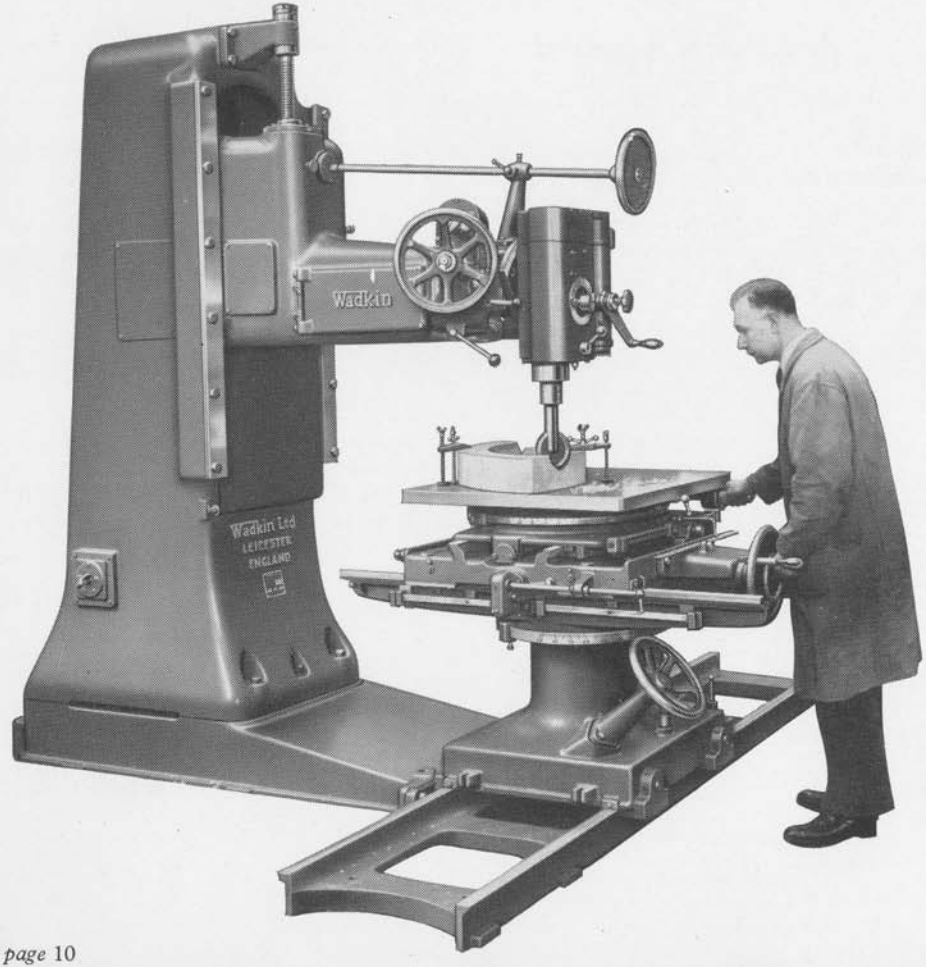
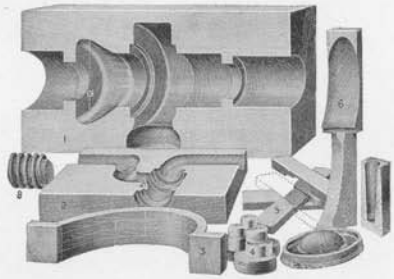
Universal Pattern Miller W.X.





Illustrations above show typical work done on the Wadkin Universal Pattern Miller.

Universal Pattern Miller W.X.

Wadkin

Specification

The Overhanging Arm. The overhanging arm carrying the spindle head is mounted on gibbed sliding ways on the main frame and can be raised and lowered either by power or hand feed. The power motion is obtained by a 1 h.p. motor built on the end of the arm, driving on to the raising and lowering screw by gears.

The Spindle Head. The spindle head swivels to any position from 50° above the horizontal to 20° beyond the vertical. The principal angles are indexed and located by a spring plunger taper pin. The swivelling movement is by worm and wheel operated by handwheel.

The Cutter Spindle. The cutter spindle is mounted in ball bearings housed in a large diameter sleeve. A movement at right angles to the arm is provided by means of a rack cut in the sleeve, controlled by hand lever on the front of the head. A fine screw feed operating on the rack is also provided. Hand lever feed is provided with a spring plunger to give definite depths of feed. Adjustable limit stops are also provided. The spindle is counterbalanced at every position. The driving end of the spindle has six solid splines ensuring easy sliding motion with freedom from wear. The cutter spindle end is bored No. 5 Morse taper and fitted with set screws for securing the tool holders and cutters.

The Spindle Drive and Control. The drive to the cutter spindle is by short centre, flat stretchless belt, driving from a six-speed workhead motor built into the headstock. The pulley on the spindle side of the drive is mounted in its own ball bearings thus preventing any belt pull on the spindle itself.
The motor provides six speeds of 4,200, 3,000, 2,100, 1,700, 1,500 and 850 r.p.m. The two speeds of 3,000 and 1,500 r.p.m. are obtained direct from the line. The remaining four speeds are obtained by means of a frequency changer mounted on the end of the arm. Motors for both the spindle and the rise and fall of the arm are controlled by a single lever handle on control station on the head, which gives start, stop and reverse to the spindle, also rise and fall for the arm. Master stop button with lock-off feature is incorporated. A speed selector switch for varying the speed of the spindle is carried immediately above the spindle control.
The main contactor gear is housed inside the arm, and embodies full protective features.

The Work Table. The work table has two motions at right angles, operated by screw and handwheel. The table also has a rotary movement for dealing with all kinds of circular and radius work. A hand lever is arranged with spring plunger taper pin giving all the principal angles.
The table is graduated and the centre recessed so that cutters may be lowered below the surface of the table. Suitable spring and dead stops are fitted to the various table movements.
The table body frame upon which the compound slides are mounted is provided with a secondary rotary motion.
The complete table body is mounted on anti-friction rollers and travels along the foundation frame rails. This movement is controlled by a conveniently placed handwheel, and a quick-acting lever locks the table body in any desired position.

Equipment. A comprehensive range of cutter equipment is supplied with the machine.

Dimensions and Capacities

Centre of cutter spindle to face of body frame	49"
Max. height of spindle from table: vertical	24"
horizontal	20"
Mechanically controlled limit of radius work	60" (10' 0" diam.)
Cutter spindle speeds, r.p.m.: 50 cycles	4200, 3000, 2100, 1700, 1500, 850
60 cycles	4500, 3600, 2700, 2250, 1800, 1350
Horse power of spindle motor	On high speed, 5; on low speed 4
Floor space	12' 0" × 10' 0"
Net weight	68 cwt. (7600 lb.)
Shipping dimensions excluding tool cabinet	403 cu. ft.

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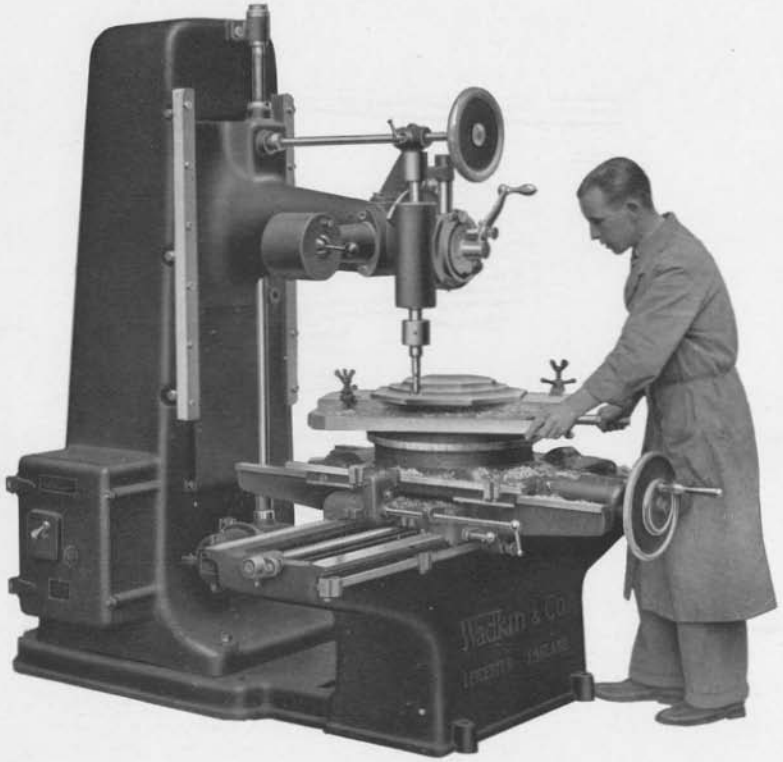
Junior Pattern Miller W.S.



This machine is similar in general principle to the larger W.X. machine shown on page 10, the chief point of difference being one of capacity. For the shop whose class of work is of comparatively small dimensions it is a machine that can be recommended with confidence.

Specification

All Movements are under mechanical control and fitted with positive feed motions, index scales and automatic stops.

The Overhanging Arm has rising and falling motion by both power and hand, and the spindle head swivels between horizontal and vertical.

Two Speeds are provided to the cutter spindle.

The Table has two motions at right angles, also a rotary motion; adjustable stops are provided on each of the table movements.

Drive. The machine is self-contained electric driven. Both motors are contactor controlled from central one-lever control station on the machine head.

Equipment. A comprehensive range of cutter equipment is supplied with the machine.

Dimensions and Capacities

Centre of cutter spindle to face of body frame	28"
Max. height of spindle from table: Vertical	14½"
Horizontal	18"
Mechanically controlled limit of radius work	32"
Spindle speeds, r.p.m.	12 speeds from 800 to 4000
Horse power of motor for cutter spindle	4
Floor space	8' 0" × 6' 4"
Net weight	37 cwt. (4150 lb.)
Shipping dimensions	210 cu. ft.

Cross Cutting and Trenching Machine C.D.

Wadkin

This machine has rising and falling and swivelling motions only, for straight or angular cross cutting and trenching.

Specification

The Motor is underslung mounted on the sliding saw carriage thus economizing space. It is of the totally enclosed fan-cooled type, and can be supplied for practically any alternating current three phase supply. A brake is fitted to the motor spindle. Motor can be so mounted that the saw is either at left of the saw carriage (as illustrated) or at the right of the carriage.

Aluminium Saw Carriage has a rigid and powerful straight line action. It moves on ball-bearing rollers on special ground circular steel runways which are renewable, and is exceptionally easy to operate. The saw carriage is returned after cutting by spring action. A pneumatic buffer effectively cushions the return stroke of the carriage. The raising and lowering motion to the saw carriage is by handwheel and screw, and screw mechanism is totally enclosed.

The weight is taken by ball thrust washer.

The principal angles are marked on the swivelling motion and the saw carriage positively located by spring plunger. Saw is thoroughly guarded, and a hood provided for discharging the sawdust.

Table may be entirely of wood constructed by purchaser, or a wooden table top fixed to cast-iron legs supplied by us. Alternatively an all-metal table incorporating anti-friction rollers, can be supplied. A cutting-off gauge is recommended with either table.

The machine is self-contained and requires no belts, countershaft or overhead fixing.

Dimensions and Capacities

	Model C.D.1	Model C.D.2	Model C.D.3	Model C.D.4	Model C.D.5
Diam. of saw	18"	18"	24"	18"	24"
Diam. of saw spindle end	1¼"	1¼"	1¼"	1¼"	1¼"
Will cut off between	14" × 5" & 18" × 1"	22" × 5" & 27" × 1"	16" × 7" & 21¾" × 4"	45" × 5" & 48" × 1"	40' × 7" & 42" × 4"
Will groove up to 2½" × 1⅝" in material	10¾" wide	20" wide	not available	not available	not available
Saw speeds, r.p.m.:					
50 cycles	3000	3000	1500	3000	1500
60 cycles	3600	3600	1800	3600	1800
Horse power of motor	5	5	6	5	6
Net weight	8¾ cwt. (980 lb.)	9¼ cwt. (1036 lb.)	9½ cwt. (1050 lb.)	9¾ cwt. (1100 lb.)	9¾ cwt. (1100 lb.)
Shipping dimensions	66 cu. ft.	66 cu. ft.	66 cu. ft.	80 cu. ft.	80 cu. ft.

Wadkin

Cross Cutting and Trenching Machine C.C.

This machine not only forms a fast operating accurate cross cut saw for either straight, angular or compound angular cutting, but is equally successful as a grooving and trenching machine.

Specification

Movements. The machine has a rising and falling movement to the saw carriage, by handwheel and screw motion, and is arranged to swivel and the spindle arranged to cant. Positive locking devices are provided on all movements and the principal angles located by plungers.
Saw or grooving head is carried directly on the extended shaft of the motor mounted on the end of the saw carriage.

Saw Motor is of the totally enclosed fan-cooled type and can be supplied for practically any alternating current three phase supply. The motor can be so mounted that the saw is either on the left of saw carriage (as illustrated) or to the right of the carriage, to suit the direction of feeding the timber.

Saw Carriage is made of aluminium and is also mounted on ball bearing rollers, running on renewable ground steel circular tracks. It is returned after cutting by spring action, and a pneumatic buffer effectively cushions the return stroke of the carriage. Brake is fitted to the saw spindle.

Table may be of wood constructed by purchaser, or an all-metal table incorporating anti-friction rollers can be supplied. Alternatively we can supply three metal legs on which a wooden table can be carried. Cutting-off gauge can be supplied.

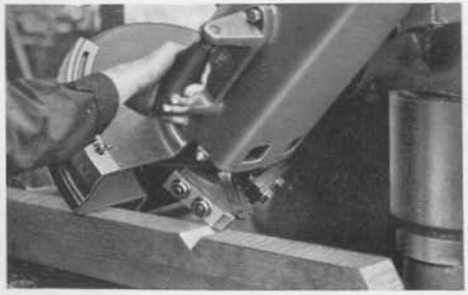
Dimensions and Capacities

	Model C.C.1	Model C.C.2
Diam. of saw	18"	18"
Diam. of saw spindle end	1¼"	1¼"
Spindle speeds, r.p.m.: 50 cycles	3000	3000
60 cycles	3600	3600
Will cut off between	22" × 5" and 27" × 1"	27" × 5" and 32" × 1"
Will groove up to 1⅛" deep in material	20" wide	25⅛" wide
Horse power of motor	5	5
Net weight without table	10¼ cwt. (1150 lb.)	11 cwt. (1250 lb.)
Shipping dimensions without table	62 cu. ft.	62 cu. ft.

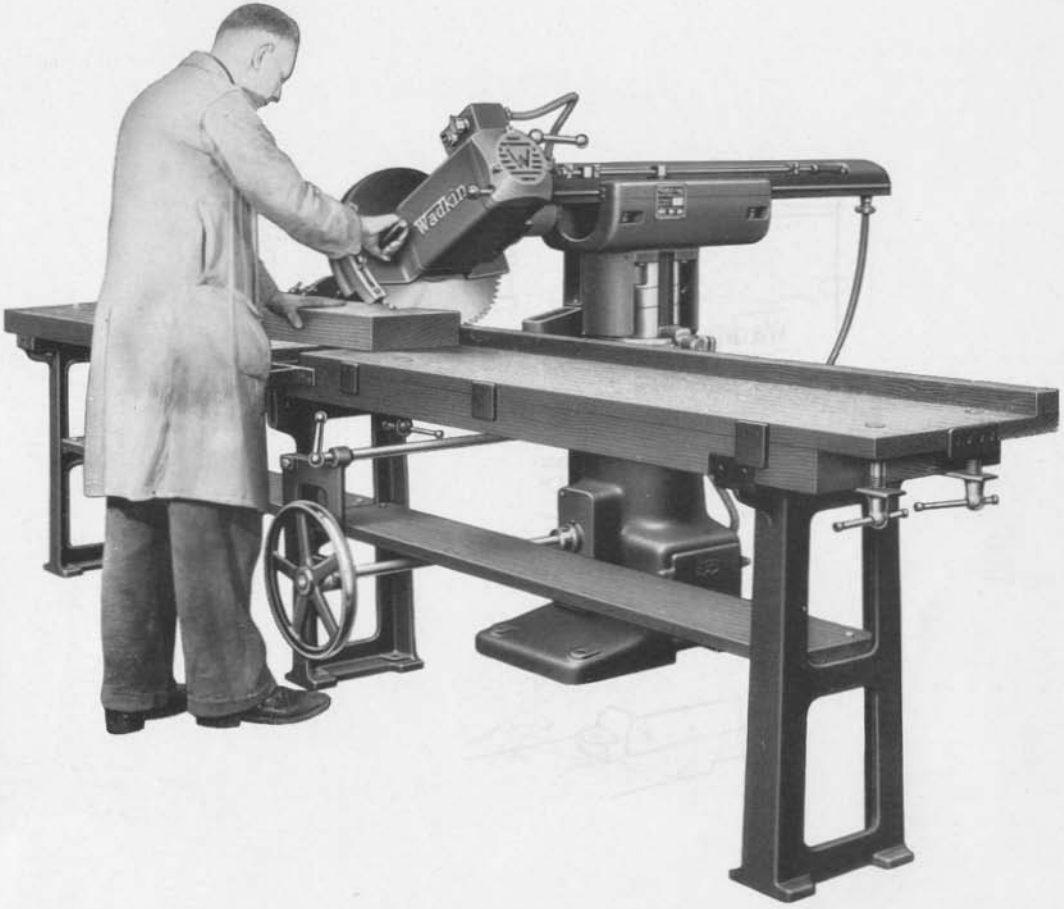
Cross Cutting and Trenching Machine C.C.

Wadkin

Saws can be taken off, and this expanding grooving head substituted in two or three minutes



Shows head canted for such work as birdsmouthing roof spars.



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Hydraulic Cross Cut Saw C.J.

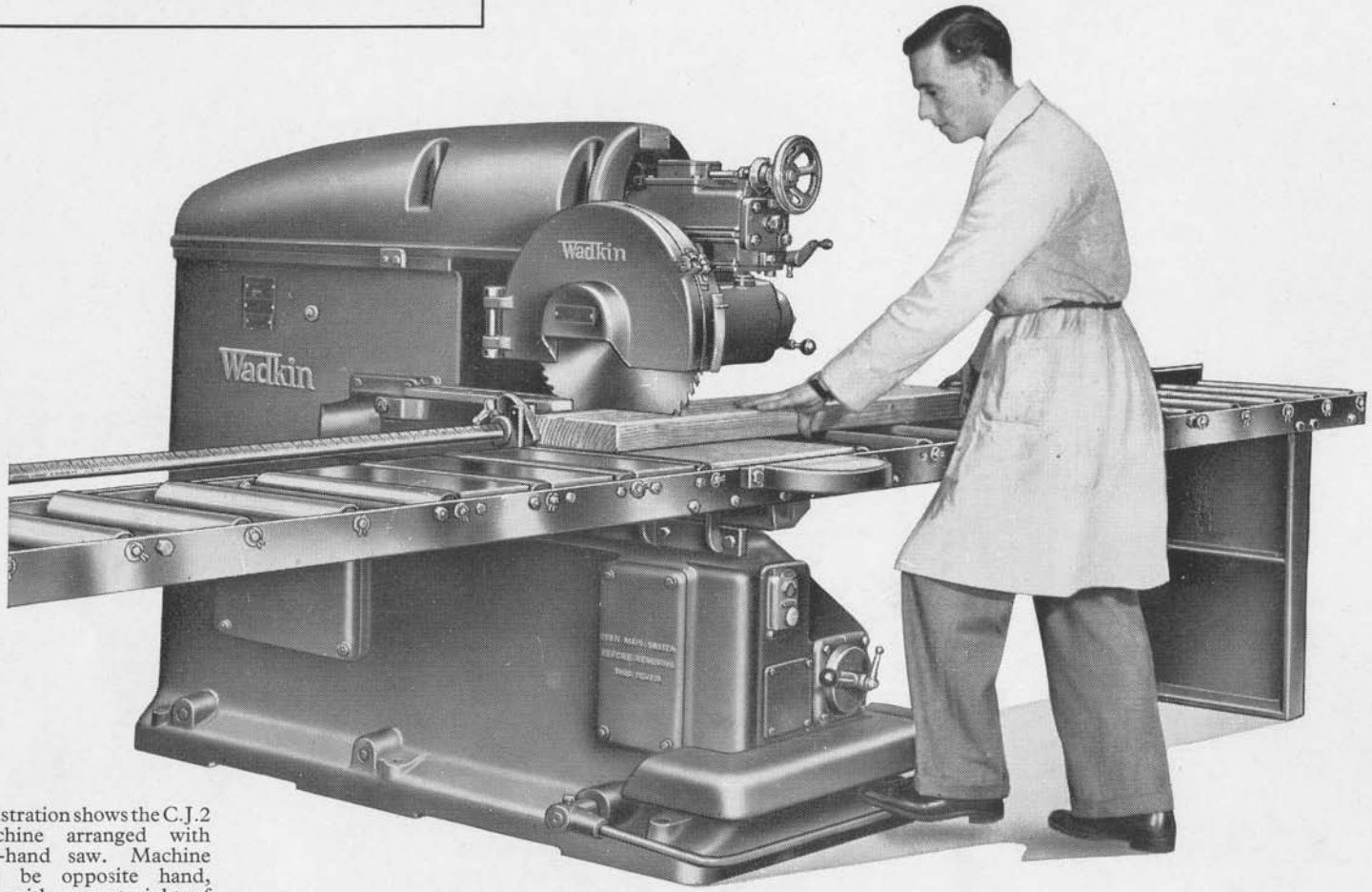


Illustration shows the C.J.2 machine arranged with left-hand saw. Machine can be opposite hand, *i.e.*, with saw at right of saw carriage.

Hydraulic Cross Cut Saw C.J.

Wadkin

This is an entirely automatic cross cut, specially developed for fast production on cross cutting and trenching. Its potential output is considerably higher than a hand-operated machine, due to the fact that the operator is relieved of the effort of continually pulling the saw through the cut, and has always both hands free for the speedy handling of the timber.

The machine is available in five sizes, as detailed below. All sizes are available with saw carried either at the left or right of the saw carriage to suit the direction from which the timber is brought to the machine.

Specification

The Machine consists of a main frame which supports a power operated saw carriage. Inside is contained the tank which carries the oil pump and valve gear for the hydraulic mechanism.

The Saw Carriage is a special aluminium alloy casting to give lightness and rigidity, to enable high traverse speeds and reversal without shock to be obtained. It is mounted on ball bearing rollers running on hardened and ground steel runways. These runways have a long life and are the controlling element of the straight line cut.

The saw carriage is operated by hydraulic gear controlled by foot pedal at the front of the machine.

The rate of flow of the oil can be controlled by turning a handwheel on the front of the machine, and thus the forward speed of the carriage can be varied by simply turning the handwheel. A constant high speed return stroke reduces the idle time to a minimum.

The Saw Motor is of the totally enclosed fan-cooled type, and can be supplied for practically any alternating current three phase supply. On models C.J.2, C.J.3, C.J.4, and C.J.6 the saw motor is mounted on the saw spindle and the motor frame is carried in a circular slide controlled by nut and screw so that a rise and fall can be obtained to compensate for wear on the saw for setting when trenching. An efficient locking device is fitted to this slide to ensure accuracy and rigidity. On model C.J.5 the motor is mounted to the rear of the saw carriage, and drive to the saw spindle is by means of an endless flat belt. This model cannot be used for trenching. In the case of the model C.J.6 the saw unit is arranged to cant up to 45° for angular cutting.

The Control Gear for both the saw and pump motors is by push buttons operating a contactor built into the main frame.

The Saw Guard is arranged to give maximum protection to the operator, and is hinged for convenience in changing saws. Saw dust hood is provided with a nozzle for connecting up to an exhaust system.

The Hydraulic Unit consists of an electric motor driving a small gear pump, which delivers oil under pressure to the cylinder in the saw carriage, via a valve which is foot operated. The unit is built into an oil tank, which is housed in the main frame, and is easily accessible.

Table. To take advantage of the productive possibilities of this machine, we recommend an all-metal table having ball bearing rollers inserted for quick and easy manipulation of the timber. The standard table is in two sections, 8′ 0″ long each side of the saw. It is fitted with an Automatic Stop Bar which dispenses entirely with the necessity of marking out on repetition work. The bar is fixed on the back edge of the saw table and can be supplied either right or left hand, the position being governed by the direction from which the timber is fed to the saw. The stop bar is supplied with three stops. Additional stops can be supplied.

Adjustable fence may also be supplied for use when several pieces are required to be cut side by side at one operation.

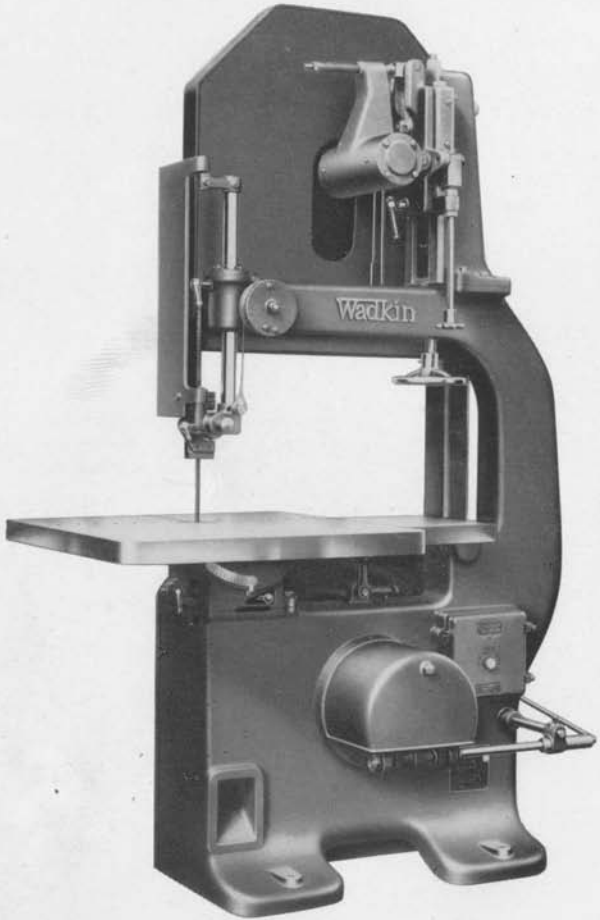
Dimensions and Capacities

	Model C.J.2	Model C.J.3	Model C.J.4	Model C.J.5	Model C.J.6
Diam. of saw	18"	18"	18"	24"	18"
Diam. saw spindle end	1¼"	1¼"	1¼"	1¼"	1¼"
Max. section cut	20" × 5" or 24" × 3"	12½" × 5" or 16" × 3"	42" × 5", 45" × 3" or 48" × 1"	20" × 7" or 22" × 5½"	20" × 5"* or 24" × 3"
Max size groove	2" × 1½" deep	2" × 1½" deep	2" × 1½" deep	not offered	2" × 1½" deep
Saw speed, r.p.m.: 50 cycles	3000	3000	3000	1500	3000
60 cycles	3600	3600	3600	1500	3600
Saw carriage variable speeds	5 to 160 ft. per minute	5 to 160 ft. per minute	5 to 120 ft. per minute	5 to 120 ft. per minute	5 to 120 ft. per minute
H.P. saw motor	5	5	5	10	5
H.P. feed motor	1½	1½	1½	1½	1½
Length of table	16′ 0″	16′ 0″	16′ 0″	16′ 0″	16′ 0″
Net weight	22 cwt. (2500 lb.)	18 cwt. (2000 lb.)	23 cwt. (2600 lb.)	24 cwt. (2725 lb.)	22½ cwt. (2560 lb.)
Shipping dimensions	154 cu. ft.	130 cu. ft.	132 cu. ft.	132 cu. ft.	132 cu. ft.

* Max. depth of cut on C.J.6 at 30° canting is 4", and at 45° canting, 1¼"

Wadkin

30" and 36" Band Sawing Machines D.R.



These machines are characterized by steady vibrationless running at high speed, essential for clean accurate sawing in hard or soft wood.

Specification

The Main Frame is a heavy casting in one piece.

The Spindles are mounted on heavy dustproof ball bearings.

The Saw Pulleys are of the steel disc type and have best quality rubber vulcanized on to the rims. The pulleys are most accurately balanced.

The tensioning of the saw is automatically regulated by a spring, and a tracking device, actuated by handwheel and screw provided.

An adjustable brush is fitted, for keeping the face of the bottom saw pulley free from dust and chips.

The Table is a heavy casting accurately machined and mounted on a quadrant seated in machined ways. An auxiliary table is fitted at the back of the main table.

The Anti-friction Guide above the table is balanced, and is fitted with ball bearings, to prevent undue friction on the back of the saw.

Guards. The machine is guarded by hinged metal guards as illustrated opposite.

Dust Chute is embodied in the main frame and arranged to discharge the dust at the rear of the machine.

Self-contained Electric Drive. The motor is mounted directly on the bottom saw spindle, close up to the wheel as shown in the illustration. It is fan cooled and protected from sawdust. Control is of the automatic contactor type operated by push buttons. A powerful external contracting brake is fitted.

Belt Drive. When the machine is to be driven by belt, fast and loose pulleys also striking gear are provided.

Table Fences. Either plain or canting fences can be supplied, and all machines are prepared with tapped holes on the face and edge of the table to receive them.

Dimensions and Capacities

	30"	36"
Diam. of saw wheels	30"	36"
Saw pulley speeds, r.p.m.:		
50 cycles	720	720
60 cycles	900	900
Max. width of saw	1½"	1¾"
Max. length of saw	17′ 0"	20′ 0"
Min. length of saw	16′ 0"	19′ 0"
Horse power	3	5

Max. distance between top saw guide and table	14"	18½"
Table cants 45° to right, 5° to left		
Floor space (electric)	4′ 8" × 2′ 10"	5′ 6" × 3′ 2"
Net weight	18½ cwt. (2070 lb.)	21¾ cwt. (2420 lb.)
Shipping dimensions	78 cu. ft.	114 cu. ft.

26" and 32" Circular Saw Benches

with rising and falling table, S.R., with plain table, S.P.

Wadkin

These saw benches are designed on robust lines and embody all the features necessary to ensure accurate cutting. In general design and construction both plain table and rising and falling table machines are identical, and the following details, except those referring to rise and fall mechanism, are common to either type of machine.

Specification

The Table is of substantial proportions, and is specially wide between the front edge and the saw. It is fitted with a removable gap plate and with a scale for quick setting of the heavy canting type fence. Table is grooved to receive a cross cutting fence. Fence has both quick and fine screw adjustment across table.

Raising and lowering motion to the table is controlled by screws totally enclosed and mounted outside the main frame to ensure ease of operation and freedom from binding.

Saw Spindle revolves on ball bearings.

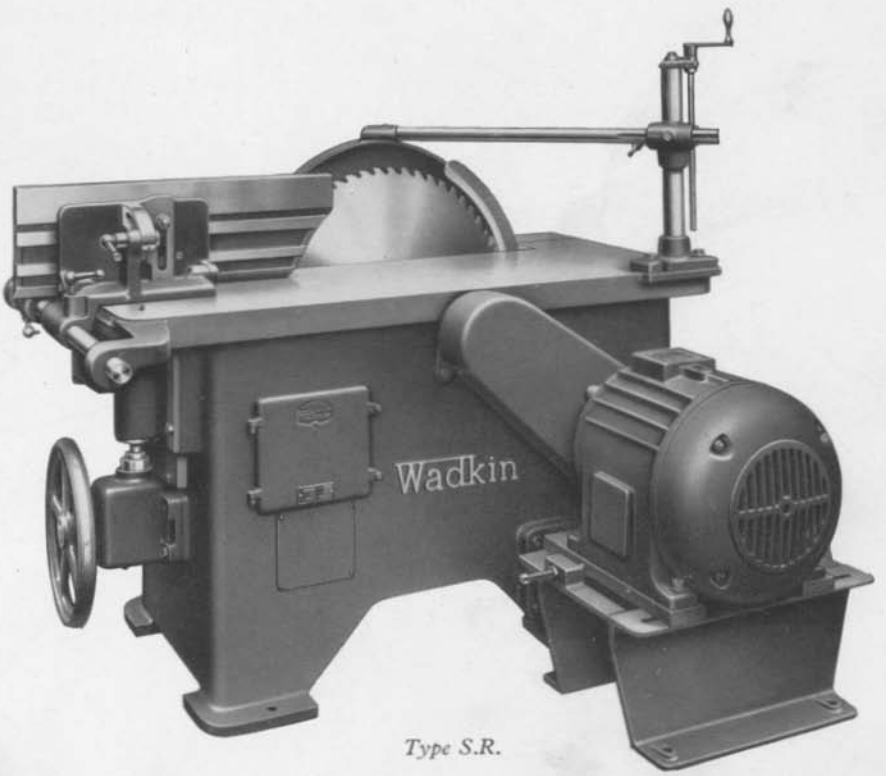
Drive. The arrangement of electric drive is by multiple vee belts from motor at the back of the machine as illustrated.

When Belt Driven fast and loose pulleys and shifting gear are provided, the latter having a safety lock to prevent belt creep.

Loose pulley is mounted on a sleeve not on the spindle itself. The machine is thoroughly guarded.

Dimensions and Capacities

	26" Machine	32" Machine
Max. depth of cut	9"	12"
Diam. of saw spindle end	1¼"	1¼"
Saw speed, r.p.m.	1500	1240
Size of table	4' 8" × 2' 6"	5' 2" × 2' 6"
Rise and fall of table	6"	6"
Max distance between saw and fence	15¼"	15¼"
Floor space (vee belt electric)	6' 9" × 3' 3"	7' 0" × 3' 3"
Horse power	10	12½
Net weight (vee belt electric drive) (type S.R.)	15½ cwt. (1750 lb.)	17¾ cwt. (2000 lb.)
" " " " " " " S.P.	14½ cwt. (1625 lb.)	16¾ cwt. (1890 lb.)
Shipping dimensions (vee belt electric)	73 cu. ft.	76 cu. ft.



Type S.R.

Wadkin

12" Circular Saw Bench S.S.

with rising and falling saw spindle

This machine, although built for 12″ saws, has an exceptionally large capacity for a machine of its class.
It will cut up to 3″ deep, and rip up to 18″ wide. Any length can be cross cut by swinging the fence out of the way. It is designed for general utility work, including cross cutting, mitring, ripping, bevelling, grooving, etc.

Specification

The Table is 2′ 9″ × 2′ 4½″ and grooved for a cross cutting fence. Scale is provided for quick setting of ripping fence.

The Fence has quick adjustment across the table by hand, also fine screw adjustment. It is adjustable along table and provided with canting movement up to 45°.

The Saw Spindle is carried on a yoke pivoting from the rear of the machine, with rise and fall movement by handwheel and screw. It is arranged to carry cutterblocks, etc.

The Electric Drive is by multiple vee belts from motor carried on the underside of the spindle yoke. Control is by push buttons. Belt drive cannot be offered.

The Guards. The saw is guarded above the table and totally enclosed below the table. A hood for discharging the sawdust is integral with the body.

Dimensions and Capacities

Diam. of saw	12″
Diam. of saw spindle end	1″
Saw speed, r.p.m.	3200
Depth of cut	3″
Size of table	2′ 9″ × 2′ 4½″
Max. distance between saw and fence	18″
Distance between front of table and saw	8″
Will groove up to	1¼″ wide × 1″ deep
Horse power of standard motor	3
Floor space	3′ 0″ × 2′ 9″
Net weight	5 cwt. (560 lb.)
Shipping dimensions	36 cu. ft.

20" Circular Saw Bench S.Q.

with rising and falling saw spindle

Wadkin

The unique design of this saw bench, coupled with its adaptability for general utility sawing has made it a popular bench particularly with Builders and Joinery Manufacturers.

Specification

The Table is 3′ 4″×3′ 2½″ and grooved for a cross cutting fence. Scale is provided for quick setting of ripping fence.

The Fence has quick adjustment across the table by hand, also fine screw adjustment. It is adjustable along the table and provided with canting movement up to 45°.

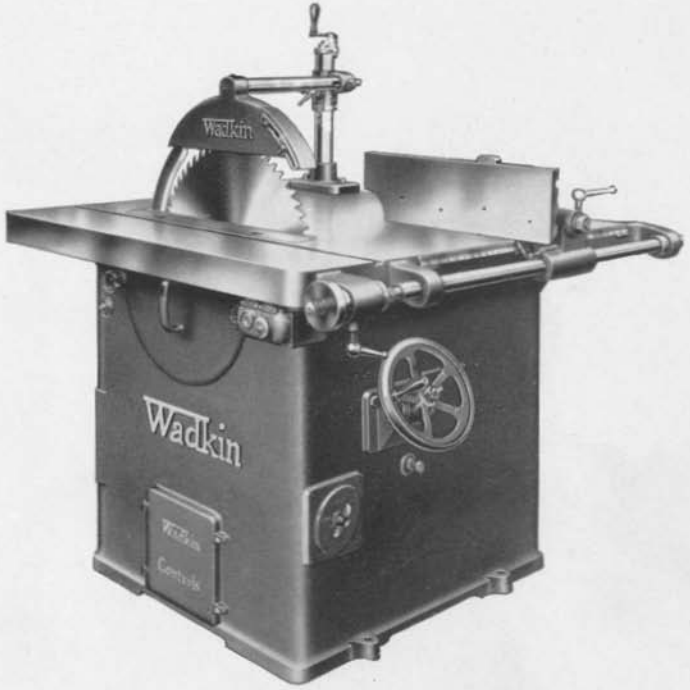
The Saw Spindle is carried on a yoke pivoting from the rear of the machine, with rise and fall movement by hand wheel and screw. It is arranged to carry cutterblocks, etc.

The Electric Drive is by multiple vee belts from motor carried on the underside of the spindle yoke. Control is by push buttons. Belt drive cannot be offered.

The Guards. The saw is guarded above the table, and is totally enclosed below the table. A hood for discharging the sawdust is integral with the main frame.

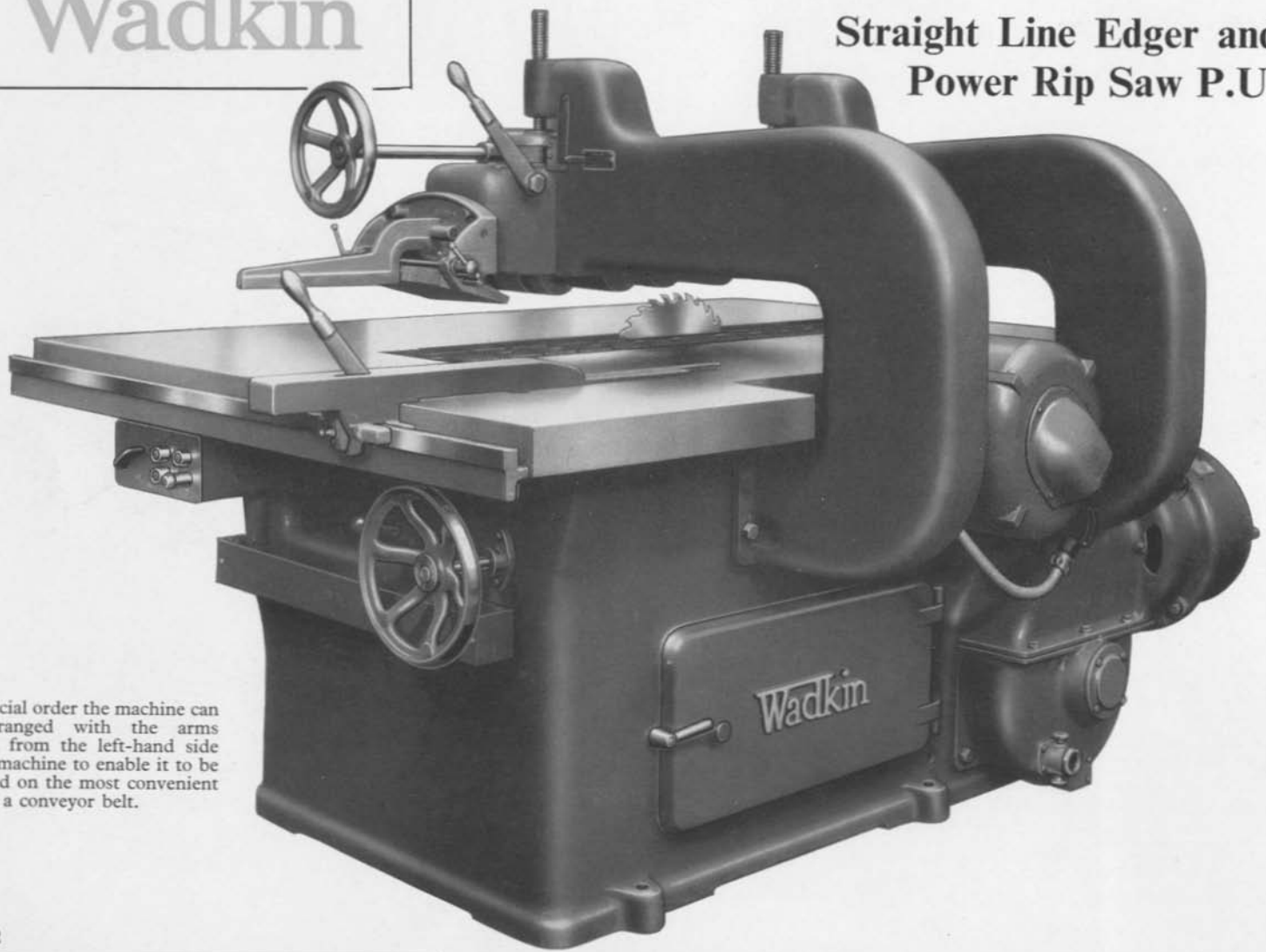
Dimensions and Capacities

Max. size of saw	20″
Max. depth of cut	7″
Size of table	3′ 4″×3′ 2½″
Max. distance between saw and fence	22″
Distance between front of table and saw	11¼″
Rise and fall of table	5″
Will take grooving heads up to	1½″ wide
Cuts mouldings up to	2½″
Diam. of saw spindle	1¼″
Speed of saw, r.p.m.	2200
Horse power:	
Standard duty	5
Heavy duty	7½
Floor space	3′ 9″×3′ 9″
Net weight	9½ cwt. (1060 lb.)
Shipping dimensions	48 cu. ft.



Wadkin

Straight Line Edger and Power Rip Saw P.U.



To special order the machine can be arranged with the arms carried from the left-hand side of the machine to enable it to be installed on the most convenient side of a conveyor belt.

Straight Line Edger and Power Rip Saw P.U.

The value of this machine lies in its ability to rip stock in a dead straight line at a high rate of feed. In design, it is fundamentally different from any other British edger, in that the saw is mounted under the table and cuts in a normal downward direction. We claim that as a result of this method of mounting, the Wadkin machine is far better adapted for its work than any other machine, and that it is safer to operate.

Specification

The Saw is perfectly supported in the main frame which makes it impossible for it to get out of alignment. It is raised and lowered by means of a worm and wormwheel controlled by handwheel and driven by motor built directly on the saw spindle.

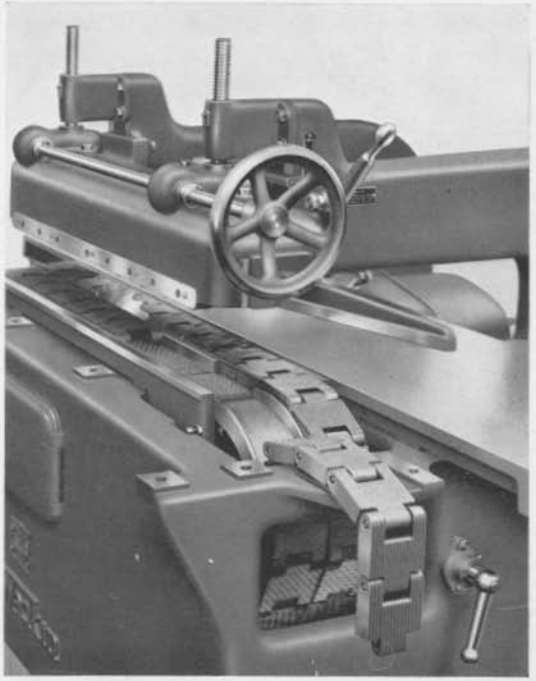
The Chain Feed is driven by a variable speed motor, all belts and gear changes being eliminated. The chain and chain bed are made of a special nickel cast iron to ensure long life, and the unique system of multiple grooves in both the chain and chain bed, not only ensures that the chain is guided in a dead straight path, but also guarantees permanent accuracy. With the saw cutting in a normal downward direction, top driven rolls are unnecessary which permits of an even distribution of the pressure rolls along the entire length of the chain. The rollers are hung in pairs on each side of the saw. They are housed in a sturdy casting which is raised and lowered by screw motion. A finger guard is fitted to the overhead pressure roller beam, consisting of $\frac{1}{8}$" thick fingers to prevent splinters being thrown back.

The Table is unusually large and will admit up to 30" on the right of the saw. A counterbalanced safety table is provided at the end of the chain and a fence and setting scale are provided.

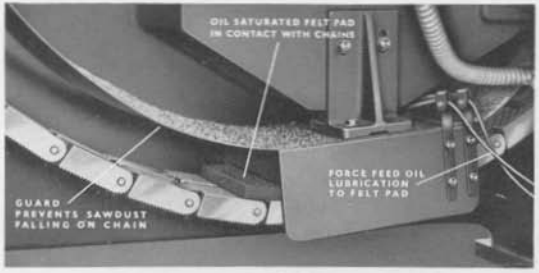
Push Button Control Gear ensures full protective features and both saw and feed motors are electrically interlocked, to prevent the feed operating when the saw is stopped.

Dimensions and Capacities

Max. depth of cut	4"
Max. diam. of saw	17"
Diam. saw spindle end	2"
Saw speed, r.p.m.: 50 cycles	3000
60 cycles	3600
Max. width of timber on right of saw when cutting 4" deep	24"
Timber above 24" up to 30" can be sawn up to $1\frac{3}{4}$" deep	
Feed in ft. per min.: 50 cycles	50, 75, 100 & 150
60 cycles	60, 90, 120 & 180
Horse power of saw motor	15
Larger motors up to 25 h.p. can be fitted for heavy work.	
Horse power of feed motor	3
Size of table	6' 9" × 4' 11½"
Floor space	7' 9" × 5' 9"
Net weight	46 cwt. (5,150 lb.)
Shipping dimensions	200 cu. ft.



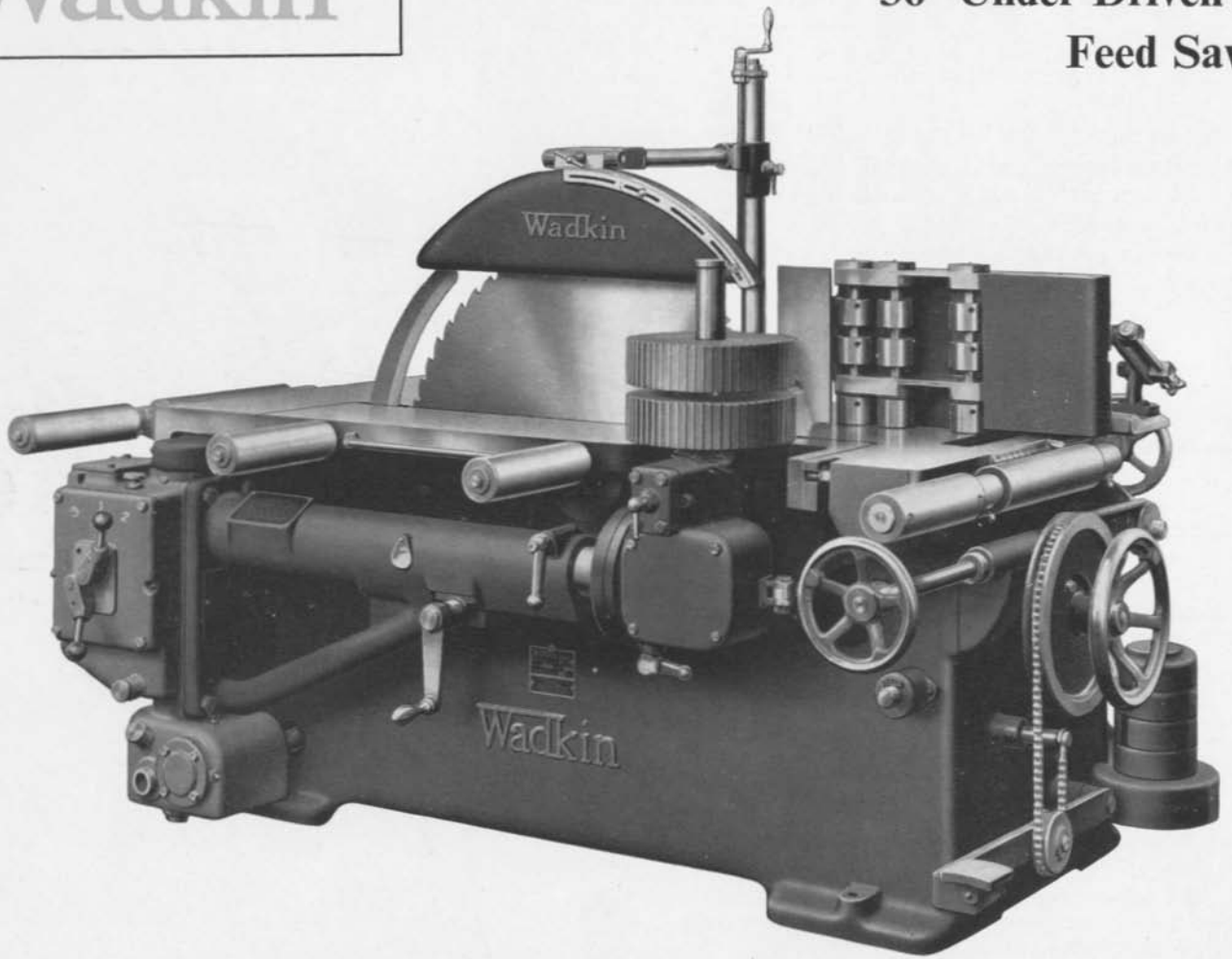
Shows the unique design of the Wadkin chain and chain bed.



Shows the method of lubricating the chain.

Wadkin

36" Under Driven Roller Feed Saw P.Z.



36" Under Driven Roller Feed Saw P.Z.

Wadkin

This is an ideal machine for resawing deals into boards or for bevel sawing weather boarding, etc. It is built on robust lines, and is capable of extremely accurate work. It is exceptionally simple to operate, and embodies a number of features to assist the sawyer in getting good quality sawing, at a high rate of output.

Specification

The Table is exceptionally large and fitted with anti-friction rollers to facilitate the return of deals for further cutting. The front portion of the table can be drawn back for getting at the saw.

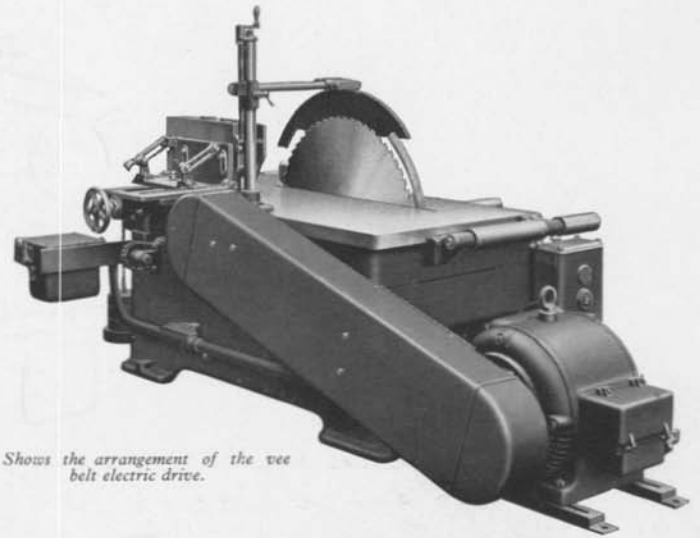
The Saw Spindle runs in heavy ball bearings.

The Fence is of heavy construction, adjustable across the table by screw motion. It is provided with anti-friction rollers which can be adjusted in height to suit the material being sawn. The fence cants up to 45° for bevel sawing, and front plate adjusts horizontally to suit different diameters of saws.

The Feed Rollers are carried on a radial arm, and can be adjusted both horizontally and vertically. In addition they can be canted up to 15° in either direction, or inverted leaving the table clear. Six rates of feed are obtained from a totally enclosed gear box. All gears are steel machine cut, and run continuously in oil. All controls are located handy for the operator.

Electric Drive is by multiple vee belts from motor placed at the outfeed end of the machine. When required, the machine can be arranged with two speeds, to enable 36" and 26" saws to be used. In this case the drive is either by vee cones from motor mounted on a base plate slide, or two-speed motor.

Belt Driven machines are provided with fast and loose pulleys and self-locking striking gear, with loose pulley running on ball bearings on separate sleeve. An outside pedestal bearing is provided.



Shows the arrangement of the vee belt electric drive.

Dimensions and Capacities

Max. size of saw	36"
Saw spindle speed (for 36" saw), r.p.m.	1100
Diam. saw spindle end	1¼"
Max. depth of cut	13¼"
Size of table	5' 6" × 2' 9"
Max. distance between saw and power feed rollers	12"
Max. distance between saw and fence	12"
Rates of feed in ft. per min.	25, 40, 60, 65, 100, 150
Horse power	30
Floor space, vee belt (electric)	10' 0" × 4' 6"
Net weight	43¼ cwt. (4850 lb.)
Shipping dimensions (approx.)	139 cu. ft.

Wadkin

18" Canting Spindle Dimension Saw P.K.

This machine will cross cut, rip or mitre equally well in any kind of wood, and the cut is made so smoothly that glue joints can be made straight from the saw.

Specification

The Saw cants up to 45° by means of a worm and worm wheel motion operated by handwheel. A scale indicates the angle of the saw.
The saw has also rise and fall movement by handwheel and screw motion, for rebating, trenching, etc.

The Saw Spindle is made of steel of 45 tons tensile strength, and runs in heavy ball bearings mounted in dustproof housings.

The Saw Guard below the table is in the form of a dust hood, arranged with a nozzle for discharging the dust behind the machine, or for connecting up to an exhaust system. The guard above the table raises and lowers by screw motion, and can be canted to suit the angle of the saw.

The Riving Knife or Splitter is rigidly supported on the bracket carrying the saw and motor, and is adjustable with the saw.

The Table is in two parts, the front portion sliding past the saw on ball-bearing rollers. It is marked out with scales for convenience in setting the fences.

18" Canting Spindle Dimension Saw P.K.

Wadkin

The sliding table has also a movement away from the main table, to give the necessary gap for grooving saws, etc. Any width of gap up to 4" can be obtained. The sliding front table is marked out in degrees for convenience in setting the fences for angular cutting. The fixed table is provided with a scale in inches or metric dimensions.

Three fences are supplied with the machine. A ripping fence with canting and adjustable front plate and fine screw adjustment. A cutting-off fence arranged to swivel 180°, also a universal double mitre fence, both provided with stops.

Plain Table. Alternatively a plain table without sliding section can be supplied in place of the above.

The Motor, which can be supplied for practically any electric supply, is mounted directly on the saw spindle and cants with the saw.

Dimensions and Capacities

Diam. of saw	18"
Diam. of saw spindle end	1¼"
Max. depth of cut	4¼"
Will cross cut	30" wide 4¼" deep or 36" wide 1" deep (*A larger sliding table to cross cut 47" wide × 4¼" deep or 50" wide × 1½" deep, can be supplied.*)
Length of material cut off using stops on fences	36"
Saw speed, r.p.m.: 50 cycles	3000
60 cycles	3600
Will rip up to	24" wide (*A larger table to admit 30", 36" or 50" between saw and ripping fence, can be supplied.*)
Size of table	3' 8" × 4' 5½"
Floor space	3' 8" × 4' 6"
Horse power of motor	4
Net weight	18 cwt. (2000 lb.)
Shipping dimensions	62 cu. ft.

Extension Cross Cut Table

Illustration above shows the machine fitted with an extended table. With this table, material up to 32" wide, 4¼" deep and 72" long can be cut, when using the turn over stop and standard length of graduated bar. Longer bars can be supplied when required.

Wadkin

**12", 16" and 20"
Planers and
Jointers R.Z.**

12", 16" and 20" Planers and Jointers R.Z.

Wadkin

These machines are designed to produce a perfectly straight and true face or edge on any class of timber, and at the same time leave it with the smoothest possible finish. In addition to these operations they will do such work as rebating, bevelling, and chamfering. They are machines of pronounced modern design and built on lines that ensure continuous and lasting service.

Specification

The Main Frame. The main frame is designed to give good foot-room for the operator. It is a robust casting, well ribbed to absorb vibration and machined on the underside to give a proper seating to the floor. It incorporates a chute to discharge the chippings clear of the operator.

The Tables. The long tables are precision ground to enable the machine to make accurate glue joints. The tables are mounted on accurately machined slides to give a rise and fall movement in relation to the cutterblock. They have also drawn-out motion for ease of changing cutters and for the use of moulding irons. Table edges adjacent to the cutterblock are fitted with steel lips.

The Fence. The fence is designed on exceptionally robust lines and is absolutely rigid in all positions. It is of the canting type and can be securely locked by quick-acting dual lock operated by single lever. Fence is adjustable across the table by handwheel and an extension on the table enables the full width of the cutterblock to be used without removing the fence from the table. Two adjustable holding-down springs are provided.

The Cutterblock. The standard cutterblock is of the safety circular wedge type, having a 5" diameter cutting circle. It is designed to give maximum support to the two thin knives which are held close up to the edge. The cutterblock is made from a forging of best quality steel and is mounted in special heavy type ball bearings.

Alternatively, a two-knife shear cut cutterblock can be supplied, arranged to take moulding irons up to 7" wide, and tonguing and grooving irons without disturbing the planing knives. It incorporates a fine screw motion for setting the planing knives and safety device.

The Cutterblock Guard. The safety guard included with the machine is of the bridge type and conforms to the requirements of the Factory Acts. A swing-away or "boomerang" type of guard can be supplied if preferred.

A guard is also provided behind the fence which automatically adjusts with the movement of the fence to cover the cutterblock.

Electric Drive. Cutterblock is driven by belt from a motor of the protected squirrel cage type housed inside the main frame. It is controlled by direct-on contactor gear built into the machine, and operated by push buttons. Control gear has full protective features including no-volt and three overload releases.

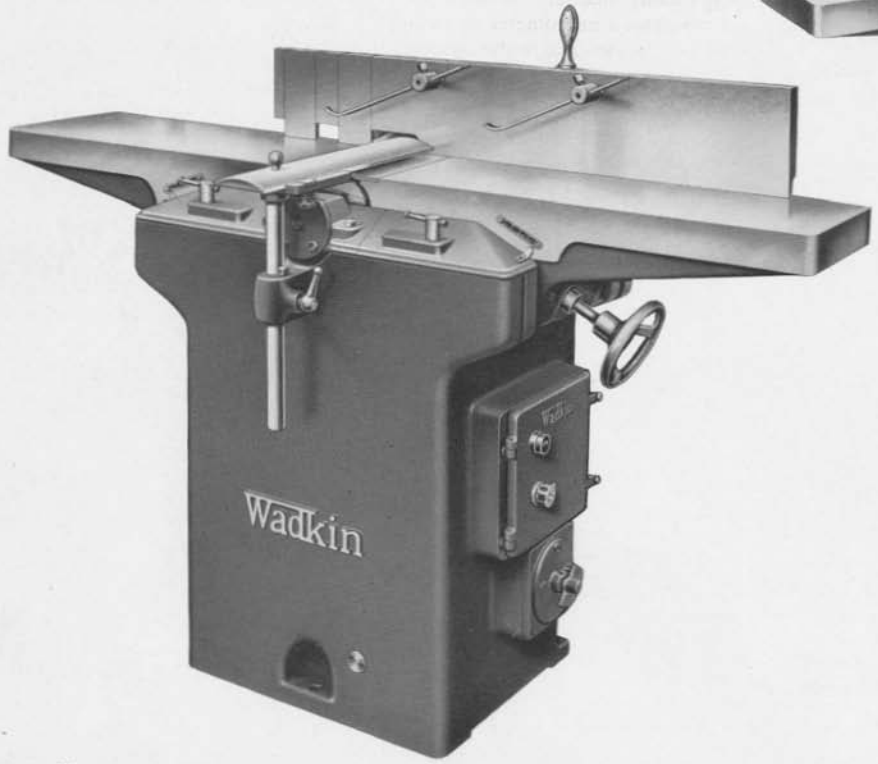
Triple-pole isolating switch complete with rewirable type fuses can be built into the machine to order.

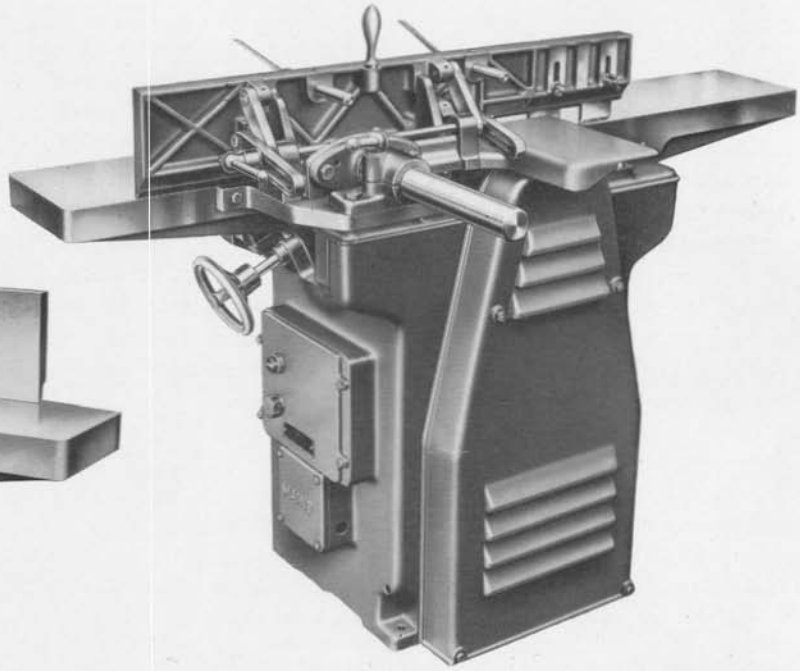
Dimensions and Capacities

Surfacing capacity	12"	16"	20"
Maximum depth of cut	$\frac{7}{8}$"	$\frac{7}{8}$"	$\frac{7}{8}$"
Maximum depth of rebate	$\frac{7}{8}$"	$\frac{7}{8}$"	$\frac{7}{8}$"
Length overall of tables	6' 0"	6' 0"	8' 0"
Speed of cutterblock in r.p.m. on 50 cycles	4200	4200	4200
Speed of cutterblock in r.p.m. on 60 cycles	4800	4800	4800
Cutting circle of cutterblock	5"	5"	5"
Horse power of motor	3	4	5
Floor space	6' 0" × 3' 0"	6' 0" × 3' 8"	8' 0" × 4' 4"
Net weight in cwt.	10½ (1170 lb.)	12½ (1400 lb.)	16½ (1850 lb.)
Shipping dimensions in cubic feet	53	60	83

Wadkin

9" Planer and Jointer R.V.





9" Planer and Jointer R.V.

Wadkin

This machine will make a big appeal on grounds of economy, where a large volume of the work going through the shop is of small dimensions. It gives the same speed and accuracy on production work as a big machine, and will do the same wide range of operations. Among the many operations which can be quickly and economically performed in addition to ordinary surface planing, are making glue joints, planing out of wind, rebating, moulding, tapering, bevelling, chamfering, stop chamfering, tonguing and grooving, etc. All the refinements and improvements found in Wadkin Planers are embodied in this model. Accuracy and precision are built into it, guaranteeing the highest standard in the work done.

Specification

The Main Frame is a heavy casting in one piece, arranged with chute for guiding the chippings clear of the operator.

The Surfacing Tables are long and ground dead true to enable the machine to make glue joints. Draw-out motion to each table is provided for convenience in changing and sharpening cutters and to enable moulding cutters to be used. Each table has also a rising and falling motion of 1", and the table edges adjacent to the cutters are fitted with steel lips to prevent chipping of the edges and to give the minimum gap over the cutters.

Scales are provided to register the depth of cut.

The Fence is designed on exceptionally robust lines and is absolutely rigid in all positions. It is of the canting type and can be securely locked by quick-acting dual lock operated by single lever. Fence is adjustable across the table and an extension on the table enables the full width of the cutterblock to be used without removing the fence from the table. Two adjustable holding-down springs are provided.

The Cutterblock is of the safety circular type. It has a 5" diameter cutting circle with knives arranged to give a shearing cut. It is designed to give maximum support to the two thin knives which are held close up to the edge thus preventing knife chatter, and making it impossible for chips to wedge in front of the knives. The cutterblock is made from a forging of best quality steel and is mounted in special heavy type ball bearings. It incorporates a micrometer screw knife setting and safety device. Moulding irons can be attached to the cutterblock without disturbing the planer knives.

The Cutterblock Guard. The safety guard included with the machine is of the bridge type and conforms with the requirements of the Factory Acts. A swing-away or "boomerang" type of guard can be supplied if preferred. A guard is also provided behind the fence which automatically adjusts with the movement of the fence to cover the cutterblock.

Electric Drive. Cutterblock is driven by belt from a motor of the protected squirrel cage type housed inside the main frame. It is controlled by direct-on contactor gear built into the machine, and operated by push buttons. Control gear has full protective features including no-volt and three overload releases.

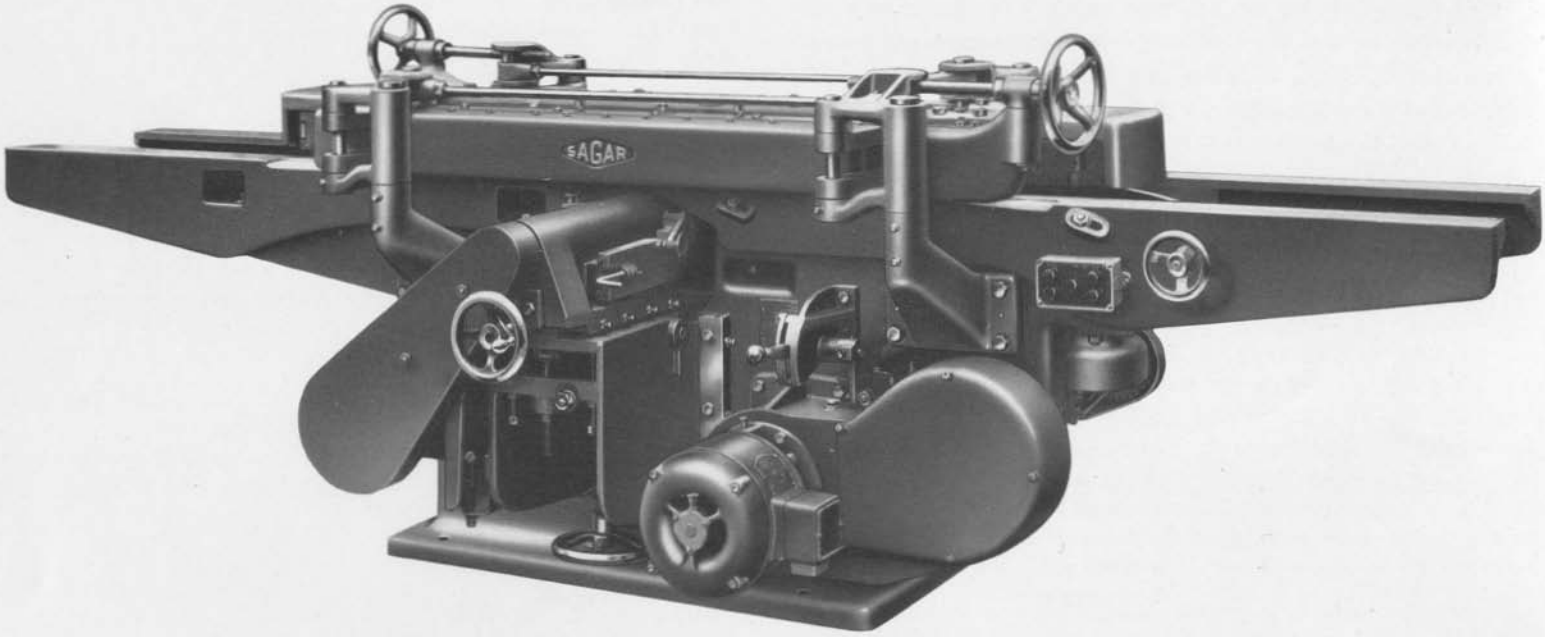
Triple-pole isolating switch complete with rewirable type fuses can be built into the machine to order.

Dimensions and Capacities

Surfacing capacity	9"
Maximum depth of cut	1"
Maximum depth of rebate	½"
Length overall of tables	5' 0"
Height of tables from floor	2' 9"
Fence cants up to 45°.	
Speed of cutterblock in r.p.m. on 50 cycles	4200
Speed of cutterblock in r.p.m. on 60 cycles	4800
Cutting circle of cutterblock	5"
Horse power of motor	2
Floor space	5' 0" × 3' 0"
Net weight	9 cwt. (1000 lb.)
Shipping dimensions in cubic feet	66

Wadkin

Continuous Feed Automatic Jointer U.K.



This machine is manufactured by J. Sagar & Co. Ltd., Halifax, one of the Wadkin Group of Companies.

Continuous Feed Automatic Jointer U.K.

Wadkin

This is a high production machine capable of jointing boards up to a maximum thickness of 4½" at speeds up to 97 feet per minute. It will do square or angular joints, single or double tongue and groove joints, edge moulding, etc. For such work as jointing table tops, coffin boards, and jointed stock for veneering, a machine of this type is indispensible. It is ball-bearing mounted throughout and is specially designed with dual cutterheads so that two boards may be worked at the same time.

Specification

The Main Frame carries all working units, is heavily built, and machined to close limits for ultimate accuracy of the finished product. It is provided with a large base area for stability and strength and incorporates a built-in dust chute to divert chippings away from the working surfaces.

Cutterheads. The machine is fitted with dual cutterheads. Each head is carried in ground slideways, and provided with vertical and horizontal adjustments by handwheel and screw. Rigid locking devices locate the head at any desired height. In addition the heads may be canted for bevel jointing. The cutter spindles revolve at 6000 r.p.m.
Provision is made on each head for the attachment of a cutter truing or jointing attachment.

The Tables. Long accurately machined tables are provided either side of each cutterhead. Each table is fitted with a steel lip adjacent to the cutters giving a minimum gap over the cutters and preventing possible damage to the cutters. Lateral draw out adjustment is incorporated enabling varying sizes of heads to be accommodated. Infeed tables have vertical adjustment for regulating depth of cut.

The Feeding Mechanism comprises an endless chain made up of serrated links running along guide rails. Stock is held against the feed chain by means of ball bearing rollers. A built-in gear box gives three rates of feed of 52, 67 and 97 feet per minute selected by hand lever.

Electric Drive. The feed chain drive sequence is by chain sprockets from a 2 h.p. motor to the gear box, and thence by reduction gearing direct to the main feed chain sprocket. Each cutterhead spindle is driven by a separate 5 h.p. motor mounted on the cutterhead slide, drive being by multiple vee ropes and grooved pulleys, with provision for belt tensioning.

Dimensions and Capacities

Maximum thickness of material	4½"
Minimum thickness of material	¼"
Minimum length of material	6"
Minimum width of material	1¼"
Length and width of material	Unlimited
Effective working length of chain	6' 0"
Rates of feed	52, 67 and 97 f.p.m.
Speed of cutterblock	6000 r.p.m.
Vertical adjustment of heads	2½"
Horizontal adjustment of heads	6½"
Heads will cant	15° above, 5° below horizontal
Height of table from floor	2' 10½"
Vertical adjustment of tables	⅝"
Overall dimension of tables	4⅝" wide × 12' 0" long
Horsepower of feed motors	2
Horsepower of cutterblock motors	5
Approximate floor space	12' 0" × 5' 6"
Speed of countershaft (belt-driven machine)	800 r.p.m.
Size of fast and loose pulleys (belt-driven machine)	8" dia. × 4¾" wide
Approximate net weight	48½ cwt. (5432 lb.)
Shipping dimensions	170 cu. ft.

Wadkin

24" Panel Planer and Thicknesser R.E.

24" Panel Planer and Thicknesser R.E.

Wadkin

This Panel Planing and Thicknessing machine is designed on robust lines to provide the necessary stability on which the production of high-grade work so largely depends. 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 heavy to withstand the strain of the heaviest cuts.

The Table. The table is a heavy casting of specially hard, close-grained metal. It is raised and lowered 9" on broad slides by means of screws operated by chain and handwheel, 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 ft. per 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 $3\frac{1}{8}$" 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.

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.

A two-knife safety circular cutterblock can be supplied if preferred.

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.

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 is embodied.

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.

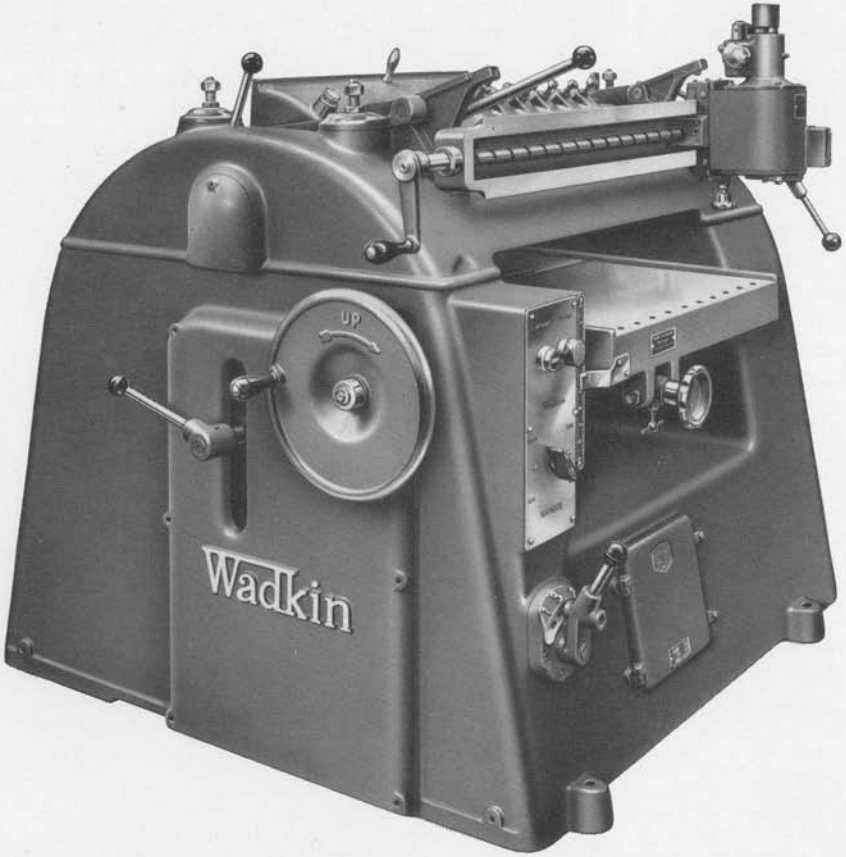
Dimensions and Capacities

Maximum size timber planed	24" × 9"
Speed of cutter block, r.p.m.: 50 cycles	4200
60 cycles	4200
Feed in feet per min.	20, 30, 46
Horse power, cutterblock motor	$7\frac{1}{2}$
Horse power, feed motor	1
Floor space	5' 2" × 4' 0"
Net weight	25 cwt. (2800 lb.)
Shipping dimensions	95 cu. ft.

Wadkin

24" Panel Planer and Thicknesser R.K.

with sectional feed rollers



24" Panel Planer and Thicknesser R.K.
with sectional feed rollers

Wadkin

This machine is of pronounced modern design. It incorporates a number of new ideas and mechanical advantages to ensure thicknessing of a high standard in both hard and soft woods. It is designed to take a cut if necessary ½" deep full width of the table.

Specification

Table is precision ground and of unusual depth, rising and falling on long slideways to give rigidity under heavy cuts. It rises and falls 9" by handwheel and screw motion. A scale registers the thickness being planed and a four-point lock is fitted, controlled by one hand lever. Table rollers have a small vertical adjustment and are quickly set in relation to the table by handwheel.

The Feed Rollers are 4" diameter. The in-feed roller is fluted and out-feed roller smooth. The bearings are self-oiling. Both rollers are controlled by totally enclosed springs easily adjustable on the top feed covers. In-feed roller is of the sectional type. Sections are forged steel 3" wide, each controlled by 12 coil springs permitting variations in stock thickness.

The Cutterblock is of the 4-knife safety circular type. It is mounted in extra-heavy ball bearings in dust-proof housings. The knives are held in the block by tapered clamps. Screw adjustment is provided for knife setting. All machines are prepared to receive a combined knife grinder and jointing attachment. This is supplied to order. Attachment for jointing only can be supplied.

The Chipbreaker in front of the cutterblock is of the sectional type and consists of steel shoes 3" wide, independently spring-loaded and pivoted from a shaft in front of the feed roll. This pivoting position prevents jamming of timber under the shoes and facilitates planing of very thin boards. Dead stop prevents contact with block. The whole of the chip-breaker unit is carried by two steel arms hinging from a point behind the block. This ensures a radial lift of the chipbreaker to keep gap to a minimum, which is important for obtaining a fine finish.

Drive is by vee belts from one motor, housed inside the main frame. Feed drive is by a two-speed cone built on to the motor pulley and vee belts driving on to a similar cone on a gearbox. This arrangement gives 6 rates of feed from 20 to 100 ft. per minute. All gears are heat treated and run in oil. Gearbox bearings are self-oiling ball bearings. The drive to the feed rollers is by heavy bushed roller chain. Control gear is of the automatic contactor type operated by push buttons. Contactor gear is housed in a dust-tight recess in the main frame and embodies full protective features.

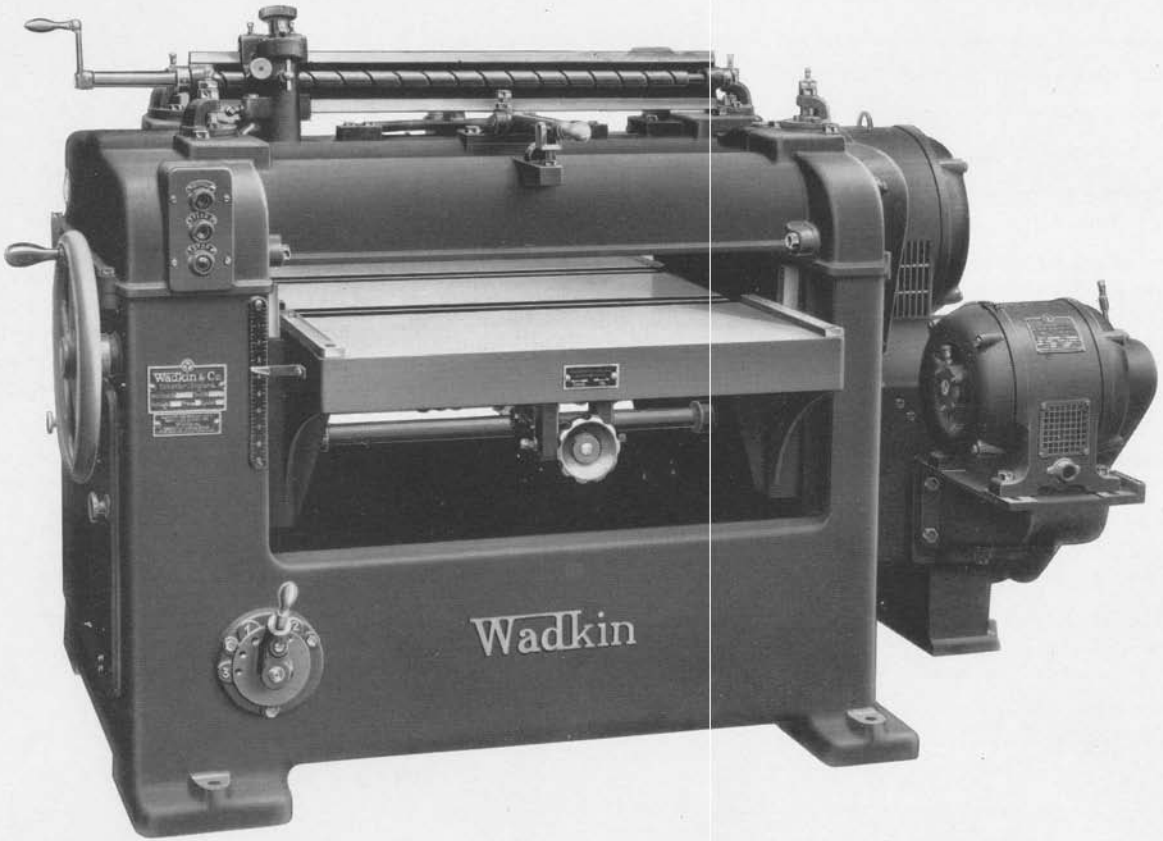
Dimensions and Capacities

Max. size of timber planed	24" × 9"
Speed of cutterblock, r.p.m.: 50 cycles	4200
60 cycles	4200
Diam. cutting circle	5"
Diam. feed rolls	4"
Rates of feed in feet per min. on 50 cycles	20, 35, 40, 50, 70, 100
60 cycles	25, 40, 45, 60, 72, 100
Horse power of motor	15
Floor space	4' 6" × 4' 2"
Net weight	31 cwt. (3500 lb.)
Shipping dimensions	105 cu. ft.

Wadkin

30" Panel Planer and Thicknesser R.J.

with sectional feed rollers



30" Panel Planer and Thicknesser R.J.
with sectional feed rollers

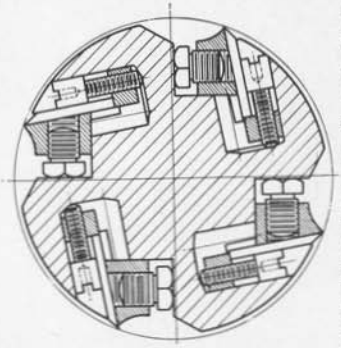
For thicknessing timber to exact dimension. The Sectional feed enables a high rate of output to be obtained when working narrow material.

Specification

Table rises and falls 9" by handwheel and screw motion. An index scale registers the exact thickness being planed. All mechanism is protected from dust and chips.

The Feed Rolls are all power driven. Top front roller is of the sectional type and grooved. Sections are 2" wide and made of forged steel. Each section is controlled by 8 springs and each is completely dust-tight. A lift of $\frac{3}{16}$" is provided for variation in stock thickness. Feed mechanism embodies oil bath gear box.
Table rollers revolve in ball bearings and are both provided with vertical adjustment; both rollers adjust simultaneously by one handwheel.
All pressure adjustments are effected from the top of the machine.

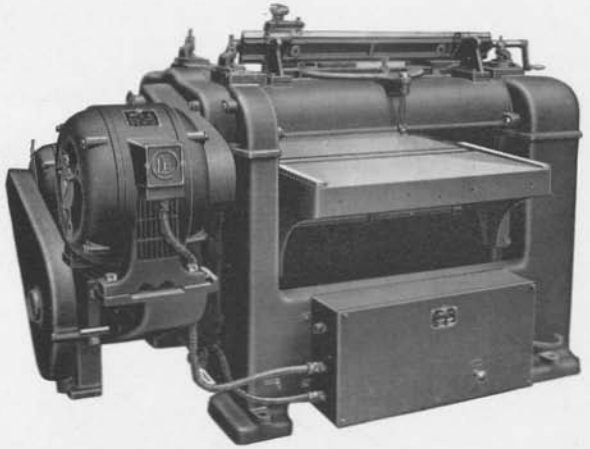
The Sectional Chipbreaker is mounted close up to the front of the cutterblock. It is mounted concentrically with the block to retain the same relative distance from the knives in any position and avoid any possibility of it being lifted into the knives. Each section is 2" wide controlled by 2 springs, and is made of forged steel. The entire unit can be swung clear of the block by lever for inspection. Both chipbreaker and feed rolls are of a special dust-tight design to avoid all possibility of sticking.



The Safety Circular Cutterblock carries 4 thin knives, securely held in the block by wedges. Screws are provided for each knife for quick and accurate setting.

Cuttersetting and Jointing Device is supplied with the machine.
Both cuttersetter and jointing device are carried side by side on the one fixture. Movement across the block is by quick screw and handle. A motorized knife grinder can be supplied to order.

Wadkin



Electric Drive. Both cutterblock and feed are driven by separate motors built on to the machine and transmitting power by endless vee belts. Control is of the automatic contactor type operated by push buttons, and both cutter block and feed motor contactors are interlocked.

Belt Drive. Countershaft is necessary when machine is arranged for ordinary belt drive.

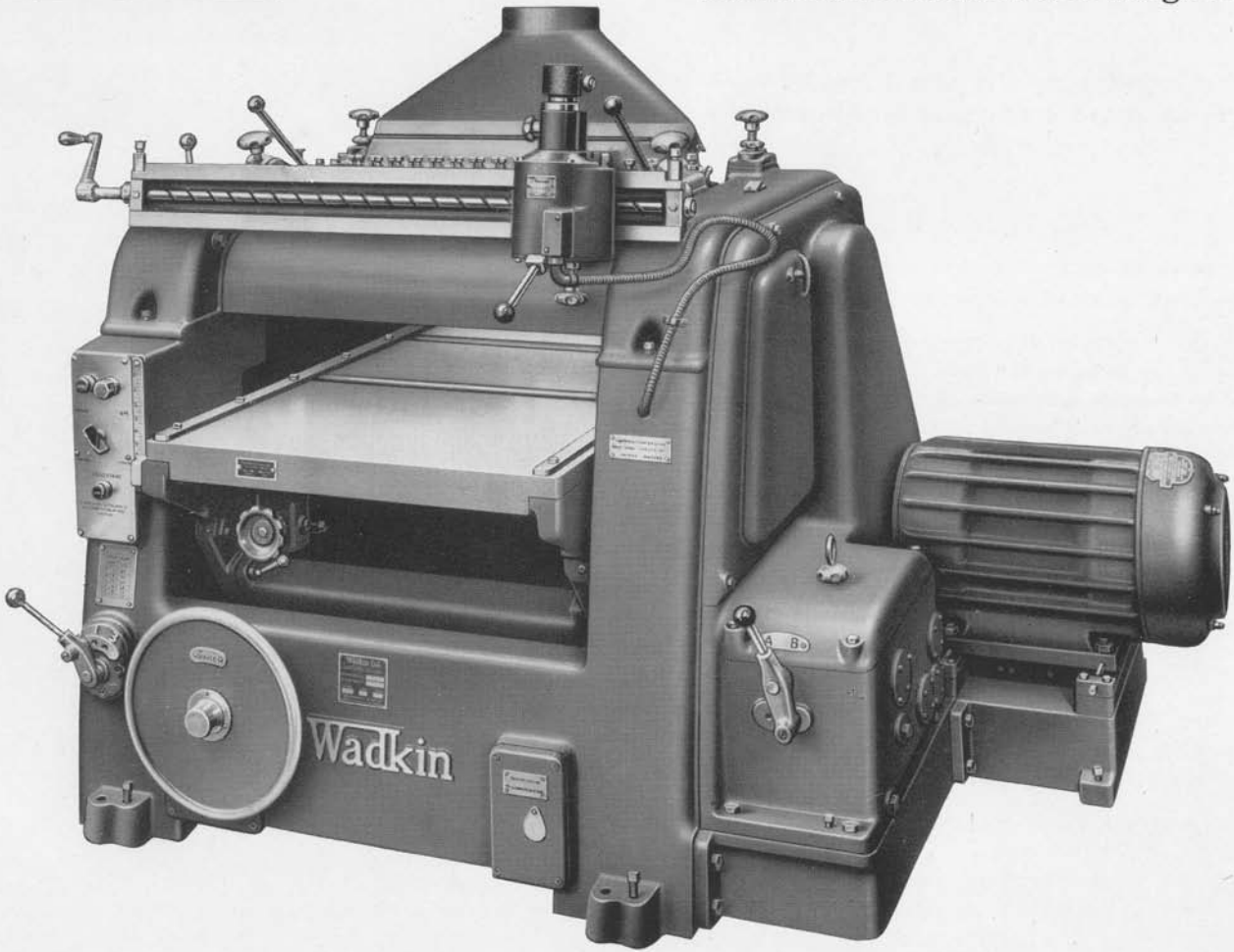
Dimensions and Capacities

Max. size of timber planed	30" × 9"
Speed of cutterblock on 50 cycles	4500 r.p.m.
60 cycles	4500 r.p.m.
Diameter of cutterblock	5"
Diameter of feed rolls	5"
Rates of feed in feet per minute	25, 37, 57
Horse power of cutterblock motor	15
Horse power of feed	2
Floor space	4' 3" × 6' 4"
Net weight	40 cwt. (4500 lb.)
Shipping dimensions	138 cu. ft.

Wadkin

36" Panel Planer and Thicknesser R.X.

with sectional rollers and wedge bed



36" Panel Planer and Thicknesser R.X.

with sectional rollers and wedge bed

Wadkin

This is an entirely new Panel Planer designed and styled on modern lines and capable of planing the heaviest timbers and giving high production and perfect finish of rails or panels at high rates of feed.

Specification

The Main Frame is designed to support the table, cutterblock and feed rolls when operating under the heaviest cutting conditions without vibration.

The Table is of heavy construction and is wedge operated on long inclined slides giving maximum support under the heaviest cuts. It is raised and lowered by means of horizontal screws fitted with ball thrust bearings. The handwheel for hand motion is located in a convenient position at the front of the machine. Major table movement is power operated by a 1 h.p. 1,500 r.p.m. motor whilst the handwheel is provided for fine setting. The centre platen between the bottom feed rolls is a hardened ground section and is renewable. Bottom rolls have quick vertical adjustment by one handwheel.

The Cutterblock. The 6" diameter cutterblock is of the 4-knife wedge type and revolves at 4,000 r.p.m. on extra heavy type ball bearings in dust proof housings. Screw adjustment is provided for knife setting. A handbrake is fitted to stop the block quickly.

Cutter Setter, Grinder and Jointer. A motorised grinder combined with knife setting and jointing device is provided. This is carried permanently on the machine and is swung clear when not in use.

The Chipbreaker in front of the cutterblock is of the sectional type and consists of malleable iron shoes, each 2" wide independently spring loaded. $\frac{1}{4}$" initial lift is provided on each shoe from a pivoting point in front of the cutterblock. In addition to this, the whole chipbreaker lifts away on a pivoting point behind the block to give a maximum cut of $\frac{3}{4}$". The chip breaker can be lifted out on the pivoting arms and swung away for access to the Block and to swing in the grinding attachment when required.

The Pressure Bar behind the cutterblock has a rise and fall movement to suit the cutting circle of the cutterblock. This adjustment is by handwheel.

The Sectional Infeed Roller is built up of 2" wide sections, each giving a maximum yield of $\frac{5}{16}$". The roll is 6" diameter and is mounted in a radial swing which swings up when the lift required is more than $\frac{5}{16}$".

Feed Mechanism. The feed rollers are all power driven and mounted on needle roll bearings throughout. Each is driven through roller chain and spur gearing from a six-speed ball bearing gearbox. The gearbox has a feed range of 20, 32, 48, 52, 80 and 120 feet per minute. A 25 h.p. motor drives the gearbox and cutterblock.

Principal Dimensions and Capacities

Planing and thicknessing capacity	36" × 7"
Speed of cutterblock	4000 r.p.m.
Horsepower of main driving motor	25
Horsepower of table power rise and fall motors	1
Diameter of cutting circle	6"
Diameter of sectional infeed roll	6"
Diameter of top outfeed and bottom rolls	5½"
Width of sectional feed roll sections	2"
Width of sectional chipbreaker shoes	2"
Length of table	4' 6"
Standard rates of feed	20, 32, 48, 52, 80 and 120 feet per minute
Approximate weight	45 cwt. (5000 lb.)
Shipping dimensions	209 cu. ft.

Wadkin

42" and 52" Heavy Duty Panel Planers P.E.

with wedge bed. Available with four or six driven feed rollers

This machine is manufactured by J. Sagar & Co. Ltd., Halifax, one of the Wadkin Group of Companies.

42" and 52" Heavy Duty Panel Planers P.E.

with wedge bed. Available with four or six driven feed rollers

Wadkin

This Heavy Duty Panel Planer is an efficient and accurate machine, capable of producing a high class of work at the fast rates of production demanded in the woodworking industry today.

Specification

The Main Frame consists of two main side members joined together by exceptionally strong binder rails; the whole main frame unit being strongly built to withstand the heavy duty work performed on this machine.

The Table is well ribbed for strength and rigidity, surface ground, and mounted on an inclined bed or seating to give maximum support throughout the full working length of the table. Vertical adjustment is by a subsidiary wedge frame, travelling horizontally by two lead screws in combination with the inclined bed. Table lead screws are mounted on ball thrust bearings and are operated by a conveniently placed handwheel at the side of the machine. Power rise and fall mechanism is incorporated by means of a separate motor built into the main frame. A graduated scale indicates the exact thickness of timber being planed.

The Cutterblock is of the circular type, mounting four thin high-speed steel planing cutters. Cutters are held into position by wedge shaped clamp bars, locking by clamp screws and incorporating independent fine screw adjustment. The machine embodies a cutter setting and truing attachment which can be instantly brought into use. To special order a built-in electrically driven cutter grinding unit can be supplied, which is interchangeable with the cutter setting attachment.

The Feed Rollers fitted above the table are power fed; the infeed being sectional and grooved and the outfeed being of the plain type. Anti-friction feed rollers are fitted into the table and are chain driven. Each roller can be adjusted by means of a handwheel. The infeed pressure bar is of the sectional type whilst the outfeed pressure bar is of the solid type. Both pressure bars are hinged mounted.

Feed Rates are 22, 28, 38, 52, 64 and 87 feet per minute obtained by a totally enclosed gearbox fitted at the infeed end of the machine. Feed speeds are selected by means of a hand lever.

Electric Drive. The cutterblock and feed unit are driven by separate motors mounted on a common base plate at the side of the machine. Drives are transmitted by vee ropes and grooved pulleys and housed within the main frame. The feed motor operates a built-in gearbox which transmits drive to the power feed rollers by heavy roller chain with corresponding jockey pulleys for compensating table rise and fall motions.

Dimensions and Capacities

	42" Machine	52" Machine
Capacity	42" × 8"	52" × 8"
Horse power of cutterblock motor	25	According
Horse power of feed motor	5	to duty
Approximate floor space of complete machine	8′ 6" × 5′ 3½"	9′ 3" × 5′ 3½"

The following specifications are common to both machines

Horse power of table elevation motor	½
Cutting circle diameter of cutterblock	7⅛"
Speed of cutterblock	3600 r.p.m.
Diameter of sectional infeed roller	6"
Diameter of outfeed roller	6"
Rates of power feed	22, 28, 38, 52, 64 and 87 f.p.m.
Rate of powered rise and fall motion for table	6¼" per min.
Length of planing table	5′ 0"
Height of table from floor in top position	32¼"
Rise and fall of table	8"
Horse power of cutter grinding motor	¼
Size of grinding wheel	4½" dia. × ½" wide × ⅝" bore
Size of carborundum truing stone	⅝" dia., 2" long
Speed of grinding wheel	4400 r.p.m.

	Approximate Net Weight	Approximate Measurement
42" Machine—Case 1	64 cwt. (7168 lb.)	189 cu. ft.
Case 2	10½ cwt. (1176 lb.)	52 cu. ft.
52" Machine—Case 1	72 cwt. (8100 lb.)	210 cu. ft.
Case 2	15 cwt. (1700 lb.)	57 cu. ft.

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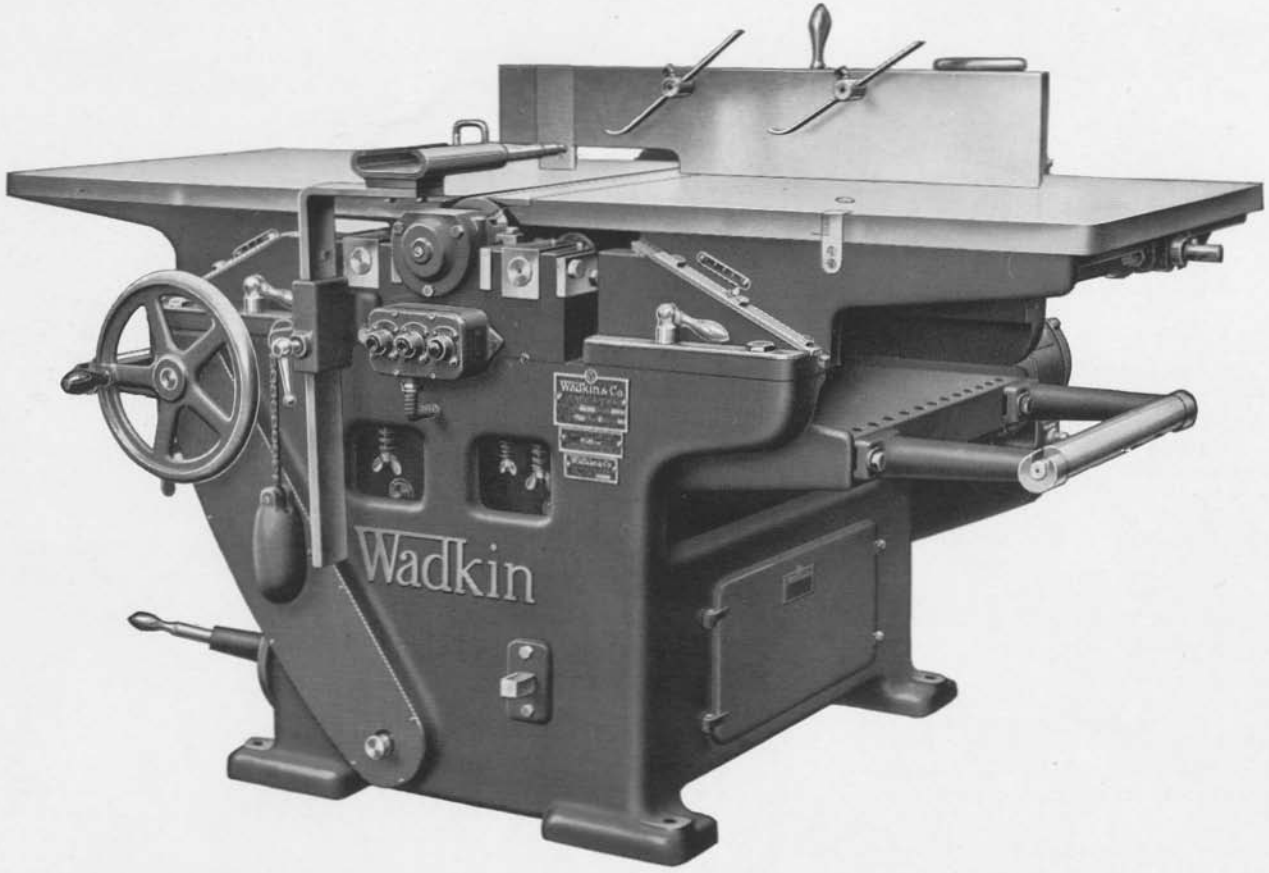
16" and 24" Planing and Thicknessing Machines R.M.



16" and 24" Planing and Thicknessing Machines R.M.

Wadkin

This range of machines is unsurpassed for accurately and efficiently planing and thicknessing all kinds of hard or soft timber. In addition to the ordinary planing operations, they are quickly adaptable for rebating, bevelling, moulding, chamfering, stop chamfering, tonguing and grooving, etc.

Specification

Tables are ground dead true for glue jointing. They have draw out motion also rise and fall motion.

The table edges adjacent to the cutterblock are fitted with steel lips to prevent chipping. The tables are specially arranged to enable rebating to be done $\frac{1}{2}$" deep in any width of timber, or 1" deep when the overhang of the timber does not exceed $1\frac{1}{2}$". Front surfacing table may be arranged to cant by screw motion for taper planing for pattern shop work.

Fence cants 45° and is adjustable across the table by handwheel and rack motion. An extension on the table enables the fence to be set back to allow the full width of the table being used. Adjustable holding down springs are included on the fence.

The Thicknessing Table is provided with two anti-friction rollers. Both rollers revolve in ball bearings and have vertical adjustment so arranged that both rollers move together by one handwheel. Carrier rollers are also fitted for long work. Table rises and falls by handwheel and gearing, and is carried on vertical slides. All mechanism for the rising and falling motion is protected against dust. An index scale indicates the height of the table.

The Cutterblock is of the two-knife safety circular type and runs in heavy ball bearings. It embodies a unique knife-setting arrangement.

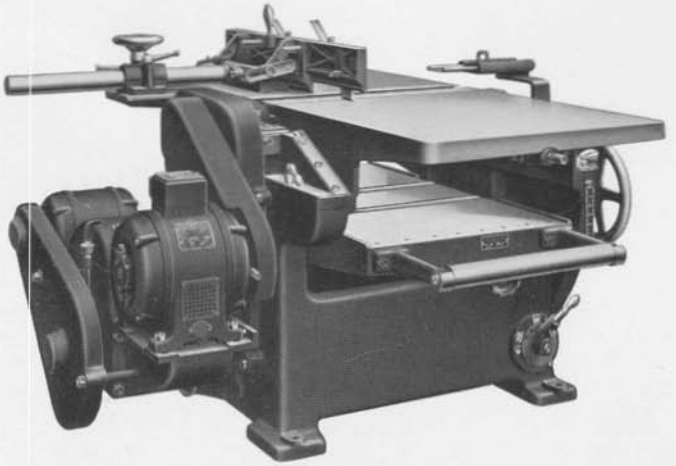
The cutterblock is arranged to take moulding irons without upsetting the planing knives.

The Feed is driven by a heavy chain totally enclosed and running in an oil bath. Three rates of feed are provided by means of a gear box. All gearing is of steel, machine cut, and runs in oil. Speeds can be varied whilst the machine is running.

The feed rollers and pressure bars are controlled by adjustable springs and are provided with stops to prevent them being lifted into the cutters.

Electric Drive. Both cutterblock and feed motion are driven by separate motors, and transmitting power by endless vee belts. Suitable control gear is provided.

Belt Drive. Countershaft with fast and loose pulleys and striking gear is provided.



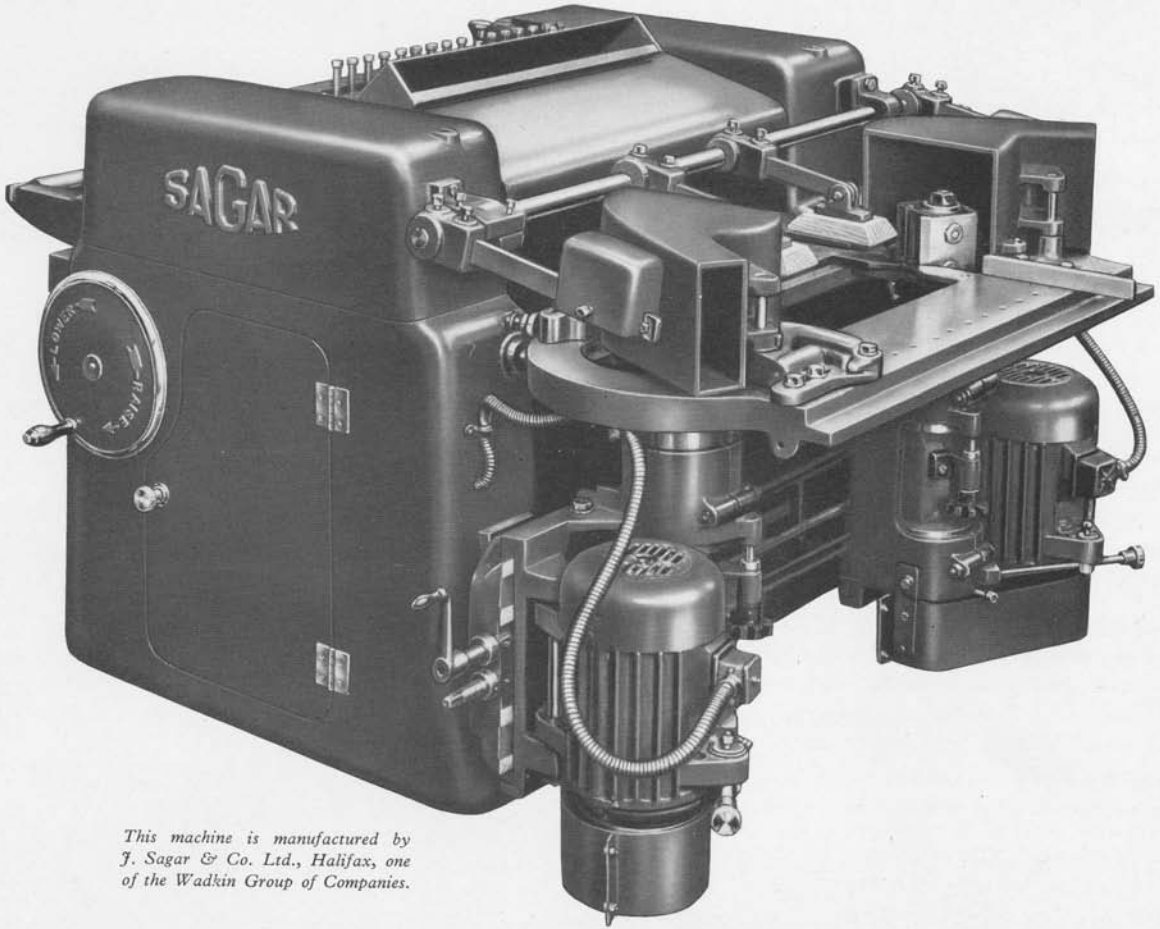
Showing arrangement of the two-motor drive.

Dimensions and Capacities

	16" Machine	24" Machine
Thicknessing capacity	16" × 9"	24" × 9"
Surfacing capacity	18"	26"
Max. depth of cut	$\frac{3}{4}$"	$\frac{3}{4}$"
Length of surfacing tables	6' 1"	6' 1"
Length between carrier rolls in thicknessing table	5' 5½"	5' 5½"
Speed of cutterblock, r.p.m.: 50 cycles	4200	4200
60 cycles	4800	4800
Cutting circle of cutterblock	5"	5"
Rates of feed in ft. per min.	20, 30, 46	20, 30, 46
Horse power of cutterblock motor ..	4	5
Horse power of feed motor	1	1
Floor space	6' 1" × 4' 8"	6' 1" × 5' 4
Approx. net weight	26 cwt. (2900 lb.)	29 cwt. (3250 lb.)
Shipping dimensions	83 cu. ft.	98 cu. ft.

Wadkin

Three Cutter Planing and Moulding Machine A.G.V.



This machine is manufactured by J. Sagar & Co. Ltd., Halifax, one of the Wadkin Group of Companies.

Three Cutter Planing and Moulding Machine A.G.V.

Wadkin

This machine will appeal to all who are looking for an efficient yet economical method of handling their three-sided planing. Every class of thicknessing and a host of other jobs including edging, tonguing, grooving and moulding, etc., is done quickly, accurately and with good finish in both hard and soft timbers.

Specification

The Main Frame is a one piece cored casting mounting all working parts, having large base area for strength and rigidity under all operational conditions.

The Table. Rise and fall motion is through handwheel, chain reduction gears and dual raising screws, fitted with ball thrust bearings to ensure easy movement. Two anti-friction rollers are let into table, fitted with fine adjustment by handwheel and screw from in-feed end of machine. Indicator scale is fitted to show planing and moulding capacity.

The Drive and Feed Mechanisms. Upper power feed rollers are ball bearing mounted on swinging link castings, with chain drive from 3-speed built-in gearbox. All controlling handwheels for feed roller adjustment are externally operated. Hinged top covers provide immediate access to upper portion of machine. Out-feed cover incorporates built-in exhaust chute. Horizontal cutterhead and feed motion are driven by totally enclosed vee ropes and grooved pulleys from single motor.

The Vertical Side Cutterheads. These are mounted on horizontal slides at the outfeed end of the machine with individual horizontal and vertical adjustments by handle and screws. Drive is by flat belt from self-contained motors on same slide as vertical cutterheads. Spring loaded side, and weight loaded upper pressures are arranged to take wooden shoes and located at outfeed end of machine. Each side spindle is provided with detachable exhaust hoods.

The Cutterblocks. Standard machine is fitted with two-knife rectangular cutterblock for horizontal head with provision for moulding cutters. Two square cutterblocks and bolts for vertical side spindles.

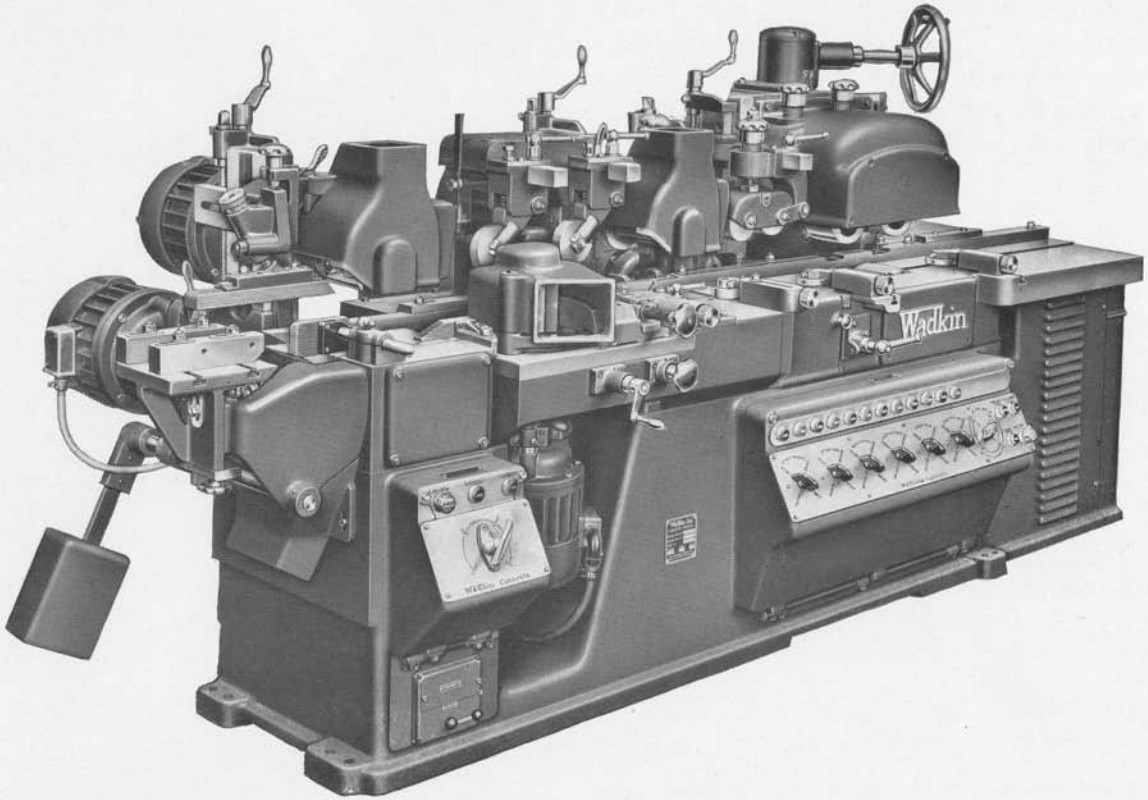
The Motors and Control Gear. All motors are of the squirrel cage totally enclosed type, controlled by automatic direct-on contactor starters for side head motors and star delta starters for horizontal cutterblock and feed unit. Motors are fully protected by no-volt and overload releases. Remote control "Start and Stop" push buttons for each motor with master stop button to close all motors down simultaneously.

Dimensions and Capacities

Standard machine with side spindles	24" wide × 6" deep
Machine without side spindles	24" wide × 9" deep
Cutting circle diameter of horizontal cutterblock	5⅛"
Speed of all cutterblocks	4000 r.p.m.
Diameter of feed rollers	3¼"
Rates of power feed	20, 40, 60 feet per minute
Overall length of table	6' 4"
Horizontal cutterhead motor	10 h.p. 1500 r.p.m.
Vertical side cutterhead motors	5 h.p. 3000 r.p.m.
Height of table from floor in top position	2' 7"
Rise and fall of table	9"
Approximate floor area	6' 4" × 4' 8¾"
Approximate net weight	38 cwt. (4256 lb.)
Shipping dimensions	189 cu. ft.

Wadkin

4" x 4" Planer and Moulder F.D.



4" x 4" Planer and Moulder F.D.

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This is a self-contained, electric high-speed machine, capable of dealing with a wide range of four-sided work. It is designed to operate on a high-frequency supply, giving high spindle speeds with good rates of feed on single knife finish. Frequency changer is built into the machine.

The machines are supplied with heads arranged as follows:—

F.D.41. 4 heads. Bottom, fence side, near side, top.
F.D.42. 5 heads. Bottom, fence side, near side, top, bottom.
F.D.43. 5 heads. Bottom, fence side, near side, top, top.
F.D.44. 6 heads. Bottom, fence side, near side, top, top, bottom.
F.D.45. 5 heads. Bottom, top, fence side, near side, top.
F.D.46. 6 heads. Bottom, top, fence side, near side, top, bottom.

Specification

The Bed. The feed works and cutterheads are all mounted on a one-piece bed.

Feed Works. The feed is by four 6" rollers. The bed rolls are adjustable for rise and fall. The top rolls are independently mounted and spring loaded. The rise and fall of the top feed rolls is effected by handwheel. All the gears and chain drive run in oil in totally-enclosed oil baths. Pump lubrication is provided to all bearings in feed mechanism.

Head Adjustments. Table before the first bottom block is arranged to rise and fall. A swing away door gives access to this block. Fence side head is easily adjustable from the front of the machine to line up with the rigid fence which follows this head.

Telescopic mounting of the bed plates is incorporated in this design. Adjustment of near side head together with its side pressure and radial chip breaker is from the front of the machine. Chip breaker can be swung away to provide access to the block.

A swing away chip breaker with two 2" wide sections is provided for the top head. This chip breaker is arranged to give a very efficient action up to variations of $\frac{1}{4}$" width of stock, working very close to the cutters. For variations of more than this the radial mounting of the chip breaker comes into action to clear the cutters. All spindle units are fitted with rise and fall and horizontal adjustments.

Cutter Spindle Design. All units are fitted with totally-enclosed fan-cooled motors direct on the spindles. All spindles are the same size, $1\frac{1}{4}$" diameter, so that all blocks and equipment are interchangeable on all spindles. Square blocks of heat-treated alloy steel are fitted as standard. Pressures and chip breakers are all readily adjustable.

Electrical Equipment and Control Gear. The spindle speed of 7500 r.p.m. is obtained by a frequency changer secured to the machine. Power braking is provided on all heads. The feed works are driven by a 4-speed motor driving through a two-step cone giving 8 speeds. The feed speed selector and the forward and reverse control are conveniently located at the operating position.

A mains isolating switch is built into the machine.

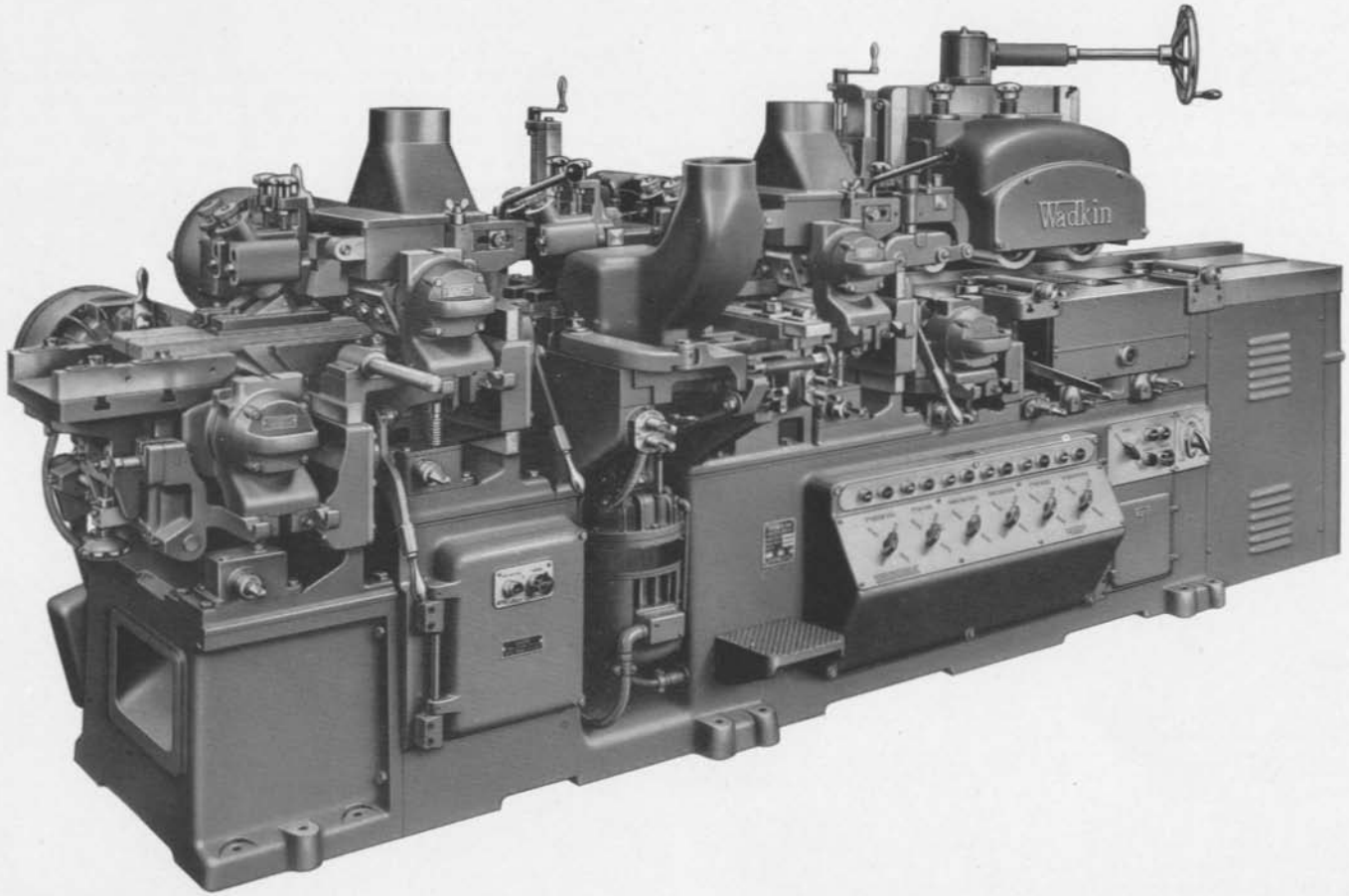
Dimensions and Capacities

Max. size of finished work	4" × 4"
Horse power of spindle motors	6
Spindle speeds in r.p.m.	7500*
Diameter of spindle ends	$1\frac{1}{4}$"
Horse power of feed motor	$1\frac{1}{2}$, $2\frac{1}{2}$, 3, $4\frac{1}{2}$
Feed speed in feet per min.	30, 45, 60, 90; 40, 60, 80, 120
Length of blocks	$4\frac{1}{4}$"
Min. cutting circle	$5\frac{1}{2}$" diam.
Max. cutting circle	
1st bottom block	$6\frac{1}{2}$" diam.
All other heads	8" diam.
Diam. of feed rolls	6"
Centres of feed rolls	8"
Floor space (Four head machine)	9' 3" × 3' 6"
Net weight (approx) (Four head machine)	66 cwt. (7400 lb.)
Shipping dimensions (Four head machine)	240 cu. ft

*Spindle speeds up to 9000 r.p.m. can be provided to special order.

Wadkin

8" x 4" Planer and Moulder F.D.



8" x 4" Planer and Moulder F.D.

Wadkin

This is a self-contained high frequency electric dual purpose machine. It is designed to give spindle speeds of 4,500 r.p.m. for multi-knife finish and 6,000 r.p.m. for single knife finish.

The machines are designed with cutterheads in the following sequence:—

F.D.81. 4 heads. Bottom, fence side, near side, top.
F.D.82. 5 heads. Bottom, fence side, near side, top, bottom.
F.D.85. 5 heads. Bottom, top, fence side, near side, top.
F.D.86. 6 heads. Bottom, top, fence side, near side, top, bottom.

The design embodies an entirely new four-roll feed works, ball bearing mounted throughout, providing a range of feed speeds from 18 to 150 ft. per minute. The fence and pressure system has been designed to give flexibility with maximum rigidity, and to enable all adjustments to be made quickly and conveniently. Excellent accessibility has also been provided to all heads, and special attention given to the arrangement of the outboard bearings on the horizontal heads to facilitate changing the blocks.

Specification

Feed Works are fully enclosed and ball-bearing mounted throughout. The four 8" feed rolls are driven by chain running in oil bath.

Independent adjustment is provided to each bottom roll, and provision made for pitching the bottom rolls.

Feed is obtained from totally enclosed motor driving through a two-step cone to six-speed gear box giving 12 speeds from 18 to 150 ft. per minute.

Cutterheads. Totally enclosed fan-cooled motors are built directly on to all spindles. Spindle ends are all $1\frac{13}{16}$" diameter for interchangeability of cutter equipment. Hinged outboard bearings are fitted to top and bottom heads. All heads have rise and fall, also horizontal adjustments. Speeds of 4,500 and 6,000 r.p.m. are obtained from built-in frequency changer. Power braking is provided on all heads.

Pressures and Chipbreakers. Efficient and easily adjustable pressures and chipbreakers are fitted. In the case of first top head and near side head, radial chipbreakers working close up to the cutters irrespective of stock variation are fitted to the head slides.

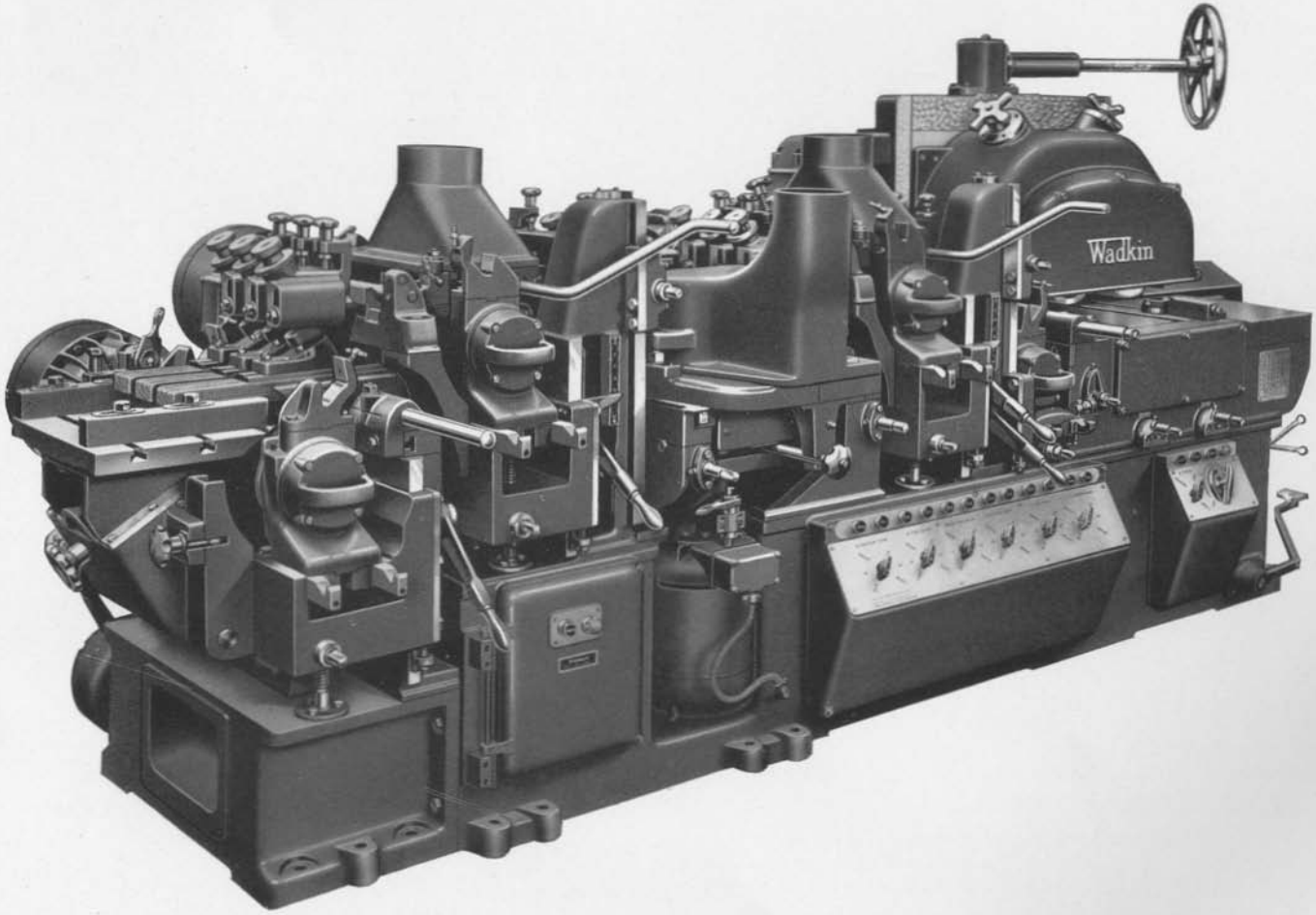
One-piece Bed. All feed works and cutterheads are mounted on a one-piece bed. Telescopic mounting of bed plates adjacent to side heads gives an unbroken bed on all widths of stock.

Dimensions and Capacities

Max. size of finished work	8" × 4"
Spindle motors:	
Top and bottom heads: 50 cycles	10/7½ h.p., 6000/4500 r.p.m.
60 cycles	10/8 h.p., 6000/4800 r.p.m.
Side heads: 50 cycles	10/7½ h.p., 6000/4500 r.p.m.
60 cycles	10/8 h.p., 6000/4800 r.p.m.
Horse power, feed motor	7½
Feed speeds in feet per min.	18, 25, 32, 45, 54, 75; 36, 50, 64, 90, 108, 150
(Alternative speed range up to 200 feet per minute can be provided)	
Diameter of spindle ends	1 $\frac{13}{16}$"
Length of cutterblocks:	
Top and bottom	8½"
Side	4¼"
Min. cutting circle, all heads	6½" diam.
Max. cutting circle:	
1st bottom head	7½" diam.
Top heads	10½" diam.
Side heads	8½" diam.
Optional 2nd bottom	10½" diam.
Side heads cant	45° inwards, 15° outwards
Diam. feed roll	8"
Floor space (5 head)	5' 0" × 12' 6"
Net weight (5 head)	6½ tons approx. (14500 lb.)
Shipping dimensions (5 head)	570 cu. ft.

Wadkin

12" x 6" Planer and Moulder F.D.



12" x 6" Planer and Moulder F.D.

Wadkin

This is a self-contained electric moulder of pronounced modern design. It is designed as Type F.D. with cutterheads in the following sequence:—

F.D.121. 4 heads. Bottom, fence side, near side, bottom.
F.D.122. 5 heads. Bottom, fence side, near side, top, bottom.
F.D.123. 5 heads. Bottom, fence side, near side, top, top.
F.D.125. 5 heads. Bottom, top, fence side, near side, top.
F.D.126. 6 heads. Bottom, top, fence side, near side, top, bottom.

Specification

Bed. Consists of a series of chrome iron plates, heat treated and ground all over. They are adjustable lengthwise to and from the bottom cutterblocks. All are interchangeable and renewable. Plates adjacent to side heads are telescopic mounted.

Feed Works are fully enclosed and ball-bearing mounted throughout. The four 10" feed rolls are driven by chain running in oil bath.
Independent adjustment is provided to each bottom roll, and provision made for pitching the bottom rolls.
Feed is obtained from totally enclosed motor driving through a two-step cone to six-speed gear box giving 12 speeds from 18 to 150 ft. per minute.

Cutterspindle Design. All heads embody totally-enclosed fan-cooled motors direct on the spindles. Horizontal units have outboard bearings designed for quick withdrawal. All spindles are same diameter, $1\frac{13}{16}$". Cutter-blocks are mounted on self-centring sleeves and are withdrawable and interchangeable.
All spindles are oil lubricated from built-in oil reservoirs.
Vertical and horizontal adjustment is provided to all heads.

Pressures and Chipbreakers. Top head radial chipbreakers are fitted with detachable shoes with hardened steel tips. Top spring loaded pad pressures and a radial arm chipbreaker with stellite steel tip are fitted to side head. Fences are hard alloy iron. A fixed fence is provided from the in-feed table to the fence side head, and an adjustable bevelled steel shoe is fitted adjacent to this head to accommodate 2" diameter variation in cutter projection and give a continuous face to the fence. The fence beyond the fence side head is controlled by two parallel links to ensure alignment of the finished stock.

Jointing. All machines are sent out arranged for jointing.

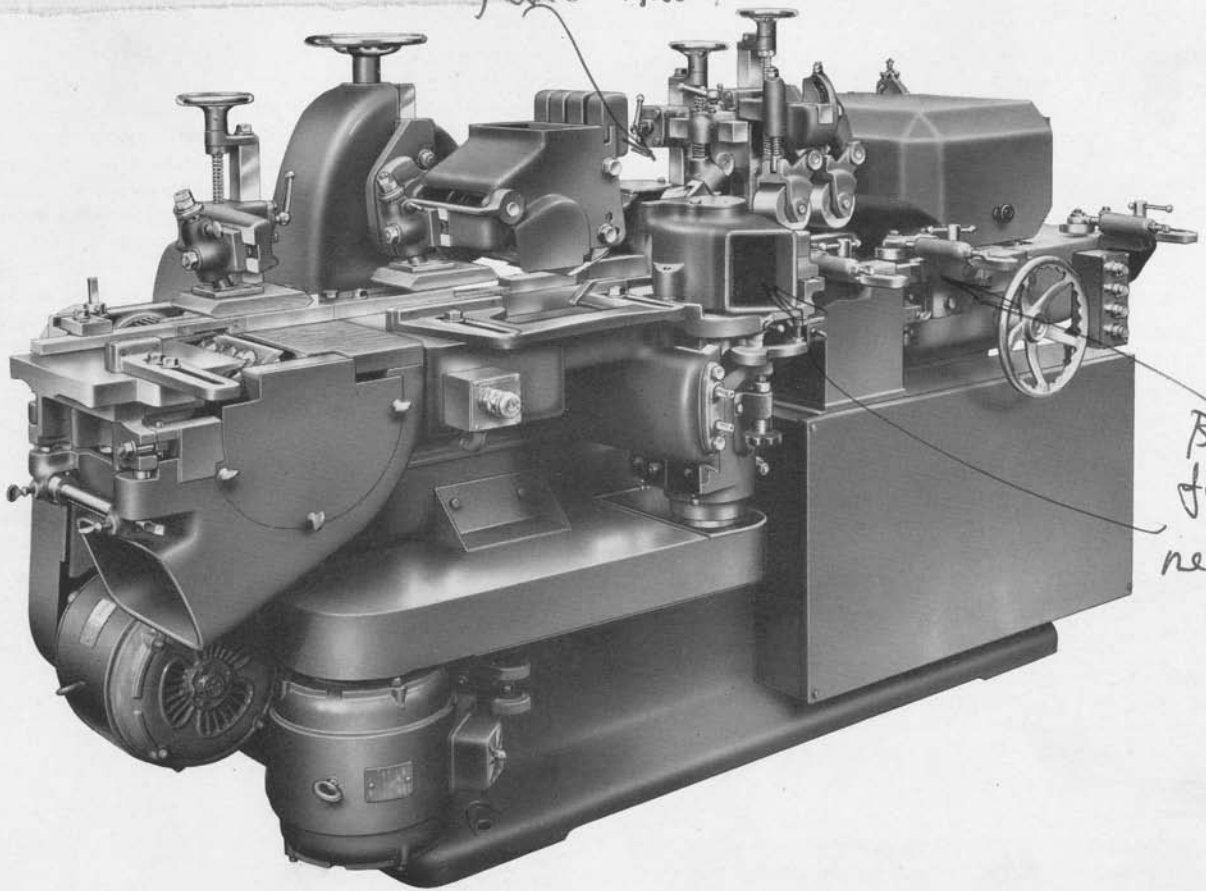
Electrical Equipment. Heads operate from high frequency supply from built-in frequency changer. Control gear embodies full protective features. The machine is electrically interlocked to prevent accidental starting. Electric braking is provided to each head.

Exhaust equipment. Hoods are supplied with the machine and a specially designed collector unit is available to simplify the connection of the machine to a main dust collecting system.

Dimensions and Capacities

Max. size of finished work	12" × 6"
Spindle motors:—	
Top heads: 50 cycles	25/20 h.p., 6000/4500 r.p.m.
60 cycles	25/20 h.p., 6000/4800 r.p.m.
Bottom heads: 50 cycles	15/12 h.p., 6000/4500 r.p.m.
60 cycles	15/12 h.p., 6000/4800 r.p.m.
Side heads: 50 cycles	10/7½ h.p., 6000/4500 r.p.m.
60 cycles	10/7½ h.p., 6000/4500 r.p.m.
Horse power, feed motor	10
Feed speeds in feet per min.	18, 25, 32, 45, 54, 75; 36, 50, 64, 90, 108, 150
(Alternative speed range up to 200 feet per minute can be provided)	
Diameter of spindle ends	$1\frac{13}{16}$"
Length of cutterblocks:	
Top and Bottom	12½"
Side	6½"
Minimum cutting circle	6½"
Maximum cutting circle:	
1st Bottom head	7½"
Top heads	10½"
Side heads	9"
Optional 2nd bottom head	10½"
Frequency changer	47 kVA
Floor space (5 head)	12' 6" × 5' 0"
Net weight (5 head)	155 cwt. (17350 lb.)
Shipping dimensions (5 head)	570 cu. ft.

225 x 100 Four Sided Planer and Moulder A.G.C.



225 x 100

Four Sided Planer and Moulder A.G.C.

This inexpensive, general purpose moulder gives production and finish at an economic cost. It has the features and operating advantages to ensure the quick setups—convenient changeovers—low running costs and minimum maintenance, which add up to economic moulder operation. It is fitted with individually motorised heads running at 5000 r.p.m.

The machines are supplied with heads arranged as follows:—

A.G.C.71. Four-head machine. Bottom, fence side, near side, top.

A.G.C.72. Five-head machine. Bottom, fence side, near side, top, bottom.

A.G.C.75. Five-head machine. Bottom, top, fence side, near side, top.

A.G.C.76. Six-head machine. Bottom, top, fence side, near side, top, bottom.

Specification

The Main Frame is a heavy one-piece casting of extremely rigid construction running the full length of the machine and mounting all component units.

The Feed consists of four ball-bearing mounted feed rollers which are quickly removable. The infeed top roller is grooved spirally, thus giving the timber a permanent lead towards the fence. Other rollers are of the plain type. Adjustment is by means of conveniently placed handwheels. The drive of the feed works is by means of a three-speed gearbox and two speed cone pulleys. Feed speeds range from 4·5m to 34m per minute in six steps.

Cutterheads are of high quality steel, dynamically balanced and quickly removable. All have both horizontal and vertical adjustment. The drive to each head is by means of multiple vee ropes with the spindles revolving at 5,000 r.p.m. A vertical throating head at the outfeed end of the machine can be supplied to special order.

The Pressures are designed to meet the maximum variety of work possible, from a moulding only a fraction of a square inch in section, to the maximum capacity of the machine. Spring loaded roller side pressures are fitted immediately before the feed rollers, and also before the bottom head. The pressure over the bottom head consists of dual rollers, and provision is made for canting when moulding bevel sawn timber. Both are independently spring loaded and mounted on a vertical steel slide with handwheel adjustment for height. The pressure between the side heads consists of a single spring loaded ball bearing roller. Horizontal adjustment for varying widths of timber is provided for all top pressures. The front side head incorporates a chipbreaker spring loaded side pressure. A pressure is fitted immediately in front of, and behind the top head. The front one is of the radial type provided with chipbreakers and can be weighted. In addition a fence type side pressure controls the timber when approaching and leaving this head.

The Control Gear comprises push button operated contactor starters for the motors. Starters are interlocked so that feed motors cut out in the event of any cutterhead motor closing down. Separate control station is fitted for the feed motion consisting of start button "forward" and "reverse", inching buttons and mushroom head master stop, which also when kept in the depressed position operates electric reverse current braking to the feed. Master stops are provided at both infeed and outfeed ends.

Dimensions and Capacities

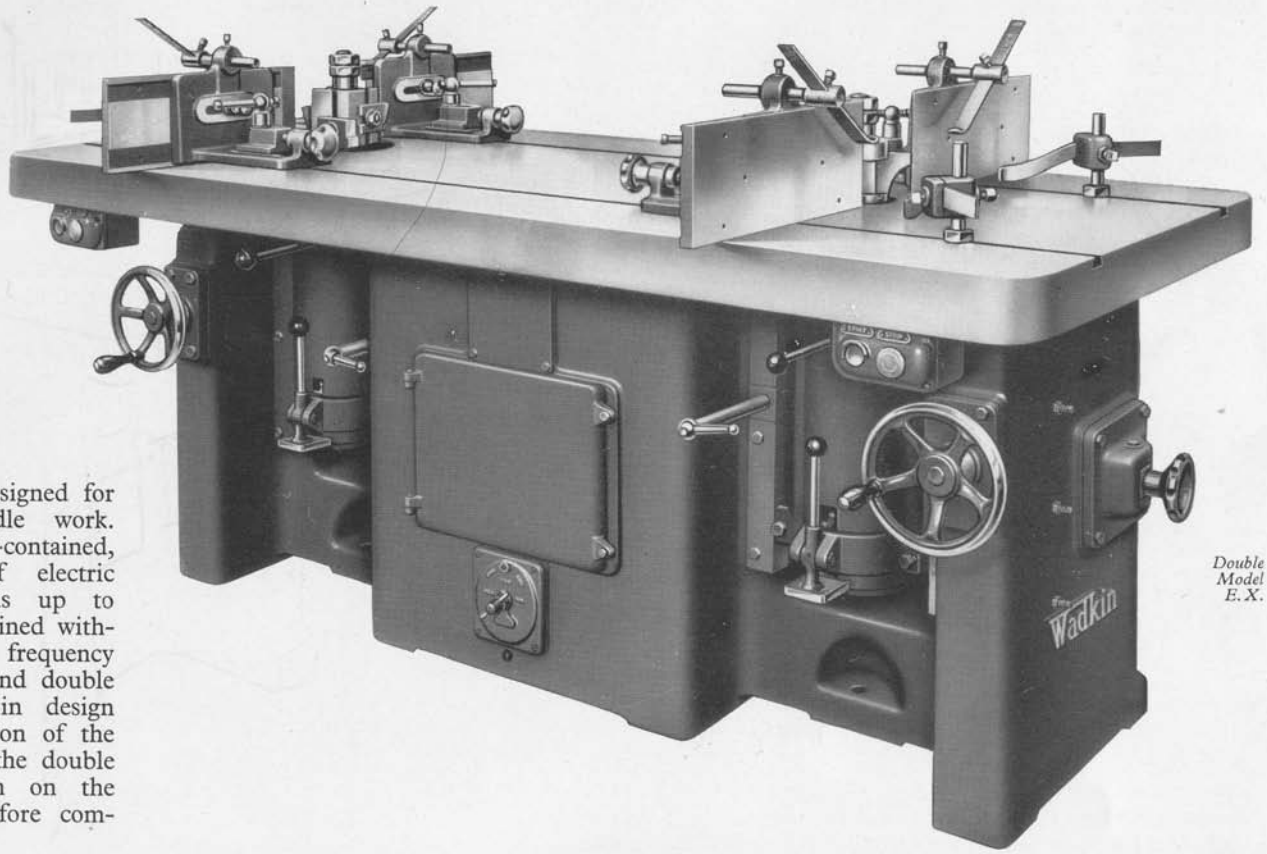
225 x 100

Capacity	
Speed of cutterheads	5000 r.p.m.
Six feed speeds from	15 to 112 feet per min.
Top and bottom cutterhead motors (standard)	7½ h.p.
Side head motors (standard)	5 h.p.
Feed motor	
Height from floor to table	1m
Approx. net weight (4 head machine)	52 cwt. (5820 l…
Shipping dimensions (4 head machine)	218 cu. ft.

Wadkin

Spindle Moulders and Shapers

Single Type E.Q., Double Type E.X.



Double Model E.X.

These machines are designed for every class of spindle work. They are entirely self-contained, and the method of electric driving enables speeds up to 9,000 r.p.m. to be obtained without the need for a frequency changer. Both single and double models are identical in design except in the duplication of the details in the case of the double type. The description on the opposite page is therefore common to both types.

Spindle Moulders and Shapers

Single Type E.Q., Double Type E.X.

Wadkin

Specification

The Main Frame is a heavy casting designed to give maximum support to the spindle housing and table.

The Spindle is mounted on special ball bearings lubricated by a patented oil mist system. This method makes it impossible for the bearings to be over lubricated, a common cause of bearing failure. It also prevents harmful dirt or grit being injected directly into the bearings. The spindle is screwed externally for securing loose top pieces, $1\frac{1}{4}$" diameter. It is provided with a locking device which dispenses with the need for tommy bars. The spindle is also provided with a brake.

The Spindle Slide is designed to give rigidity to the spindle, and has rise and fall movements of 6" actuated by screw motion.

The Drive is by endless flat belt from a cone pulley on the motor on to a parallel pulley mounted between the bearings of the spindle. The motor is mounted on a vertical hinged pivoting bracket to facilitate quick changing of the belt for the alternative speed. Correct belt tension is obtained by spring loaded screw mechanism actuated by small handwheel.

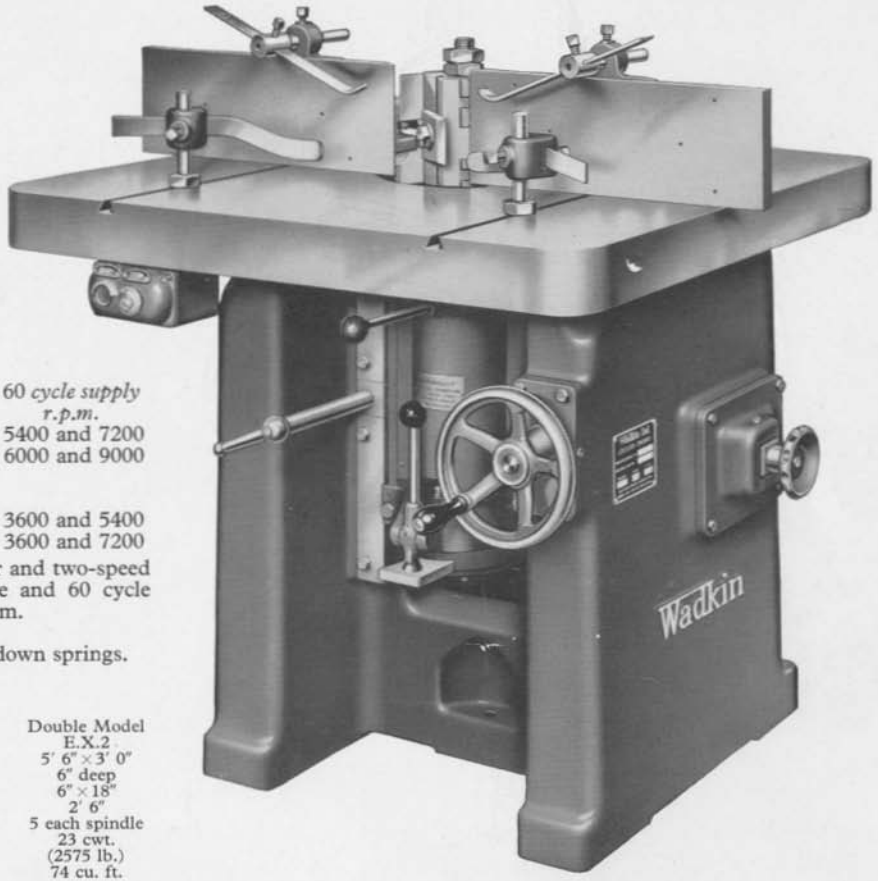
Alternative speeds are as follows:—

		50 *cycle supply* r.p.m.	60 *cycle supply* r.p.m.
Standard spindle speeds		4500 and 6000	5400 and 7200
Alternative spindle speeds		6000 and 9000	6000 and 9000
	or	4500 and 9000	
	or	5000 and 7500	
	or	3000 and 4500	3600 and 5400
	or	3000 and 6000	3600 and 7200

The machine is also offered with four speeds from a two-speed motor and two-speed cone giving speeds of 3000, 4500, 6000 and 9000 on both 50 cycle and 60 cycle supplies. Alternatively speeds may be 2250, 3000, 4500 and 6000 r.p.m.

The Table has three removable rings to suit heads of varying sizes.

Fences have fine screw adjustment, sliding front plates, also holding down springs.



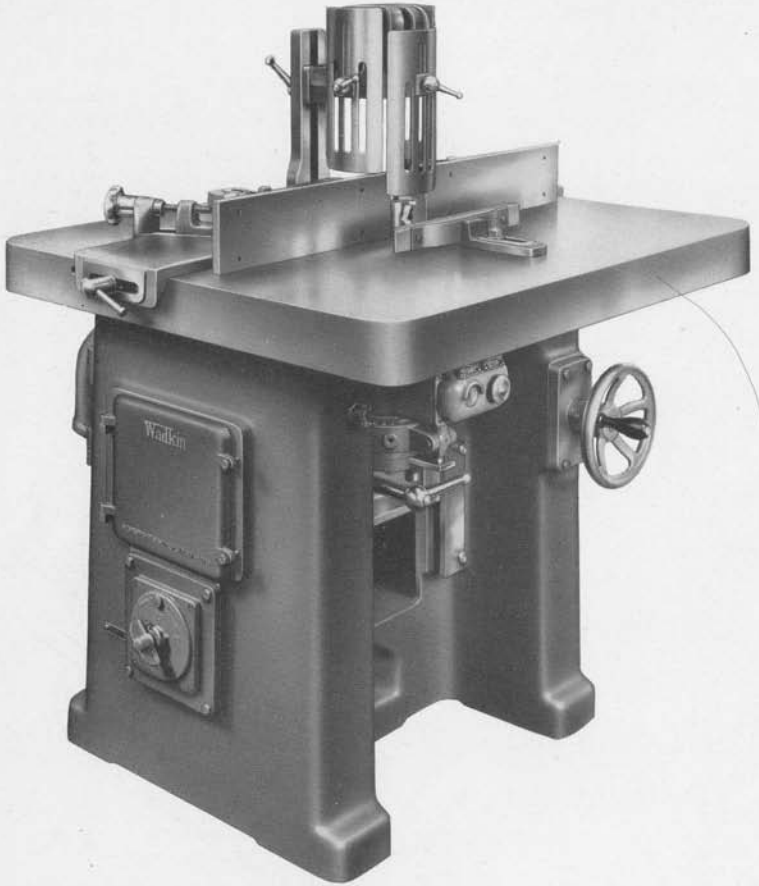
Dimensions and Capacities

	Single Model E.Q.	Double Model E.X.	Double Model E.X.2
Size of table	3′ 0″ × 2′ 8″	6′ 6″ × 3′ 0″	5′ 6″ × 3′ 0″
Capacity	6″ deep	6″ deep	6″ deep
Size of fence plates	6″ × 18″	6″ × 18″	6″ × 18″
Distance between spindles	—	3′ 6″	2′ 6″
Horse power	5	5 each spindle	5 each spindle
Net weight	12 cwt. (1350 lb.)	26 cwt. (2900 lb.)	23 cwt. (2575 lb.)
Shipping dimensions	35 cu. ft.	80 cu. ft.	74 cu. ft.

Wadkin

High Speed Spindle Moulders

Single Type E.Q.Z., Double Type E.X.Z.



This machine is particularly suitable for cabinet makers, body builders, shopfitters and all who require a really superfine finish on work up to a maximum of $1\frac{1}{4}$" deep cut ($2\frac{1}{4}$" to special order). The machine has been specially built to operate at a speed of 15000 r.p.m. and a special range of cutter equipment is available to ensure efficient production.

The single and double machines are identical in all respects, except for the duplication of the details in the case of the Double Spindle machine.

Specification

The Cutter Spindle is nickel chrome molybdenum heat-treated steel, precision ground. It is mounted in special high-speed precision ball bearings lubricated by the Wadkin patent oil mist system. Spindle is bored and screwed externally for securing the loose top pieces. Brake and spindle lock are provided. The spindle rises and falls 4" on broad slides, by means of a handwheel and screw.

The drive is by endless nylon belt from 3 h.p. motor attached to the rear of the machine. The motor is pivoted and the driving belt automatically tensioned by spring. Control is by push buttons.

The Table is made from close grain metal, and machined and ground to obtain perfect accuracy and smooth finish. It is 3′ 0″ × 2′ 8″ and is without dovetail slots to impede the free movement of the work or jigs. Fences with fine screw adjustment and a side pressure are supplied.

Cutter Equipment. A range of specially designed equipment including solid moulding cutters, serrated knife cutterheads, split collet chucks, is available for use on this machine. All the standard router equipment can be used. Top Guides embodying stationary collars or revolving rollers can also be provided for built-up frame work.

Dimensions and Capacities

	Single Spindle E.Q.Z.	Double Spindle E.X.Z.
Speed of cutter spindle in r.p.m.	15000	15000
Max, depth of cut	$1\frac{1}{4}$" deep (To special order $2\frac{1}{4}$" deep)	$1\frac{1}{4}$" deep
Size of table	3′ 0″ × 2′ 8″	5′ 0″ × 3′ 0″
Rise and fall of spindle	4"	4"
Two circular plates in table give openings of $2\frac{1}{8}$", $3\frac{1}{2}$" and $5\frac{1}{2}$" diam.		
Horse power of motor (each spindle)	3	3
Floor space	3′ 0″ × 3′ 0″	5′ 0″ × 3′ 4″
Net weight approx.,	12 cwt. (1350 lb.)	$27\frac{1}{2}$ cwt. (3080 lb.)
Shipping dimensions, approx.	46 cu. ft.	73 cu. ft.

Cutting housings for string boards. Fixture in use dispenses with the need for marking out.

The machine is exceptionally useful for panel sinking operations as shown above.

Circular moulding can be done by means of auxiliary rotating table.

Wadkin

Overhead Recessing Machine L.Q.

For recessing, boring, working outside or inside edges of straight or curved mouldings, chamfering, grooving, cutting housings, stair stringing, panel raising, slot mortising, pattern and corebox making.

The Table has compound movements, including a swivelling movement. The longitudinal traverse is by rack and spiral pinion, and the transverse movement and rise and fall by screw motion. Table surface is provided with tapped holes for securing clamps, etc.

The Cutter Spindle revolves on heavy ball bearings and is carried in a balanced sleeve, enabling the bearings to be carried close up to the chuck at every position of the stroke. The sleeve may be securely locked at any position. Two-speed pulley runs on ball bearings and is carried on a sleeve. Stops are provided for controlling the stroke of the cutter spindle. Spindle chuck is bored No. 4 Morse taper.

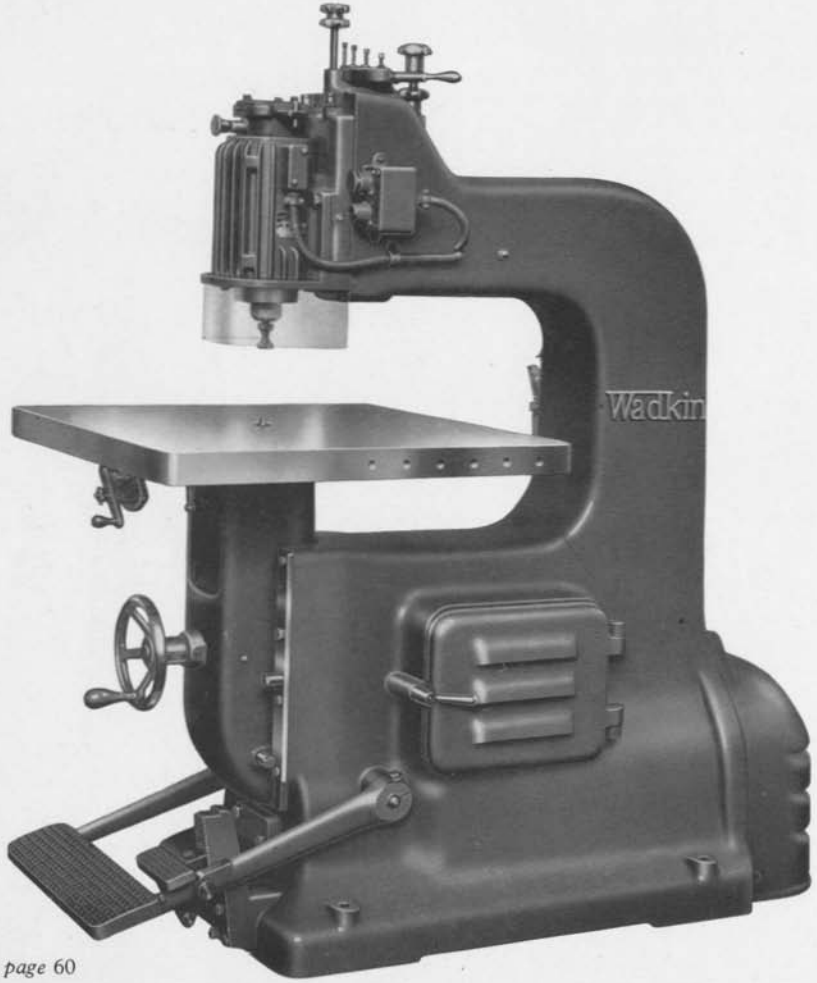
Drive. The machine is driven by motor carried on the main frame, drving on to the cutter spindle by a special endless belt. The motor slides to and from the spindle head to keep the belt at the correct tension. Suitable control gear is provided, incorporating reversing and isolating switch.

Dimensions and Capacities

Centre of spindle to inside of frame	21"	Spindle speeds, r.p.m.	2000, 3000, 4000, 6000
Max. distance table and chuck	16"	Spindle chuck bored	No. 4 Morse taper
Longitudinal traverse of table	30"	Floor space	6' 0" × 6' 6"
Transverse motion of table	18"	Horse power	2
Rise and fall of table	8"	(For continuous duty 3 h.p. or 4 h.p. motor can be fitted)	
Rise and fall of spindle	6"	Net weight	14¼ cwt. (1525 lb.)
Will bore up to	2" diam.	Shipping dimensions	93 cu. ft.

Wadkin

High Speed Router L.S.



High speed routing provides the means of producing a multiplicity of work far quicker than by any other method. Because of the exceptionally high cutting speeds involved, a superfine finish is obtained.

Specification

The Main Frame is a massive one-piece casting.
Cutter Spindle Head embodies a motor with the rotor mounted directly on the cutting spindle. It has a vertical movement of 4″ in vee slides operated and locked by foot lever. Head is counterbalanced by a spring, and is released by toe pedal. Adjustable turret type stops are provided to limit the depth of the cut. Head is a complete unit easily detachable for servicing.
Cutter Spindle is of heat-treated, nickel chrome steel, suitable for high speed work, and runs on special precision high speed ball bearings lubricated by a patented oil mist system. This method makes it impossible for the bearings to be over lubricated, a common cause of bearing failure. It also prevents harmful dirt or grit being injected directly into the bearings. Lower end of spindle carries a chuck and taper collets for shanks up to ½″. A built-in fan and exterior pipe supplies air to the cutting point to keep the face of the work clear of chips. Hinged guard is provided. Spindle is provided with a quick-acting brake, also a locking device.
The Table rises and falls 5″ by handwheel and screw. A former is used for most operations and a guide pin projects through the table against which the former is worked The pin is arranged to disappear below the table by lever motion. Table has a removable plate for moulding. Table can be provided with traverse and cross movement by hand wheels.
Frequency Changer necessary to obtain the spindle speeds is housed inside the base of the main frame. Motor is controlled by push buttons.

Dimensions and Capacities

Centre of spindle to inside of frame	24½″
Spindle rise and fall	4″
Spindle speed, r.p.m.:	
50 cycles primary supply	18000 and 24000
60 cycles primary supply	18000 and 25000
Table rise and fall	5″
Size of table	30″ × 30″
Horse power of motor:	
Continuous rating	2
Intermittent rating	8½
Floor space	5′ 6″ × 2′ 6″
Net weight	15 cwt. (1680 lb.)
Shipping dimensions	97 cu. ft.

High Speed Radial Router 40S.

Wadkin

This machine has been specially designed for cutting out window and letter-box openings in flush doors, panel raising or recessing coffin sides, stair stringing and for special jobs such as grooving and housing cooling tower units. The principle of operation is based on a high-speed router head being manually worked round a jig carried overhead. Any shape can be produced. Work involving cutouts up to 2¼" deep can be machined.

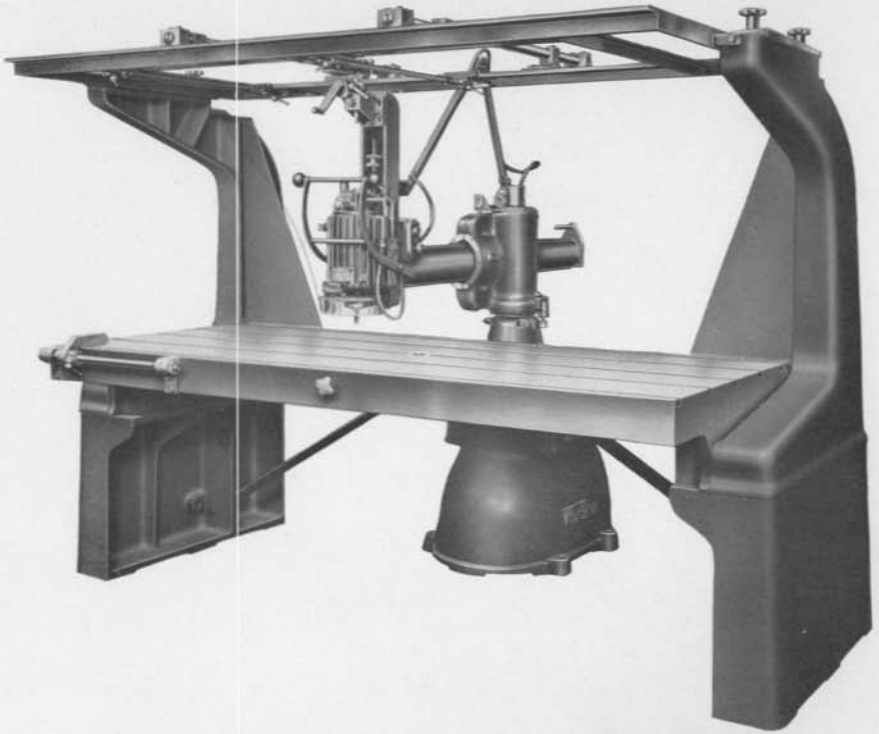
Specification

The Main Frame is of substantial construction and houses the frequency changer. Control is by push buttons and a hinged conduit carries the cable to the contactor gear built into the main frame.

The Router Head is driven by a built-in motor. The nickel-chrome spindle is mounted on precision ball bearings lubricated by the Wadkin patented oil mist system. The head has a vertical movement of 4" and an adjustable spring plunger is provided for locating the head in the working position. The guide pin is carried above the router head and is instantly adjustable by rack and handle.

The Radial Arm is an aluminium casting for lightness and easy movement. It slides on two hardened steel rods and four ball bearing rollers mounted on a swivelling frame.

The Table. Heavy section side frames carry a cast iron table having five tee slots for securing the work. A swing over end stop is provided and a two-station pin fitted in the centre of the table so that the machine can be used as a fixed head router. The tops of the side frames carry a cast iron and steel frame for supporting the overhead templates. Either tee-slotted overhead rails for template support, or an adjustable universal jig for square or rectangular cutouts can be supplied. In an alternative arrangement, metal table may be replaced by a wooden table supplied by purchaser.

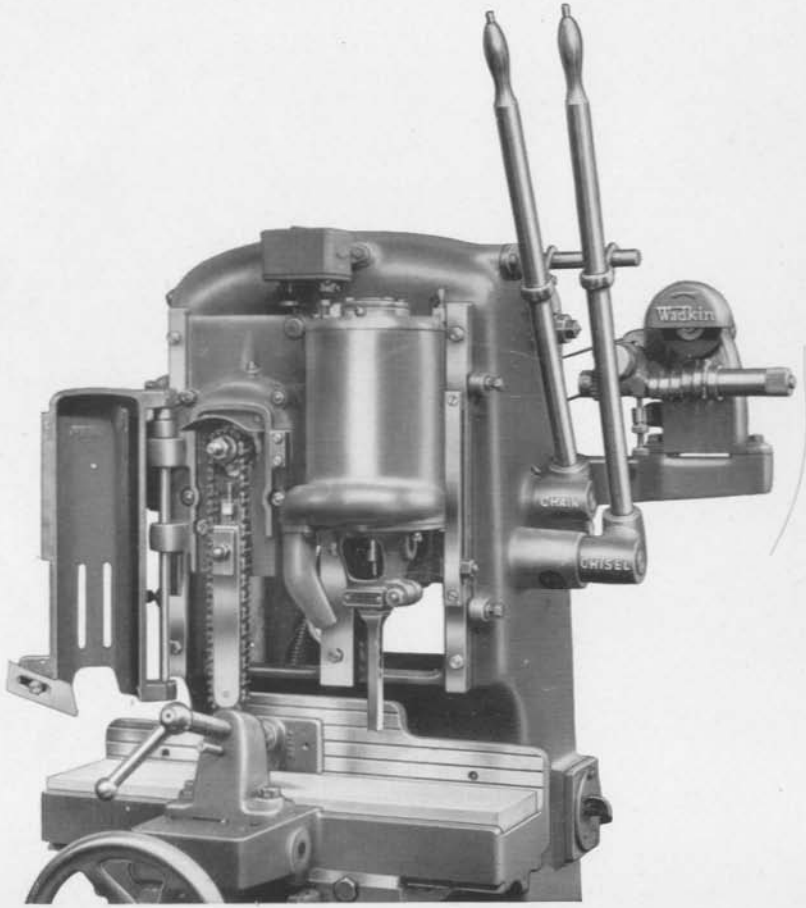


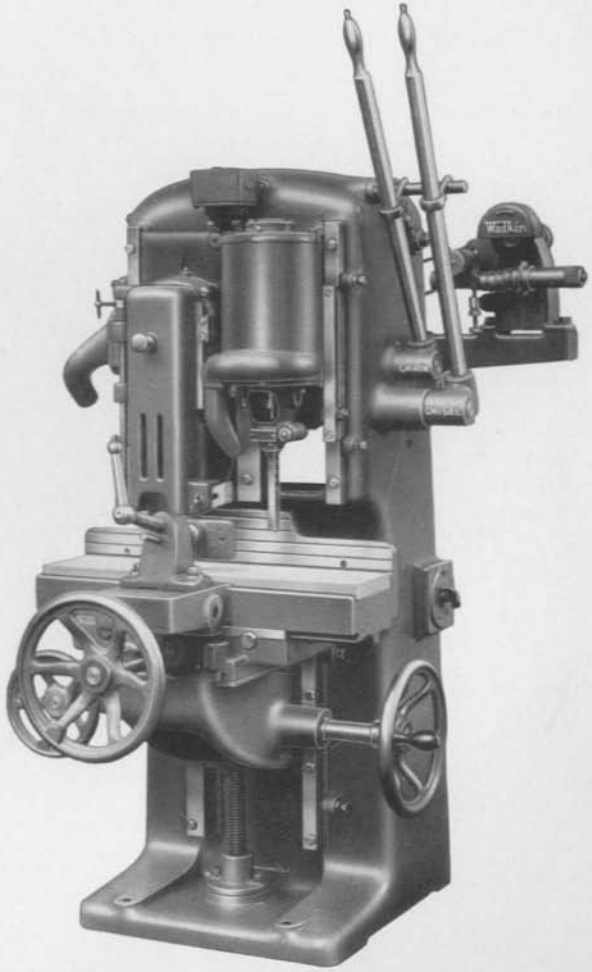
Dimensions and Capacities

Maximum radius of arm	4' 5"	Size of table	7' 5" × 3' 0"
Minimum radius of arm	20"	Net weight	34 cwt. (3808 lb.)
Horse power of head	2/8½ h.p.	Shipping dimensions	192 cu. ft.
Speed of head	24000 and 18000 r.p.m.		

Wadkin

Combined Chain and Chisel Mortiser M.F.





Double End Tenoning Machine W.F.

Wadkin

This machine will cut the tenons, scribe the shoulders and cut off to length both ends of material at one operation. It is also capable of cutting double tenons, top and bottom scribing, cross cutting, squaring off, etc.

Specification

Headstock. Each Headstock is of the box type and consists of two rigid vertical columns with connecting cross members. Each is arranged to carry a cut-off saw, two scoring saws, two horizontal tenoning heads, top and bottom scribers or cope heads, a pressure beam and feed chain way. The right-hand headstock is fixed and the left-hand one is movable along the bed to suit varying lengths of timber. The movable headstock is traversed along the bed by power or handwheel. A scale is provided for setting.

Horizontal Tenoning Heads are each arranged with a totally enclosed motor built in, and the spindles revolve on heavy ball bearings. The cutterblocks are designed to give a shearing cut. There are two blocks to each head, each taking a 3″ wide cut. Each pair of top and bottom heads can be adjusted vertically. In addition they have separate horizontal adjustment, also canting movement.

Vertical Scribing or Cope Heads are carried on the back of the rear column, and are similar in design to the tenon heads. They have vertical and horizontal adjustment, also canting movement. A separate motor is built into each head. The cutterblocks have four dovetail slots, for carrying slotted cutters, and are keyed to the shafts.

Cutting-off Saws are mounted direct on the motor spindles and are fitted at the front of the main headstocks. They are 14″ diameter and will cant 45° up or down. The saw may be above or below the work. Horizontal and vertical adjustments are provided. A suitable guard is provided on each saw. Hogging saws can be carried on the saw spindles to reduce the offcut to dust.
An overhead beam designed to carry up to six gaining or grooving heads can be supplied. Speeds of either 3,000 or 6,000 r.p.m. (50 cycles) can be provided on the gaining units. Stock supporting stands are also available.

Pressures are of the caterpillar type, and rigidly hold the work down to the chains. They are carried from the main headstocks, and are adjustable vertically to suit varying thicknesses of timber. They consist of special chains fitted with rubber pads, the whole of which are carried on rigid beams.

Automatic Feed Chains consist of two endless chains of special design. The work rests on the travelling chains and not on the stationary chain ways, thus eliminating marking of the stock. Each solid link is vee shaped to correspond with the vee chain way on which it travels. The vee portions of the chain ways are renewable. Both chains and vee slides are automatically lubricated by power-driven pressure pumps. Chain ways are offered in two lengths, one for feeding material up to 24″ wide and a longer length for accommodating work up to 60″ wide. Provision is made for setting one chain in relation to the other to ensure parallel feeding, also to enable the chains to be set for angular tenoning. The chain dogs are of steel and adjustable to give angular setting.

Feed Gear is driven by a variable speed motor, giving infinitely variable feed of 10 to 40 ft. per minute. A slip clutch is embodied in the drive as a safeguard against overloading or jamming.

Electrical Gear. Motors on all heads are totally enclosed. The motors are operated by rotary switches mounted in the chain beams. A master stop is fitted on each beam. Electric braking is provided to each spindle at the control station.

Dimensions and Capacities

Max. size of material	24″ × 4½″ or 60″ × 4½″
Max. length of material to pass between headstocks	9′ 7″
Max. length of material cut between shoulders	8′ 2″
Min. length of material cut between shoulders	6½″
Max. length of tenon	6″
Diam. of cut off saws	14″
Diam. of spindle ends for tenon and scribe heads	1⅜″
Diam. of cut off saw spindle	1¼″
Cut off saws cant, up or down	45°
Rates of feed in ft. per min.	10–40
Horse power of motors (horizontal heads, scribers and cut off saw): each	5
Horse power of variable speed feed motor	3¾
Horse power of traverse motor	2
Floor space, 60″ machine	15′ 9″ × 17′ 6″
Net weight: 60″ machine	191 cwt. (21500 lb.)
60″ machine without beam	110 cwt. (12300 lb.)
Shipping dimensions	967 cu. ft.

Wadkin

Double Ended Tenoner or Cut Off Saw

Types W.O. and W.G.

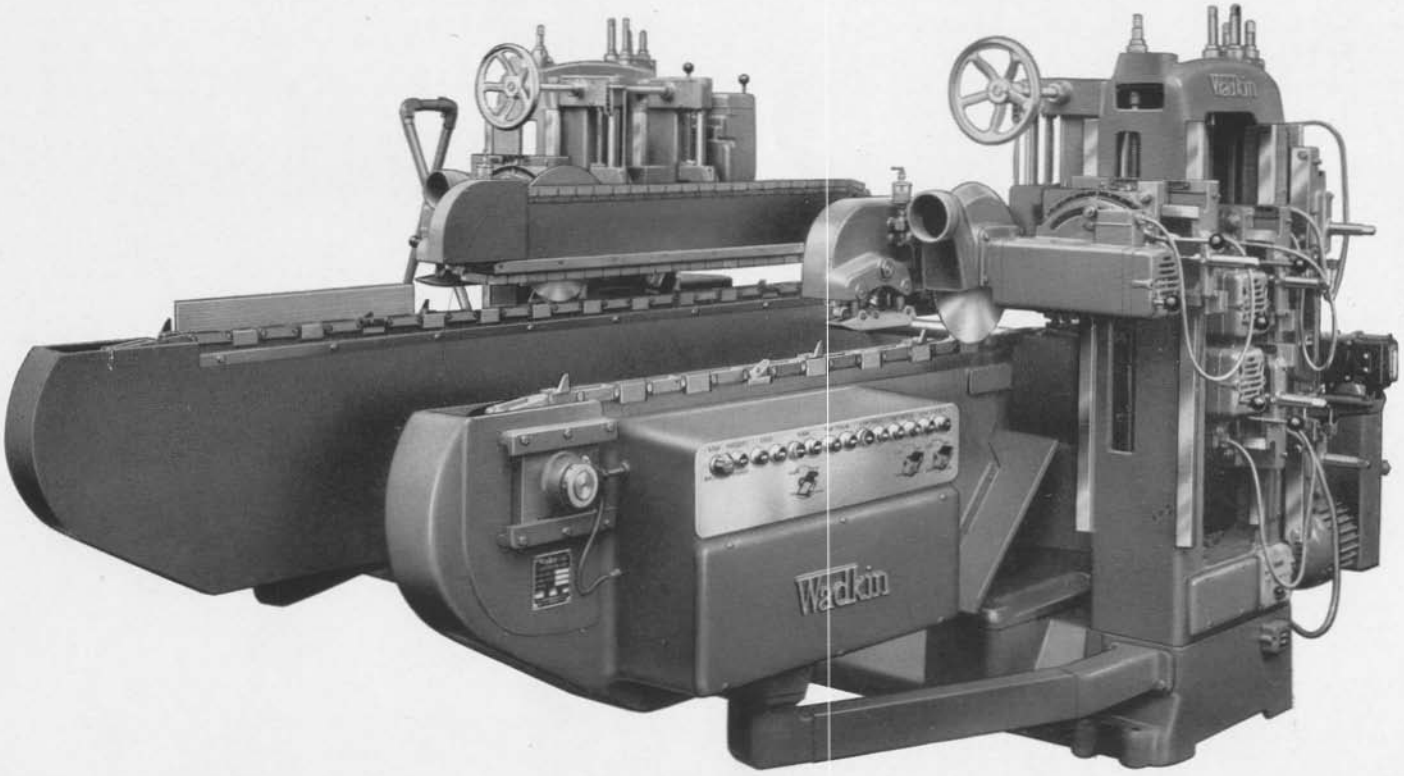


Illustration shows the machine arranged as Double End Tenoner, with tenon heads, scribing units and cut off saws.

Single End Tenoning Machine E.C.A.

Wadkin

This machine will tenon, scribe the shoulders and cut off dead to length at one operation.
It will take timber 14″ wide, 4½″ deep and cut tenons 4½″ long at one operation.

Specification

Horizontal Headstocks. These are each arranged with an electric motor built in. The spindles are made from special steel of 40 tons tensile strength, and mounted in heavy ball bearings. Both headstocks are adjustable, vertically. They can be locked in position when finally adjusted.
Horizontal adjustment is also provided to both top and bottom spindles for producing tenons with unequal shoulders.
The cutterblocks are of steel and designed to give a shearing cut. Spur cutters are fitted for giving a clean and accurate finish to the shoulders of the work. The cutterblocks are keyed to the shafts. Hinged guards are provided.

Vertical Scribing or Cope Spindles. The vertical scribing spindles are each attached to the main headstock slides, and are, therefore, adjustable with them. In addition, they have independent vertical and horizontal adjustments, all of which may be operated while the machine is running. A separate motor is built into each head. The scribing cutterblocks are of steel and have four dovetail slots for carrying the slotted scribing cutters. The cutterblocks are secured to the spindles by keys.
Allowance is made for spindles to take 11″ diameter grooving saws.

Cutting-off Saw. The cutting-off saw is fitted at the back of the cutterblocks and is, therefore, well out of the way of the operator. The saw spindle is mounted in ball bearings, and carries a 12″ diameter saw. It is mounted below the table and is horizontally adjustable by screw and handwheel to suit the length of tenon. A guard is provided over the saw.

Motors. The motors are built into the headstocks and are dust-tight, thus making impossible the entrance of dust or chips. The cutterheads are mounted directly on the motor shafts, which run in heavy ball bearings, enclosed in dust-proof housings.

Control Gear. The motors are controlled from a centralized push button station, and the control gear is of the automatic contactor type. The contactor gear is built into the main frame and is dust-tight. A master stop shuts down all motors simultaneously and embodies a "lock out" feature which makes it impossible for the machine to be started inadvertently.

Table. The table is mounted on ball-bearing rollers. The runways are accurately machined, and scrapers are fitted to keep them clean. The table is so arranged that perfect alignment with the cutterblocks is always maintained.

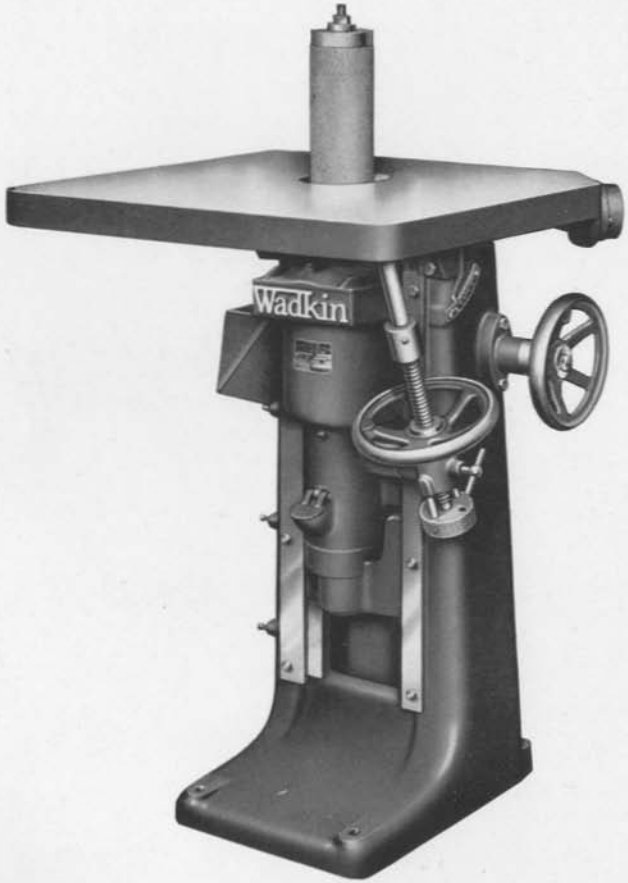
Table Fence. The table fence is provided with a turnover stop which can be utilized with equal facility whether the fence is in the square or angular position. In addition, a spring stop running the full width of the table is provided to enable the table to be loaded with narrow stock, such as sash bars. A quick-acting lever cramp is fitted for securing the work.
A dead stop is also provided for use in conjunction with the shoulder stop on the fence. This is adjustable along a bar and can be locked where desired.

Dimensions and Capacities

Will admit timber up to	14″ × 4½″
Will cut tenons at one operation	4½″ long
Fence may be swivelled	45°
Top cutterhead will rise above table	4¼″
Size of table	2′ 6″ × 1′ 4″
Diam. of cut off saw	12″
Diam. of spindle ends for tenon and scribe heads	1¼″
Diam. of spindle end for cut off saw	1″
Speed of all motors, r.p.m.: 50 cycles	3000
60 cycles	3600
Horse power of motors for tenoning and scribing heads	2
Horse power of saw motor	1½
Floor space	5′ 0″ × 4′ 9″
Net weight (all heads)	20½ cwt. (2300 lb.)
Shipping dimensions	112 cu. ft.

Wadkin

Vertical Bobbin Sander J.Y.



This machine is a wonderful time and labour saver in a pattern shop, or wherever there is a wide variety of radius work to be sanded or ground to size. It will deal with either inside or outside curves, and the canting table enables any required taper or draft to be obtained.

Specification

The Sanding Bobbin is driven by an electric motor mounted directly on the vertical spindle. A reciprocating motion is given to the bobbin by means of a worm and worm wheel drive. These gears are mounted in a totally-enclosed box and run in an oil bath. The carriage forming the motor unit is counter-balanced. A handwheel and screw are provided to give a rise and fall movement, allowing the full length of the abrasive paper on the bobbin to be utilized.

The Bobbin is of metal, and is made in two halves with a unique method of locking by screw motion, which both stretches and holds the paper perfectly tight.

The Table is arranged to cant 30° below and 10° above horizontal, by handwheel and screw. A scale indicates the angle of the table and the horizontal position is definitely located.

Dust Collecting Arrangement. The dust is sucked down through a duct built underneath the table surface. A suitable socket is secured at the back edge of the table to which the main piping may be attached. This arrangement leaves the table top clear for large work. We can supply to order a self-contained dust collector of the filter sleeve type, complete with motor-driven fan.

The Motor is of the squirrel cage type and is supplied for any alternating current of 50 or 60 cycles. Control gear is mounted on the machine and includes full safety features.

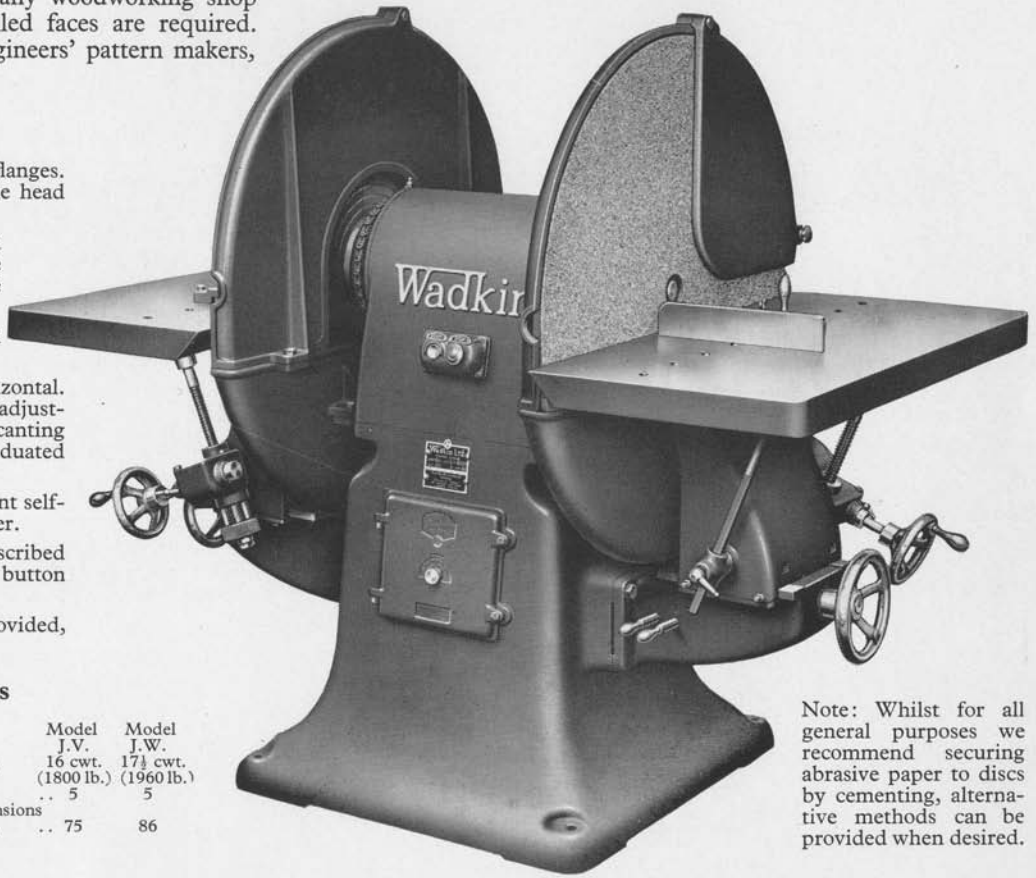
Dimensions and Capacities

Max. depth sanded	8"
Sanding bobbin supplied with machine	diam. 3½", length 9½"
Max, diam. of bobbin	5"
Min. diam. of bobbin	2"
Size of table	26" × 25½"
Diameter of Bobbin spindle	1¼"
Spindle speeds, r.p.m.: 50 cycles	3000
60 cycles	3600
Horse power of motor	1½
Floor space	26" × 27"
Net weight	4½ cwt. (500 lb.)
Shipping dimensions	27 cu. ft.

Double Disc Sanders J.V. and J.W.

Wadkin

An invaluable type of Sanding machine for any woodworking shop where smooth and perfectly square or bevelled faces are required. It is particularly suitable for the needs of engineers' pattern makers, cabinet makers, shopfitters, etc.



Specification

The Disc Spindle is tapered to receive the disc flanges. It is mounted directly in the motor, enclosed in the head of the machine, and runs on ball bearings.

The Sanding Discs are turned steel, and recessed for quickly locating on to the driving flanges. The abrasive paper is cemented on to the discs to ensure a perfectly flat surface.

A Disc Press and two spare steel discs are provided to facilitate renewing the abrasive paper.

The Work Tables cant 45° below and 10° above horizontal. Canting movement is by screw motion. A horizontal adjustment is also provided for use in conjunction with the canting mechanism. Tables are drilled to receive graduated swivelling fences.

Dust Hoods are provided to each disc and an efficient self-contained dust collecting system can be fitted to order.

When Electric Driven, the motor is built in as described above. The control gear is of the automatic push button type.

When Belt Driven, fast and loose pulleys are provided, complete with striking gear.

Dimensions and Capacities

	Model J.V.	Model J.W.
Diam. of discs	30″	36″
Size of tables	2′ 10″ × 1′ 5″	3′ 4″ × 1′ 7″
Floor space	2′ 10″ × 5′ 4″	3′ 4″ × 5′ 8″
Speed of discs, r.p.m.	900	900
Net weight	16 cwt. (1800 lb.)	17½ cwt. (1960 lb.)
Horse power	5	5
Shipping dimensions in cu. ft.	75	86

Note: Whilst for all general purposes we recommend securing abrasive paper to discs by cementing, alternative methods can be provided when desired.

Wadkin

Disc and Bobbin Sander J.T.A.

Where floor space is limited or where the volume of work does not justify separate Disc and Bobbin machines, this combination machine will be found a most effective means of sanding both straight and radius work.

Specification

The Sanding Disc is turned steel, and recessed for securing to the driving flange.
The disc spindle forms the shaft of an electric motor which is built directly into the head of the machine.

The Disc Work Table is arranged to cant 45° below and 10° above horizontal, by handwheel and screw. A scale registers the principal angles. A horizontal adjustment to and from the disc is also provided. Fence is of the universal swivelling type and can be reversed to suit right or left-handed work.

The Bobbin is driven by a motor built on to the vertical spindle. It has reciprocating motion by worm and worm wheel gears to ensure a smooth finish, and can be adjusted in height by screw motion to enable all the paper to be utilized. All gearing is totally enclosed. The bobbin is of metal, and is made in two halves with a unique method of locking, which both stretches and holds the paper.

The Bobbin Table cants 30° below and 10° above horizontal by handwheel and screw motion. A scale indicates the angle of the table. A duct is built immediately below the table for collecting dust.

Dust Collecting is provided for both disc and bobbin, also a disc press and two spare discs to facilitate renewing the abrasive paper. A self-contained dust collecting system can be supplied to order.

Dimensions and Capacities

Diam. of disc	30″
Size of bobbin	diam. 3½″ length 9½″
Max. diam. of bobbin	5″
Min. diam. of bobbin	2″
Max. depth of material sanded with bobbin	8″
Size of disc table	2′ 10″ × 1′ 5″
Diameter of bobbin spindle	1¼″
Size of bobbin table	2′ 2″ × 2′ 1½″
Speed of disc, r.p.m.	900
Speed of bobbin, r.p.m.:	
50 cycles	3000
60 cycles	3600
Horse power, disc motor	4
Horse power, bobbin motor	1½
Floor space	5′ 6″ × 2′ 10″
Net weight	18½ cwt. (2000 lb.)
Shipping dimensions	84 cu. ft.

14" Horizontal Belt Sander G.L.3

Wadkin

This is a thoroughly practical tool combining simplicity with efficiency. The labour saved on sanding will pay for its cost within a very few months. All controls and adjustments are arranged in the most convenient way. Sand belts can be quickly and easily renewed. Covers and hoods are hinged for easy access to the belt. The machine will sand both curved stock and flat work.

Specification

The Sanding Belt is tensioned by lever and a screw operated tracking motion is provided to ensure the belt running truly. Any width of sandpaper belt up to the maximum sizes can be used.

The Sanding Drums are mounted on ball bearings. They are accurately machined and finished to give a perfect running balance. Both hoods on the drums hinge downwards to enable radius work to be sanded.

The Table is accurately machined to give a perfectly true surface. It is a strong well-ribbed casting for maximum rigidity. A fence fitted across the table is arranged to swing out of the way when not required.

The Drive is from motor placed within the base of the machine and transmitting power to the larger pulley by multiple vee belts. The motor is a 5 h.p., 1440 r.p.m. fan cooled, totally enclosed type controlled by a direct-on line contactor starter having no-volt and three overload releases. Control is by start and stop push buttons.

Dust Collecting. Dust is collected by means of a dust hood enclosing the larger pulley and exhausting through a chute built into the main frame. We can supply for use with the machine a Dustmaster Unit dust collector with fan direct driven from totally enclosed motor housed inside the unit.

Dimensions and Capacities

Maximum width of sandpaper belt	14"
Length of sandpaper belt	11' 6"
Size of table	4' 1½" × 1' 3"
Height of table from floor level	2' 7½"
Diameter of sander drums	10" and 7"
Horse power of motor	5 h.p., 1440 r.p.m.
Floor space (without dust unit)	5' 9" × 2' 3"
Net weight (Approx.)	11 cwt. (1230 lb.)
Shipping dimensions	45 cu. ft.

Wadkin

Heavy Vertical Belt Sander Y.A.9

This machine is manufactured by J. Sagar & Co. Ltd., Halifax, one of the Wadkin Group of Companies.

Heavy Vertical Belt Sander Y.A.9

Wadkin

There is considerable scope for a sander of this type in any shop. Not only is it efficient for both edge and flat sanding but it is equally successful for shaped work. It is fitted with canting tables thus enabling any required taper or draft to be obtained. Moreover, when radius work is being sanded at the bobbin end of the machine, the exceptionally long length of belt saves frequent belt changes.

Specification

The Main Frame, on which all the working parts are mounted, is substantially built and rests on a large base area.

The Three Tables are rigid in construction, and arranged to cant 45° above and 30° below the horizontal. Graduated scales are provided to determine the angle of cant. The front table has vertical adjustment by handwheel and screw, and the end tables have adjustment to and from the cylinders on machined slides.

The Sand Belt is mounted on two cylinders on vertical spindles, each mounted in a sliding frame and with reciprocating motion operated from electric motor in the base of the machine through worm and wheel.

The Idle Pulley is 8" diameter and arranged with tensioning and tracking movements for the sand belt, and is detachable for fitting smaller spindles. The main spindles are 5' 6" apart and mounted on precision ball bearings.

Vertical Fence runs the full distance between the pulleys and is adjustable to and from the sand belt.

Supplementary Bobbin can be supplied if required for sanding work with small radii.

Drive. The sanding belt is driven by a 5 h.p., 3000 r.p.m. squirrel cage induction motor which is mounted on the machine spindle. The oscillation is driven by a 1 h.p., 1500 r.p.m. protected type squirrel cage induction motor. Both motors are controlled by push button operated direct-on contactor starters, with no-volt and overload releases, and are mounted in a common panel on the machine frame. They are operated by remote control start and stop push button station.

Dimensions and Capacities

Sand belt	8" wide × 12' 8" long
Size of front table	5' 0" × 1' 0"
Size of end tables	1' 6½" × 1' 2"
Tables cant upwards to	45°
Tables cant downwards to	30°
Distance between main spindles	5' 6"
Diameter of sand belt driving pulley	5"
Diameter of sand belt idle pulley	8"
Length of fence	5' 0"
Speed of sand belt	3700 f.p.m.
Horse power of motor driving sand belt	5
Horse power of motor for reciprocating motion	1
Floor space	8' 6" × 2' 3½"
Approximate net weight	20 cwt. (2240 lb.)
Shipping dimensions	94 cu. ft.

Wadkin

6" Open End Belt Sander G.Z.

6" Open End Belt Sander G.Z.

Wadkin

This machine provides a most efficient method of sanding a big range of work. The travelling hand pad gives sensitive control of the sand belt, enabling a perfect finish suitable for polishing to be easily obtained. The long length of belt makes it flexible and easy to manipulate on straight or curved faces, whilst the open end design enables any length of work to be dealt with. It is specially suitable for sanding built up work owing to its large capacity between the table and sand belt.

Specification

The Machine consists essentially of two heavy swan neck columns, mounted on a base plate, and strongly braced across the top, making a self-contained unit of exceptional rigidity.

The Table has a smooth easy movement on four ball bearing rollers, running on circular steel tracks. It is of laminated wood construction which gives strength without weight. The raising and lowering is on heavy slideways and large square thread screws operated by handwheel and chain and totally enclosed spiral gears. Stops are provided to limit the travel or to lock the table in one position. Table fence is adjustable along the length of the table and may be locked where desired.

Sanding drum, also the idler pulleys for tensioning, are all machined and balanced and revolve in dust-proof ball bearings.

Belt Tensioning. Tensioning of the sanding belt is by weight loaded pivoting idler pulley. Belt changing is facilitated by a lever which releases the tension whilst the belt is being put on or taken off. A tracking device is also included, operated by conveniently placed handwheel.

The Pressure Pad is so designed that the face of the pad remains always in the same plane as the belt. The movement of the pad along the table is on sealed ball bearing rollers on two steel circular runways which ensures effortless operation.

The Drive to the main sanding drum is by short flat belts from totally enclosed fan cooled motor. The motor is pivoted to allow for the correct tension on the belt to be easily maintained.

Dust Collecting is adequately provided for by a dust hopper on the main sanding drum. A special feature of the design is that the dust is exhausted at the top of the hood immediately behind the top idler pulley. This ensures that the dust embedded in the belt is exhausted as the grit on the belt "opens" in passing over the pulley. Where a main dust system is not installed we recommend and supply a self-contained dust collecting unit, complete with built-in fan and filters.

Dimensions and Capacities

Height from floor to sand belt	3′ 4″
Max. depth between belt and table	1′ 11″
Any length can be sanded by passing under the arms but not exceeding 2′ 3″ wide × 4½″ deep	
Length of material sanded between columns	7′ 6″
Width of material sanded between columns	3′ 6″
Size of table	8′ 0″ × 3′ 0″
Size of sand belt	24′ 6″ × 6″
Floor space (approx.)	11′ 3″ × 7′ 0″
Net Weight	26½ cwt. (2975 lb.)
Shipping dimensions	180 cu. ft.

Wadkin

42" and 52" Two Drum Sanders A.G.Q.

This machine is manufactured by J. Sagar & Co. Ltd., Halifax, one of the Wadkin Group of Companies.

42" and 52" Two Drum Sanders A.G.Q.

Wadkin

This is an efficient inexpensive drum sander for dealing with boards, panels and built-up joinery, as well as short and narrow stock. The machine is of modern design with all working units totally enclosed and protected from dust and dirt.

Specification

The Main Frame consists of heavily ribbed castings combining rigidity and strength, and completely enclosing all working mechanisms. Hinged, and detachable doors give immediate access to working parts.

The Rise and Fall Table is mounted on strong links, counterbalanced for ease of movement, and provided with handwheel operated rise and fall motion. A graduated scale is incorporated to indicate thickness of timber being sanded. Table is also spring loaded, and fitted with hand-lever controlled quick release device, enabling the table to yield if oversize or irregular material is inadvertently fed into the machine. Spring loading is instantly adjustable according to type of material being sanded.

The Endless Travelling Bed consists of an endless serrated conveyor band, giving resilience and grip under all operational conditions. Replacement conveyor bands may be fitted without disturbing drums or platens.

Bed Drive is from main motor through vee ropes and worm reduction gear box to give infinitely variable feeding speeds from 15 to 30 ft. per minute, operated by handwheel control in conjunction with a visual indicator scale.

The Sanding Drums are 11¾" nominal diameter, dynamically balanced, and ball bearing mounted for vibrationless sanding conditions. Sandpaper is spirally mounted with spring loaded automatic take-up to compensate for stretching conditions. An independent self-contained oscillation motion is provided for each drum. Drum drive is by endless flat belting from one main motor.

The Platens. The machine is provided with three platens (or inverted tables) against which the timber is pressed while being sanded, with provision on platens and also drums for variations in depth of cut.

Dimensions and Capacities

	42" Machine	52" Machine
Sanding capacity of machine	42" wide × 6" thick	52" wide × 6" thick
Nominal diameter of sanding drums	11¾"	11¾"
Speed of first drum	1200 r.p.m.	1200 r.p.m.
Speed of second drum	1335 r.p.m.	1335 r.p.m.
Infinitely variable feed speeds from	15 to 30 f.p.m.	15 to 30 f.p.m.
Horse power of driving motor	17½	20
Approximate floor area	7' 11" × 6' 8"	9' 1" × 6' 8"
Approximate Net Weight	90 cwt. (10080 lb.)	115 cwt. (12880 lb.)
Shipping Dimensions	326 cu. ft.	375 cu. ft.

Wadkin

42" and 52" Triple Drum Sanders O.T.

This machine is manufactured by J. Sagar & Co. Ltd., Halifax, one of the Wadkin Group of Companies.

42" and 52" Triple Drum Sanders O.T.

Wadkin

This triple drum sander incorporating many exclusive features and refinements has been specially developed to produce a high quality finish free from minute "depressions" and "high spots" which show up so badly when the surface is highly polished. Scores of these machines are in continuous service and have proved their ability to handle every class of production sanding on an efficient low cost basis.

Specification

The Main Frame is of heavy cast iron construction with deep ribbed side members, connected by binder rails at the top and bottom of the machine.

The Table is mounted on two side frames, is counterbalanced for ease of movement and rises and falls by means of handwheel. A graduated scale is fitted adjacent to the table end and indicates the height of the table in relation to the sanding drums (*i.e.* thickness of stock being sanded). The quick release motion is operated by a lever at the infeed end in case of accident or jams, and also permits the table to yield in the event of oversize or irregular material being fed into the machine. Spring loading of the table is incorporated. The machine can be supplied, as an extra, with a power operated rise and fall table motion.

The Endless Travelling Bed consists of an endless serrated rubber band which gives resilience and grip under all operational conditions. The bed is tensioned and tracked by a small key which adjusts the infeed table roller to give the required correct tension.

The Three Sanding Drums are dynamically balanced with the sandpaper spirally mounted having spring loaded automatic "take-up" to compensate for stretching conditions. Sandpaper and felt covers can be renewed without removing the drums from the machine. Independent drive is provided for each drum and braking is incorporated.

Drum Oscillation. A worm gear is fitted to the end of the sanding drum spindle and drives a worm wheel mounted on a shaft having eccentric ends. A hinged hood or cover which is attached to the drum bearing housing is then arranged to drop down over the two eccentric worm wheel shaft ends. This action unites the drum with the oscillating gear mechanism and imparts a very smooth movement to the drum.

The Four Platens. The drum platens are inverted tables fitted between the sanding drums against which the stock is sanded. The first, or infeed platen, has a rise and fall motion which can be quickly adjusted whilst stock is being fed through the machine. The other platens are rigidly fixed.

Brakes. All three sanding drums are provided with a single foot-operated braking system for bringing the drums rapidly to rest.

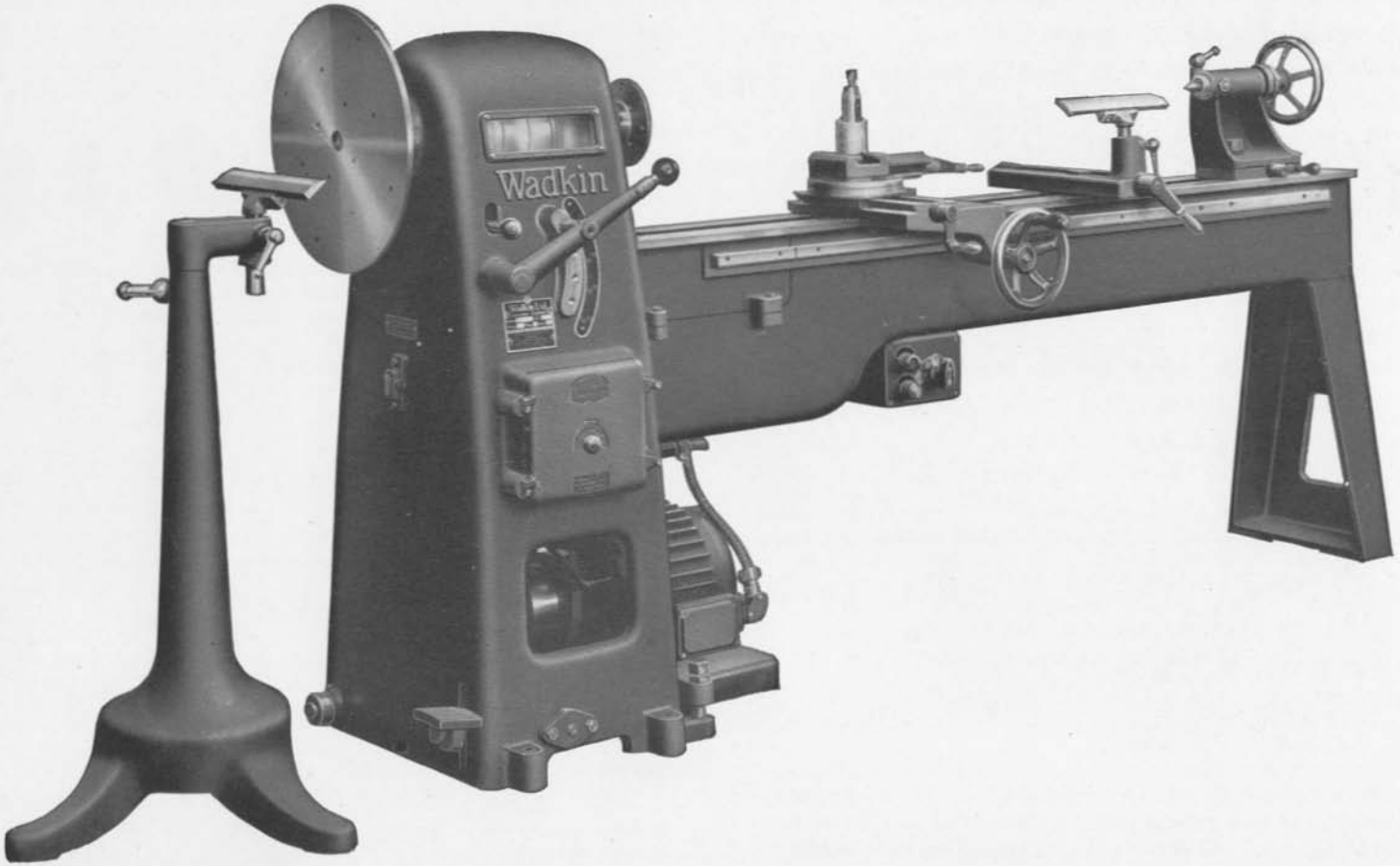
Control Equipment. All controls for feed and drum motors are grouped together at the infeed end of the machine for convenience of the operator. Individual start buttons are provided for each drum, together with a start and stop control for the feed motor, while a master "mushroom" stop is incorporated to close down all motors instantaneously.

Dimensions and Capacities

	42" Machine	52" Machine
Sanding capacity of machine	42" wide × 6" thick	52" wide × 6" thick
Diameter of sanding drums	11¼" (nominal)	11¼" (nominal)
Speed of 1st and 2nd sanding drums	1200 r.p.m.	1200 r.p.m.
Speed of 3rd sanding drum	1335 r.p.m.	1335 r.p.m.
Infinitely variable feed speeds from	15 to 30 f.p.m.	15 to 30 f.p.m.
Horse power of sanding drums	7½	10
Horse power of bed feed motor	2	3
Approximate floor space	7′ 4″ × 7′ 7″	7′ 4″ × 8′ 10″
Approximate Net Weight	95 cwt. (10640 lb.)	105½ cwt. (11816 lb.)
Shipping Dimensions	367 cu. ft.	410 cu. ft.

Wadkin

6", 8" and 10" Woodturning Lathes R.S.



6", 8" and 10" Woodturning Lathes R.S.

Wadkin

This is a self-contained type of Lathe, requiring no countershaft, and is suitable for practically all the turning work required in the average shop. It is particularly suitable for the needs of engineers' pattern makers.

Specification

The Bed is of heavy proportions and has wide machined faces scraped dead true. It is securely bolted at one end to the main headstock and at the other end to a leg.
The bed is provided with gap, and gap plate as shown in the illustration.

The Headstock is of unique construction and arranged to take the motor and driving belt inside, so that the machine is entirely self-contained. The main spindle runs in ball bearings with suitable provision for taking end thrust in either direction. The spindle is screwed at the front to receive the face plates, and bored out No. 2 Morse taper to take centres. It is also extended and screwed at the back to receive a face plate for turning large work.
Either four or eight speeds are provided as required. All speeds are quickly obtainable by a belt-shifting lever fixed conveniently for the operator.

The Travelling Slide Tool Carriage can be supplied when required. It is provided with a lateral movement along the bed, controlled by machine-cut rack and pinion, and a cross motion controlled by square thread screw. The tool post is mounted on a graduated swivel device on the cross cut slide to enable angular work to be accurately done. By means of the graduations the tool may be accurately set. The tool post is slotted to receive the turning tools and suitable spacing collars are also provided, one of which is arranged with a spherical seating to suit an adjustable tool piece. This is supplied to enable the tool to be so adjusted that it is presented to the work at the most suitable cutting angle.

The Tailstock is bored out and fitted with a long steel poppet controlled by large handwheel and square thread screw. The front end is bored out No. 2 Morse taper the same size as the headstock spindle. The centres are self-discharging. The Tailstock is arranged with set over motion by screw and handle for taper turning.

The Hand Rest can be fixed in any desired angular or lateral position along the bed by eccentric lever handle. The tool rest is adjustable vertically, and is fitted with renewable steel plate.

The Drive is from totally-enclosed motor mounted on a pivoting base plate inside the main frame. The motor is fitted with four-speed cone pulley and outer pedestal bearing. Power is transmitted by belt on to a similar four-speed cone pulley on the headstock spindle. Where eight speeds are required a two-speed motor is used.
Variations in speed are obtained by belt shifting lever mounted on the front of the headstock and a foot lever is arranged to raise the motor base plate slightly whilst actually changing speed. Adjustment is provided for taking up any slackness in the belt that may develop. In the case of eight speeds, a speed selector switch is provided to obtain either of the two motor speeds.

Control Gear. For three-phase alternating current the control gear is of the automatic contactor type operated by push buttons.

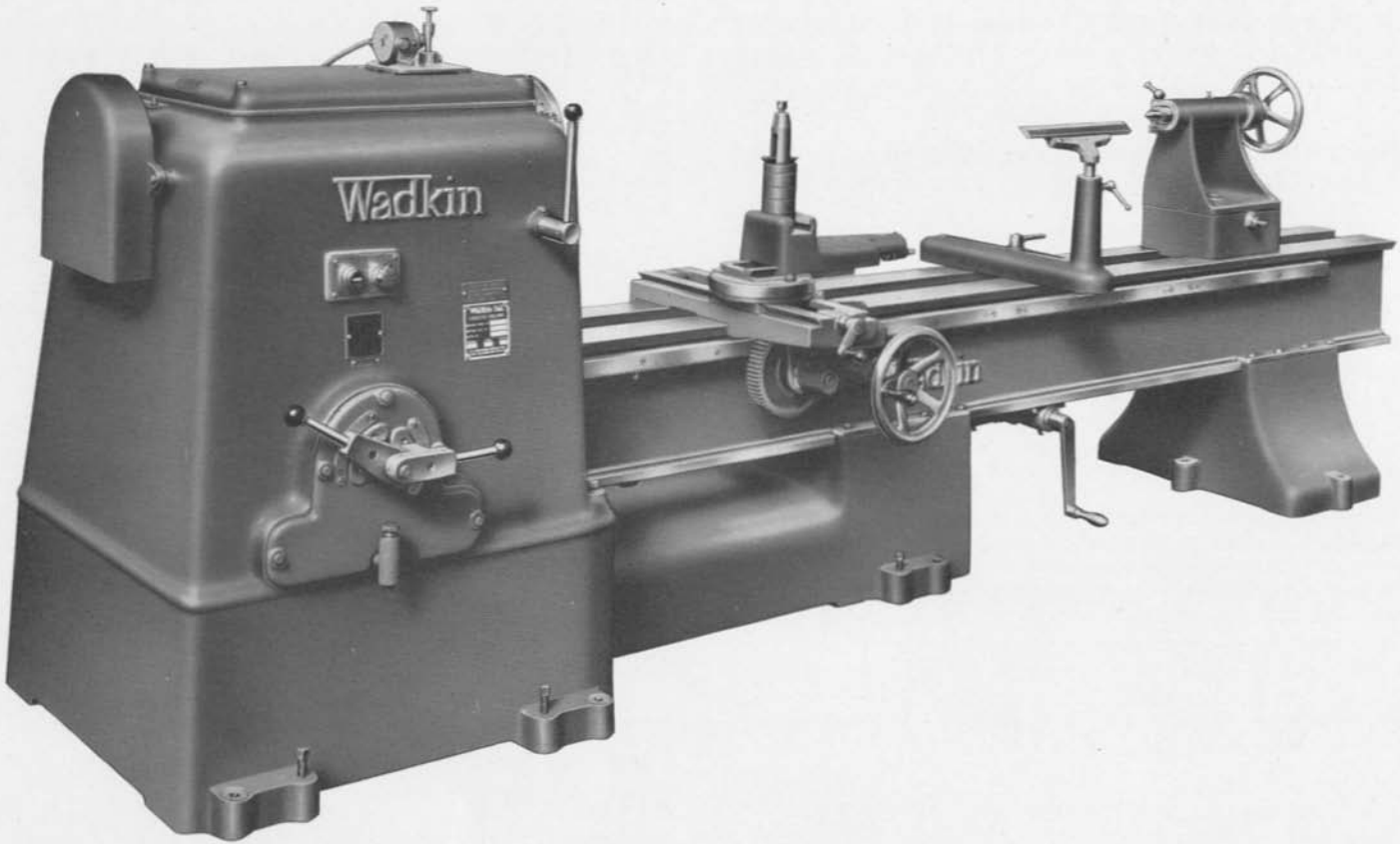
Outside Turning. We can supply, when desired, a tripod stand, complete with off-set hand rest, for turning work of large diameter. Headstock spindles on all machines are screwed to receive an 18" diameter face plate.

Dimensions and Capacities

	6" Size	8" Size	10" Size
Height of centres	6¼"	8¼"	10¼"
Will take between centres	3' 6"	5' 6"	7' 6"
Diam. turned with gap bed	2' 0½"	2' 4½"	2' 8½"
Width turned with gap bed	12"	12"	12"
Diam. turned over rests	9"	13"	17"
Spindle speeds, r.p.m.: 4-speed machine—			
50 cycles	240, 600, 1250, 2880		
60 cycles	280, 720, 1500, 3350		
8-speed machine—			
50 cycles	200, 320, 500, 750, 960, 1440, 1850, 2880		
60 cycles	240, 380, 600, 900, 1150, 1750, 2220, 3360		
Horse power	1½	1½	1½
Net weight	12¼ cwt. (1375 lb.)	13¼ cwt. (1485 lb.)	15¼ cwt. (1700 lb.)
Floor space	7' 0" × 2' 3"	9' 0" × 2' 3"	11' 0" × 2' 3"

Wadkin

12", 15" and 18" Woodturning Lathes R.U.H.



12", 15" and 18" Woodturning Lathes R.U.H.

Wadkin

This is a machine for the heaviest and largest class of work. With a range of speeds varying from 100 to 1900 r.p.m., any class of turning, either between the centres, or on the faceplates, can be done.

It is self-contained and requires no countershaft, which not only simplifies any installation difficulties, but makes for the greatest economy in floor space.

Specification

The Bed is of heavy section with wide machined faces, and is arranged with a sliding motion away from the headstock by rack and pinion, to give any width of gap. This is a big advance on a gap bed machine, for it will be readily appreciated by those who have had experience of the ordinary gap bed lathes that, owing to the gap plate being of a fixed length, it is not always convenient to adjust the tool rests to the best position when working on a narrow job.

The Headstock Spindle is mounted on Timkin taper roller bearings.
It is driven by a motor mounted in the headstock, driving on to a nine-speed gear box through the medium of vee belts.
The spindle is arranged at front for receiving the face plates, and bored out No. 3 Morse taper to take the centres. It is also extended at the back to receive a face plate for turning large work.
The spindle is arranged with a lock to facilitate the quick removal of the face plates, and provision is made to cut off the current automatically when this device is in operation. A handbrake is provided to the spindle, the operation of which automatically switches off the driving motor.

The Tailstock is bored out and fitted with a long steel poppet, controlled by large handwheel and square thread screw. It is arranged with set over motion for taper turning. The front end is bored out No. 3 Morse taper, the same size as the headstock spindle. Centres are self-discharging.

The Hand Turning Rest can be fixed in any desired angular or lateral position along the bed by lever handle. The tool rest is adjustable vertically and is fitted with removable steel plate.

Travelling Rack Slide Rest can be supplied when required. It is provided with a lateral movement along the bed controlled by rack and pinion and a cross motion controlled by square thread screw. Tool post is secured on a swivelling base on the cross slide for angular work.

Outside Turning. We can supply, when desired, either a tripod stand complete with universal adjustable hand rest and face plate for turning work of large diameter, or an independent travelling carriage mounted on a base with rack and pinion movement also a cross traverse and a central rotating movement.

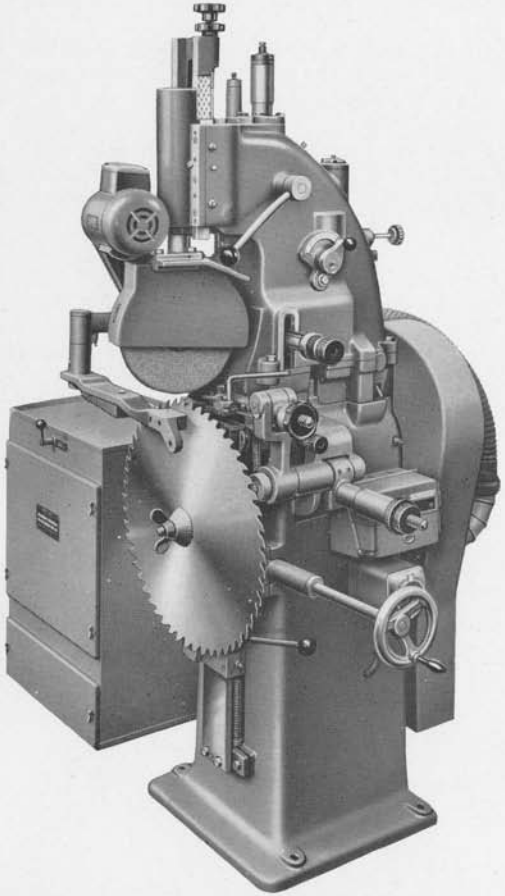
The Motor and Control Gear are by leading British makers. The control gear is of the automatic contactor type, operated by push buttons. An interlocking switch is provided which operates in conjunction with the spindle lock.

Dimensions and Capacities

	12"	15"	18"
Height of centres	12¼"	15¼"	18¼"
Will take between centres with bed close up to the headstock	8′ 3"	8′ 3"	8′ 3"
Max. gap with sliding bed	2′ 6"	2′ 6"	2′ 6"
Largest diam. that can be worked on inner faceplate	6′ 0"	6′ 0"	6′ 0"
Diam. turned over tool rests	1′ 7"	2′ 1"	2′ 7"
Floor space allowing for gap	14′ 6" × 3′ 3"	14′ 6" × 3′ 3"	14′ 6" × 3′ 3"
Nine spindle speeds, r.p.m.	100 to 1900	100 to 1900	100 to 1900
Horse power of motor	3	3	3
Net weight (approx.)	50 cwt. (5600 lb.)	55 cwt. (6160 lb.)	60 cwt. (6720 lb.)
Shipping dimensions	159 cu. ft.	169 cu. ft.	179 cu. ft.

Wadkin

"Loroch" Automatic Saw Sharpener H.F.



This machine, designed to accommodate saws from 6″ to 60″ diameter, has been developed by specialists in Automatic Saw Sharpening machinery and is the result of 30 years' experience and knowledge of the essential requirements of a machine of this type. Modern in design, it embodies every necessary mechanical advantage to enable it to grind practically every type of circular saw as well as band and frame saws. It is built on first-class engineering lines and year in and year out can be depended on to maintain your saws in good condition, and save you time, trouble, money and manpower.

Specification

The Machine is fully automatic and is suitable for tooth pitches up to $2\frac{3}{8}$″ and tooth depths up to $1\frac{3}{4}$″ maximum.

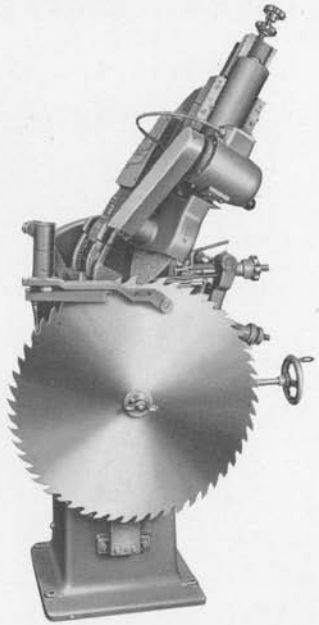
The Head is fitted with a 10″ diameter wheel and on each downward stroke swivels from the square position to a preset angle up to 25° in order to give the required front bevel. The rates of feed are 35 and 70 teeth per minute, the face of the tooth being ground on the down stroke and the back of the tooth on the return stroke. The machine is provided with built-in cams for grinding a wide variety of tooth profiles.

The Saw Clamp Adjustment is by handwheel.

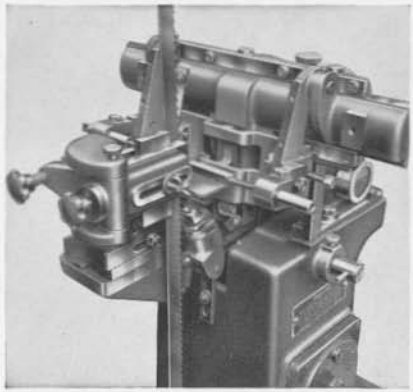
The Electrical Gear consists of a $\frac{1}{4}$ h.p. grinding wheel motor and a $\frac{1}{2}$ h.p. feed motor controlled by push-button starters and a two-speed selector switch for the two rates of feed.

Dimensions and Capacities

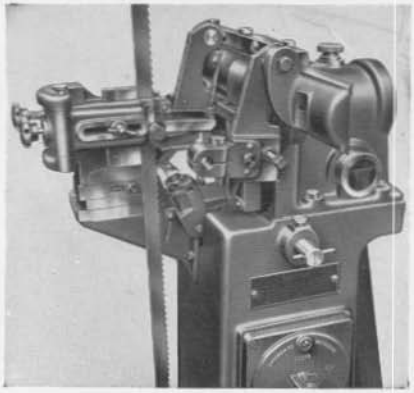
Diameter of saws accommodated	6″ to 60″
Maximum tooth pitch	$2\frac{3}{8}$″
Maximum tooth depth	$1\frac{3}{4}$″
Maximum face bevel	20°
Maximum cutting angle (hook)	25°
Rate of grinding in teeth per minute	35 and 70
Diameter of grinding wheel	10″
Horse power of grinding wheel	$\frac{1}{4}$
Horse power of main drive	$\frac{1}{2}$
Net weight	7 cwts. (784 lbs.)
Shipping dimensions	73 cu. ft.



The Grinding Head cants up to 25° either way for varying amounts of hook or rake.



Close up view showing the machine set up for filing.



View of the machine arranged for setting.

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Automatic Band Saw Filer and Setter H.D.

This machine will sharpen and set band saws better, quicker and cheaper than the most expert hand filer. Each tooth is sharpened and set to the correct depth and angle with accuracy and uniformity.
With the saw carried vertically, floor space required for this machine is considerably less than previous horizontal types.

Specification

Filing. The action of the machine is obtained by the sliding carriage which carries the file, advancing to the saw and moving across the tooth.
At the end of the stroke the carriage falls away from the saw and returns to its original position. As the file returns, a feed pawl engages with the saw which is moved upwards ready for the next stroke. The cycle of operations is continuous at the rate of 75 teeth per minute. The file can be swivelled to give the required angle of tooth and the saw adjusted towards the file to give depth of cut.

Setting is effected by means of a hardened steel die which is caused to swing across the teeth. The amount of set can be controlled by two contact screws.

Drive. Motor is self-contained with the machine. When belt driven fast and loose pulleys and striking gear are provided.

Dimensions and Capacities

Any length of saw can be handled.

Max. width of saw	2¼"
Will set teeth in saws up to	1½"
Will file and set up to	⅜" pitch
Floor space	3' 0" × 2' 0"
Horse power	½
Net weight	2½ cwt. (280 lb.)
Shipping dimensions	11 cu. ft.

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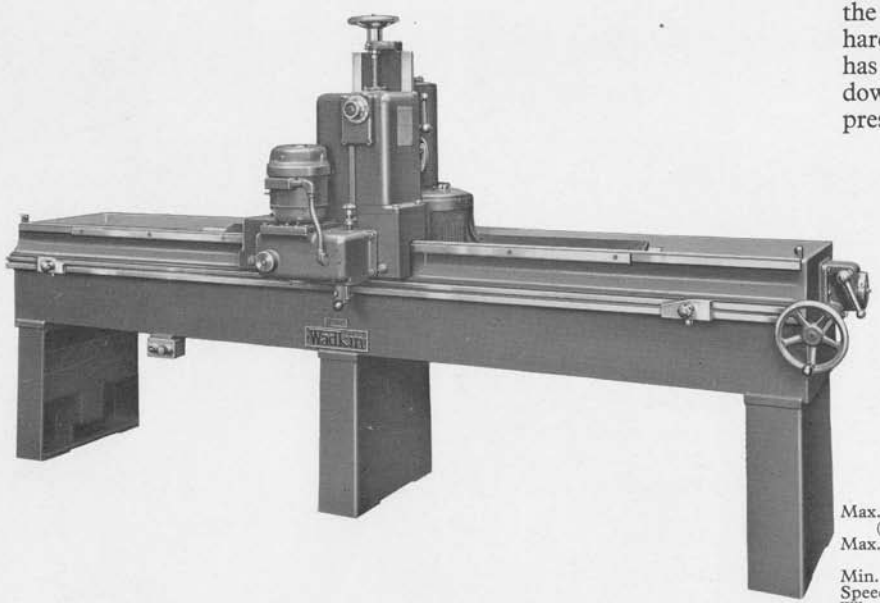
Automatic Straight Knife Grinder N.P.



This machine is designed to carry knives up to 80″, or to special order 120″ long. It is designed for wet grinding and is fully automatic in action.

The machine consists of an open tank mounted on three columns, the carriage is mounted on ball bearing rollers and moves on hardened rods carried on the sides of the tank. The carriage has a power-operated traverse and reverse, with automatic downfeed to the grinding wheel head. An automatic trip can be preset to allow up to ·012″ to be ground from the knife.

Specification

The Grinding Wheel Spindle is direct motorized, and arranged to cant up to 30° for hollow grinding.

The Knife Bar. The knives are supported on a carrier inside the tank, arranged to cant from 0 to 45° to give the required cutting bevel.

The Grinding Solution is supplied to the knife and to the grinding wheel by a self-contained motorized pump.

The Knives are set from the back edge using setting blocks. Four pairs of blocks are provided, covering all widths of knife from $\frac{3}{4}$″ to 6″.

Dimensions and Capacities

Max. length of knife	80″
(to special order)	120″
Max. knife section (normal)	1′ × 6″
(if slotted)	1″ × 8″
Min. knife section	1″ × $\frac{1}{8}$″
Speed of traverse	20 ft. per min.
Wheel size	12″ diam. 4″ cup type
Speed of wheel, r.p.m.: 50 cycles	1500
60 cycles	1800
Horse power wheel head	6
Horse power traverse motor	$\frac{1}{4}$
Floor space: 80″ machine	11′ 6″ × 3′ 4″
120″ machine	15′ 0″ × 3′ 4″
Net weight: 80″ machine	35 cwt. (3920 lb.)
120″ machine	40 cwt. (4480 lb.)
Shipping dimensions (80″ machine)	194 cu. ft.

Automatic Straight Knife Grinder N.Q.

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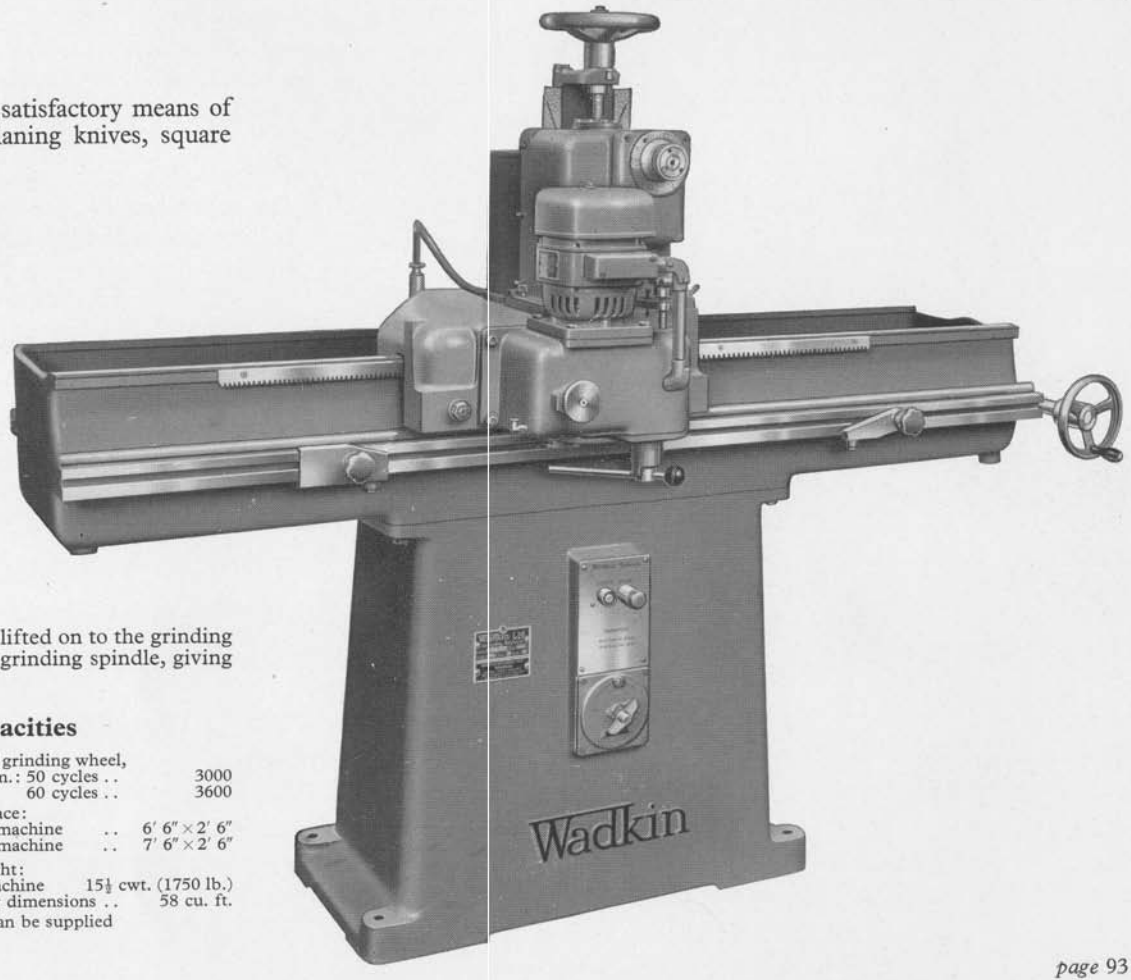
This machine provides a completely satisfactory means of wet grinding both thick and thin planing knives, square chipper irons, paper knives, etc.

Specification

The Carriage is mounted on ball bearing rollers and moves on hardened ground rods. It embodies grinding wheel head with motor built in. The carriage has power-operated traverse and reverse, and automatic downfeed to the wheelhead. An automatic trip is provided to the downfeed to prevent wasteful grinding.

The Spindle is arranged with vertical adjustment for setting, also canting movement up to 25° for hollow grinding.

Knife Bar. The knives are supported on a knife bar mounted inside the tank, which is arranged to cant from 0 to 45°. The solution in the tank is lifted on to the grinding wheel by means of a screw paddle on the grinding spindle, giving complete protection from burning.



Dimensions and Capacities

*Max. length of knife (standard)	36″
Max. knife section ..	4½″ × ⅝″
Max. section if slotted	6½″ × ⅝″
Min. knife section ..	¾″ × ⅛″
Speed of traverse ..	27 f.p.m.
Horse power, wheel head	2
Horse power, traverse motor	1/6
Wheel size 6½″ dia. × 3″ cup, ⅞″ bore	

Speed of grinding wheel, r.p.m.: 50 cycles ..	3000
60 cycles ..	3600
Floor space: 36″ machine ..	6′ 6″ × 2′ 6″
48″ machine ..	7′ 6″ × 2′ 6″
Net weight: 36″ machine	15½ cwt. (1750 lb.)
Shipping dimensions ..	58 cu. ft.

* Machine to take up to 48″ knives can be supplied

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Cutter Grinder N.U.

This machine is designed for regrinding the cutters used on high-speed routers. The machine is entirely self-contained and consists of a main frame on which is mounted a precision spindle to carry the grinding wheels, also a table which has movements in three directions.

Specification

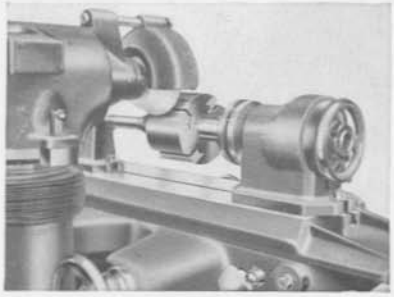
The Grinding Wheel Spindle is mounted on precision ball bearings, lubricated by oil. The spindle end is prepared to take grinding wheel $\frac{3}{8}''$ bore and up to 4″ diameter.

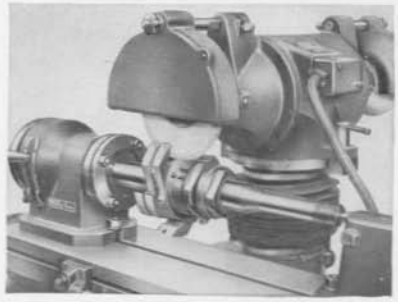
The Table is provided with a working surface $19\frac{1}{2}''$ long × 5″ wide and one $\frac{1}{2}''$ tee slot for locating and clamping fixtures. The table has a longitudinal traverse of 7″ operated by handwheel with rack and pinion and adjustable stops for repetition work are provided. This motion is on vee slides. The cross traverse is operated by screw and handwheel. The rise and fall of the table is by means of a handwheel actuated by mitre gears. Both the rise and fall and cross traverse motions are given fine adjustment by micrometer setting. Suitable dust covers are provided on all three movements.

Drive is by endless belt from totally enclosed motor, carried on a hinged plate on the main frame, to facilitate belt tensioning. Control is by push button starter, built into a dust-proof housing in the main frame.

Dimensions and Capacities

Longitudinal travel of table	7″	Spindle speed, r.p.m.	4750
Cross travel of table	6″	Max. diam. of wheel	4″
Rise and fall of table	6″	Horse power	$\frac{1}{2}$
Centre of spindle to table surface in top position	3″	Floor space	3′ 0″ × 2′ 8″
Table size overall	$19\frac{1}{2}''\times5''$	Net weight	$4\frac{1}{2}$ cwt. (500 lb.)
		Shipping dimensions	34 cu. ft.





Universal Grinder N.H.

This machine has been specially designed for the proper regrinding and maintaining of all cutter equipment used on a modern high-speed planer and moulder. It will deal with all types of multi-knife cutterheads, as well as cutters for square or circular blocks, thick or thin planing knives up to 12″ long*, either in the blocks or independent of them. It is also capable of regrinding tungsten-carbide tipped saws from 8″ to 18″ diameter.

Specification

The Machine consists of a rigid main frame, carrying the motorized grinding head and table.

The Table is rigidly carried on the main frame. It has longitudinal movement on ball bearings and hardened steel slides, also transverse movement. Control of table movements is by handwheels. Handwheels for transverse movement are graduated in ·001″ or ·1 mm. for giving a fine feed. All control handwheels are duplicated so that the machine can be operated from front or rear of table.

The Grinding Wheel Head swivels 360°. Head rises and falls by handwheel and screw, and has horizontal adjustment. Spindle is mounted on precision pre-loaded bearings. It is arranged to take a cup grinding wheel at each end. Grinding wheel head has motor built in. All slides are covered at every position to prevent entrance of dust.

Dimensions and Capacities

Will take cutters up to	12″ long*
Longitudinal table travel	16″
Cross travel of table	5½″
Min. height wheel centre to table	8″
Max. height wheel centre to table	14″
Speed of grinding wheels, r.p.m.: 50 cycles	3000
60 cycles	3600
Diam. of grinding wheels	6″ or 7″
Horse power of motor	2
Floor space (max. movements)	5′ 3″ × 3′ 9″
Net weight	12 cwt. (1350 lb.)
Shipping dimensions	59 cu. ft.

*To special order will take up to 24″ long.

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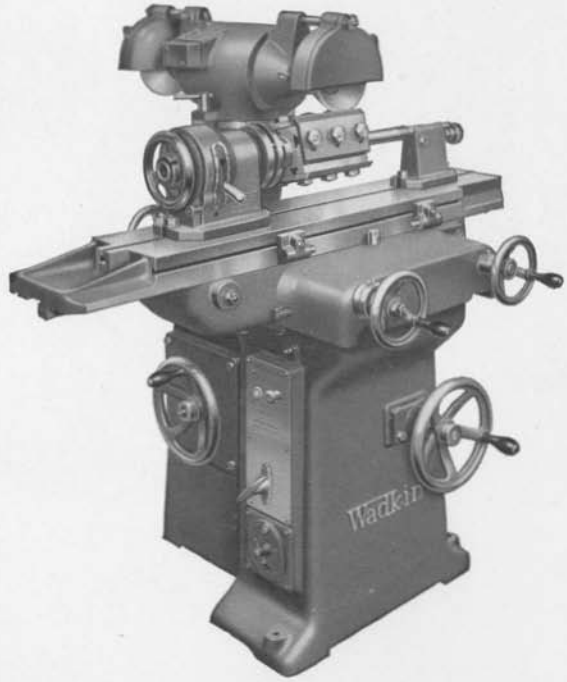

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Tools and Accessories

Illustrated here are typical examples of the Tools and Accessories we can supply. We maintain our own large Tool Department and these facilities in conjunction with our experience as machine manufacturers, enable us to produce high grade Tools and Cutter equipment that enable the machines to show the best results.

Details of our full range of Tools and Accessories are in Catalogue No. 745, a copy of which will be sent on request.

Chain and Chisel Mortise Sets.

We carry a large variety of circular saws in stock.

A comprehensive range of cutters is stocked for Planers, Four Cutters and Spindle Moulding Machines.

We can supply all types of Router Cutters.

Tools and Accessories

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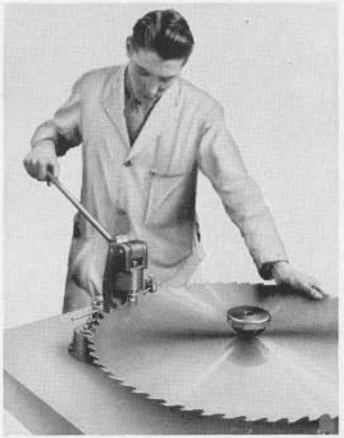
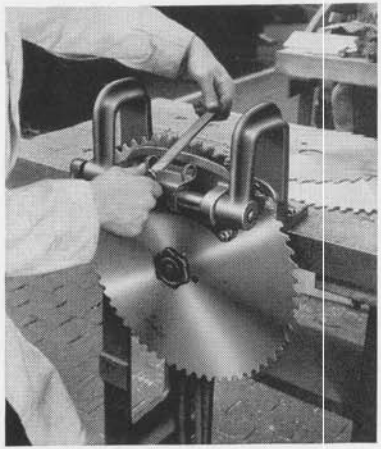
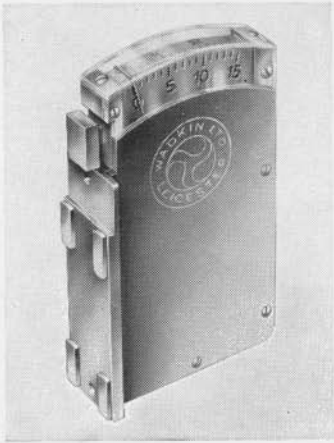


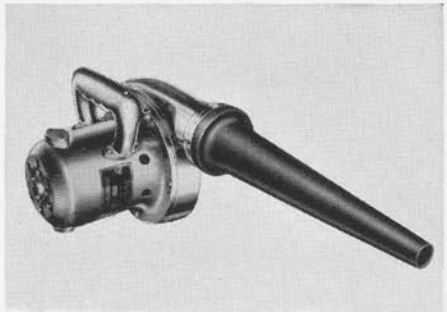
With this Wadkin Circular Saw Setter it is an easy matter to leave every tooth uniformly set to a specified amount



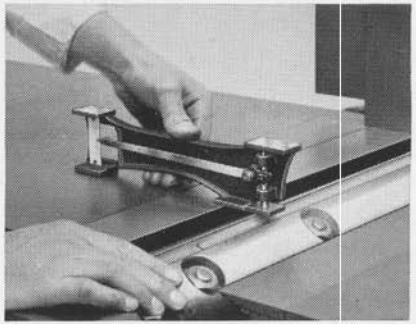
With this Circular Saw Sharpening Vice the saw is clamped close up to the teeth and clamping action obtained by single lever handle



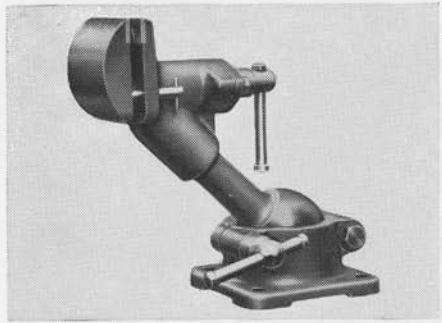
This handy Precision Saw Set Guage is an invaluable accessory for use when circular saws are sharpened in the vice



This Portable Electric Blower will add years to the life of your machinery—by blowing out dust, dirt, fluff and all foreign matter



This Precision Cutter Setter is a simple, accurate tool ensuring accurate knife and cutter setting. Can be used on most types of machines



This Tool and Cutter Vice is fitted with ball and socket base which enables it to be swung to any position for convenient working

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Index

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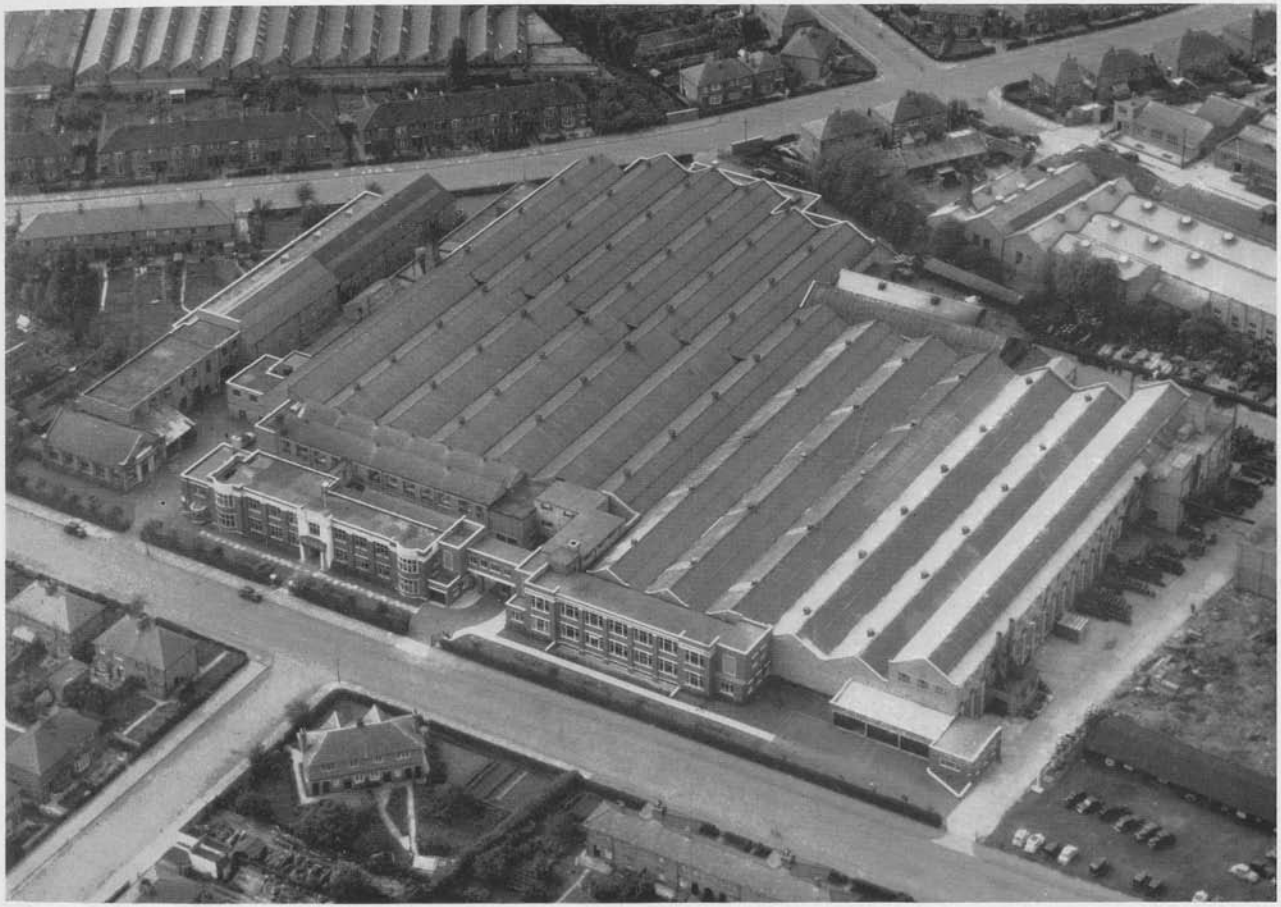

An aerial view of
Wadkin Ltd.
Green Lane Works
Leicester

Catalogue 790/G/25C/6/57. Printed in England