

Wadkin

WOODWORKING MACHINERY



Catalogue No. 708/6

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THIS abridged catalogue is intended to give only a brief outline of the various types of Wadkin machines available.

More comprehensive information in the form of Booklets and Leaflets covering each different machine is obtainable on request.

As will be seen from the following pages, the Wadkin range includes most types of machines in common use in Saw Milling, Joinery Manufacture, Cabinet Making, in Railway Workshops and Engineers' Pattern Shops. Whatever your particular requirements, whether for an individual machine or a complete woodworking plant, expert advice and complete information will be gladly given by your nearest Wadkin Agent.

For details of the Wadkin Sales and Service Organisation throughout the world, see pages 6 and 7.

Wadkin Ltd. GREEN LANE WORKS, LEICESTER, ENGLAND

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Incorporating:

BURSGREEN (DURHAM) LTD., Fence Houses, Houghton-le-Spring, Co. Durham

BURSGREEN (COLNE) LTD., Lodge Holme, Trawden, Nr. Colne, Lancs.
J. SAGAR & CO. LTD.

LONDON OFFICE: 62-64 BROOK STREET, W.1. TELEPHONE: MAYFAIR 7048



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 employ more than 900 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.

The Works in which Wadkin machines are built are recognised as being among the most up-to-date and best equipped of their kind. Illustration above shows one of the 13 bays comprising the main engineering shops at Green Lane Works, Leicester.

Wadkin



One of the bays in the machine shop. Production is on a repetition basis enabling extensive use to be made of jigs and fixtures. This ensures low manufacturing costs and enables design features and improvements to be included in Wadkin machines, the cost of which would otherwise be prohibitive.

An exacting system of inspection and testing at every stage of manufacture ensures the maintenance of a high standard of workmanship and engineering. Finally every machine must undergo extended running tests at the hands of expert woodworking machinists.

The necessary electrical plant is available in the Test Department to enable all machines to be tested on a supply identical with that on which the machines will operate in service.

Wadkin



Good machines require good tools if they are to work at their maximum efficiency.

We maintain a large tool and cutter department, properly equipped and staffed by specialists in tool and cutter work. These facilities in conjunction with our experience as manufacturers of the machines themselves, not only enable us to produce all types of tools of a high standard of excellence, but to produce exactly the right class of tool to enable the machines to show the best results.

Details of the full range of tools available are given in our separate Tools and Accessories Catalogue, a copy of which will be sent on request.

ARGENTINE

E. A. Anderson & Cia (Argentina), S.R.L., Venezuela 691 (R76), Buenos Aires.

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Atkins (W. A.) Ltd., "Mazda House", 894 Hay Street, Perth.

Austral Engineering Supplies (Pty.) Ltd., 490-494 Kent Street, Sydney.

Austral Engineering Supplies (Pty.) Ltd., 78 Grange Road, Welland.

A.E. Supplies (Pty.) Ltd., 44 Punt Road, Windsor, S.I., Victoria.

Queensland Machinery Co. Ltd., 142-156 Albert Street, Brisbane.

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H. Brenneisen & Cie., 64 Rue Slesbroek Zuen, Brussels.

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71 Front Street East, Toronto.
65 Ste. Anne Street, Quebec City.
1465 Tecumseh Boulevard East, Windsor, Ontario.
136 Sparks Street, Ottawa.

Gorman's Ltd., Edmonton and 43rd Avenue and First Street S.E., Calgary, Alberta.

T. S. Taylor Machinery Co. Ltd., 1600 Portage Avenue, Winnipeg 12, Manitoba.

B.C. Equipment Co. Ltd., B.C. Equipment Building, 551 Howe Street, Vancouver, 1, B.C.

Foulis Engineering Sales Ltd., 4 Atlantic Street, Halifax, Nova Scotia.

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E. Thurston & Co. Ltd., Avenida Bulnes 149, Santiago.

CHINA

The Jardine Engineering Corporation Ltd., 14-16 Pedder Street, Hong Kong.

DENMARK

A/S F. L. Bie, Valdemarsgade 14, Copenhagen V.

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A. Baumann & Co. Ltd., Mansion House, Nairobi.
Mombasa, Dar-es-Salaam, Nakuru.

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The Delta Trading Co. S.A.E., 18 Emad el Dine, Cairo.

EIRE

H. J. Niblock, 11 Rosmeen Gardens, Sandycove, Co. Dublin.

FIJI

Millers Ltd., P.O. Box 296, Suva.

FINLAND

O/Y Cronvall, A.B., E. Esplanaadikatu 22, Helsinki.

FORMOSA

Jardine, Matheson & Co. Ltd., 36 Kwei Teh Street, Taipei, Taiwan.

FRANCE

H. Brenneisen & Cie., 60-64 Rue Planchat, Paris XX^e.

Pattern Shop Machines only:
Soc. Annom., Alfred Herbert, 1-3 Rue du Delta, Paris 9^e.

GERMANY, WEST

Reinhold J. Probst, G.m.b.H., Bolongarotrasse 92, Postschliessfach 109, Frankfurt A.M.-Hochst (16).

Pattern Shop Machines only:
Stenzel & Co., Wiesbaden.

HOLLAND

R. S. Stokvis & Zonen N.V., Technische Afdeling, Rotterdam.

ICELAND

Fridrik Bertelsen & Co. Ltd., Hafnarhvoll, Reykjavik.

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Societa Italiana, Alfred Herbert, Via Andrea Doria, Milano.

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Pattern Shop Machines only:
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A. Falkenberg E.F.T.F., Radhusgt 30 Oslo.

PERU

G. Berckemeyer & Co., S.A., Av. Argentina 232, Casilla 153, Lima.

PORTUGAL

The Engineering Company of Portugal Ltd., Rua Dos Remolares 12, Lisbon.

RHODESIA

Sawmill & Engineering Supplies, P.O. Box 2517, Victoria Street, Salisbury.

SOUTH AFRICA

Rutherford (Pty.) Ltd., 80 Bree Street, Capetown and 10 Nugget Street, City and Suburban, P.O. Box 3802 Johannesburg.

Herbert Gearing & Sons (Pty.) Ltd., 16 Broad Street, North End, Port Elizabeth C.P.

P. J. Yelland & Co. (Pty.) Ltd., 110 Gale Street, Durban.

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SWEDEN

A. B. Sigfr Stenberg & Co., Nassjo, Goteborg.

SWITZERLAND

Spoerri & Co., A.G., Schaffhauserstrasse 89, Zurich 6/42.

THAILAND

Yip-in-Tsoi, Mahaprudharam Road, Phitsathien Bridge, Bangkok.

UNITED STATES OF AMERICA

Atwood Imports Inc., 1300 South Soto Street, Los Angeles 23, California.

Freeman Supply Company, 1152, East Broadway, Toledo 5, Ohio. (*Pattern shop machines only.*)

General Equipment Inc., Highway No. 64, P.O. Drawer 1558, Statesville, North Carolina.

James F. Murphy, 113 Richdale Avenue, Cambridge 40, Massachusetts.

Supreme Woodworking Machinery Corp., 130-40 180th Street, off Merrick Blvd., Springfield Gardens, Jamaica 34, New York.

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

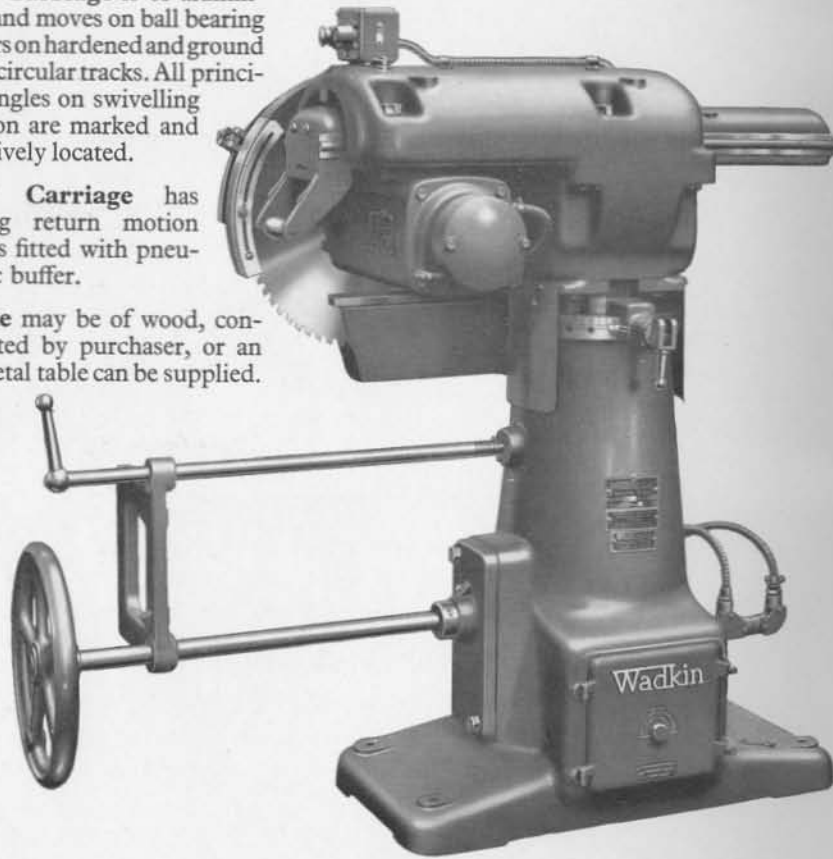
This machine has rise and fall, also swivelling motions for straight or angular cross cutting and trenching.

The Motor is underslung mounted to conserve space, and is provided with brake. It can be so mounted that the saw is either to the left or right of the saw carriage.

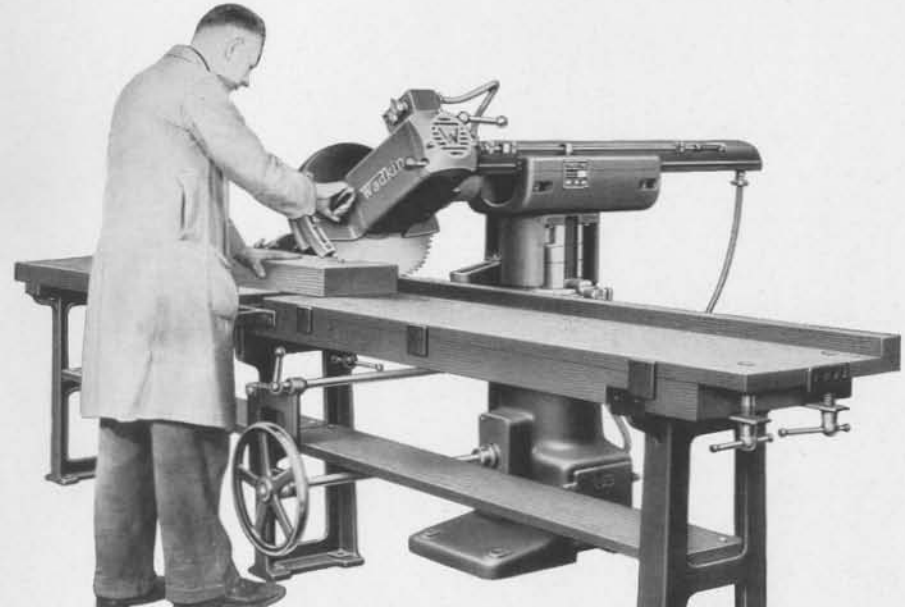
Saw Carriage is of aluminium and moves on ball bearing rollers on hardened and ground steel circular tracks. All principal angles on swivelling motion are marked and positively located.

Saw Carriage has spring return motion and is fitted with pneumatic buffer.

Table may be of wood, constructed by purchaser, or an all metal table can be supplied.



	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"
Saw speed, r.p.m.: 50 cycles	3000	3000	1500	3000	1500
60 cycles	3600	3600	1800	3600	1800
Diam. of saw spindle end ..	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
Will cut off between	14" x 5" and 18" x 1"	22" x 5" and 27 1/2" x 1"	16" x 7" and 21 1/2" x 4"	45" x 5" and 48" x 1"	40" x 7" and 42" x 4"
Will groove up to 2 1/4" x 1 1/8" in material	10 1/2" wide	20" wide	not available	not available	not available
Horse power of motor	5	5	6	5	6
Net weight	8 1/2 cwt. (980 lb.)	9 1/2 cwt. (1040 lb.)	9 1/2 cwt. (1060 lb.)	9 1/2 cwt. (1100 lb.)	9 1/2 cwt. (1100 lb.)



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

The Saw has rise and fall, canting and swivelling movements, each provided with locking devices. The machine is available with the saw either at the left or right of the saw carriage to suit the direction of the timber as it is fed to the machine.

Saw or Grooving Head is carried directly on the motor shaft. Saw carriage is aluminium and moves on ball bearing rollers on hardened and ground steel circular tracks.

Carriage is returned by spring action, and pneumatic buffer prevents rebound. Brake is fitted to saw spindle.

Table may be of wood constructed by purchaser, or an all metal table can be supplied.

	Model C.C.1	Model C.C.2
Diam. of saw	18"	18"
Saw speed r.p.m.: 50 cycles	3000	3000
60 cycles	3600	3600
Diam. of saw spindle end ..	1 1/2"	1 1/2"
Will cut off between	22" x 5" and 27" x 1"	27" x 5" and 32" x 1"
Will groove up to 2 1/4" x 1 1/8" deep in material	20" wide	25 1/2" wide
Horse power of motor	5	5
Net weight without table	10 1/2 cwt. (1150 lb.)	11 cwt. (1230 lb.)



This machine is designed essentially for fast accurate cross cutting. It is equally efficient when using trenching heads. It is available with a plain roller table as shown or with power operated table, pneumatically operated stops and take off belts.

The Main Body is a steel fabrication carrying a cast iron hood in which a cast aluminium carriage slides on nitralloy steel rods and ball bearing rollers.

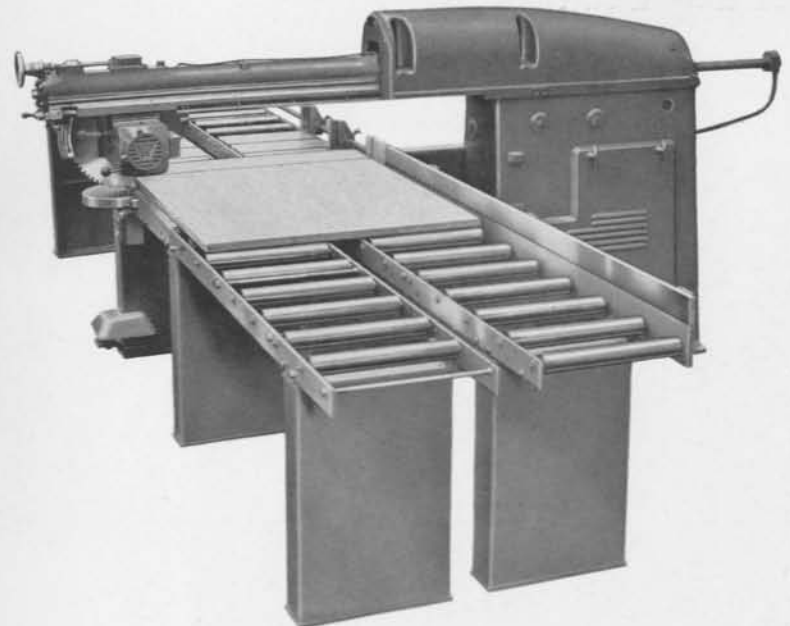
The Saw Motor is mounted on an arm and has a rise and fall movement of 2°. The motor is of special construction enabling 5½" depth of cut to be obtained with an 18" saw.

A Hand operated brake is fitted.

The Hydraulic Mechanism is housed inside the main frame and controlled by treadle.

The Forward Stroke is infinitely variable with the return stroke always at top speed.

	Model C.W.1	Model C.W.2
Diameter of saw	18"	18"
Will cut off up to	17" × 3½" and 12½" × 5½"	24½" × 3½" and 20½" × 5½"
Maximum size groove	2" × 1½"	2" × 1½"
Diameter saw spindle end	1½"	1½"
Speed of stroke	5 to 150 ft. per min.	5 to 150 ft. per min.
Saw speed r.p.m. 50 cycles	3000	3000
60 cycles	3600	3600
Horse power of saw motor	5	5
Horse power of pump motor	1	1
Net weight	13½ cwt. (1510 lb.)	15 cwt. (1680 lb.)



This is an entirely automatic cross cut, specially developed for fast production. The machine is available in three sizes as detailed below. All sizes are available with saw either at left as shown above or at the right of the saw carriage.

The Saw Carriage is of aluminium and is mounted on ball bearing rollers running on hardened and ground steel runways. The saw carriage is operated by hydraulic gear controlled by foot pedal.

The forward speed of the carriage can be varied by simply turning a hand lever. A constant high speed return stroke reduces the idle time to a minimum.

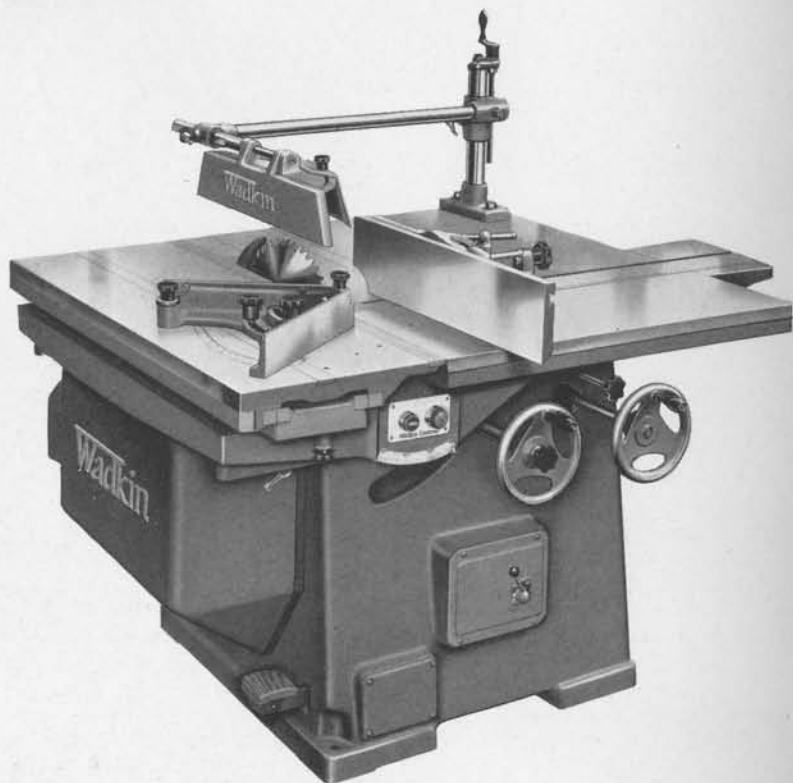
The Saw Motor is mounted on the saw spindle and the motor frame is carried in a circular slide controlled by worm wheel and handle so that a rise and fall can be obtained to compensate for wear on the saw, or for setting when trenching.

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. We recommend an all-metal table having ball bearing rollers. The standard table is in two sections, 8' long each side of the saw.

	Model C.J.4	Model C.J.5	Model C.J.6
Diam. of saw	18"	24"	18"
Diam. saw spindle end	1½"	1½"	1½"
Max. section cut	49" × 5" or 52" × 1"	20" × 7" or 22" × 5½"	20" × 5" or 24" × 3"
Max. size groove	2" × 1½" deep	not offered	2" × 1½" deep
Saw speed, r.p.m.: 50 cycles	3000	1800	3000
60 cycles	3600	1800	3600
Saw carriage variable speeds	5 to 120 ft. per minute	5 to 120 ft. per minute	5 to 120 ft. per minute
H.P. saw motor	5	10	5
H.P. feed motor	1½	1½	1½
Net weight	21½ cwt. (2400 lb.)	25 cwt. (2800 lb.)	21½ cwt. (2550 lb.)

* Max. depth of cut on C.J.6 at 30° canting is 4", and at 45° canting, 1½"



This machine is designed and built to give precision sawing to extreme limits of accuracy.

Saw has canting also rise and fall movements actuated by totally enclosed gearing.

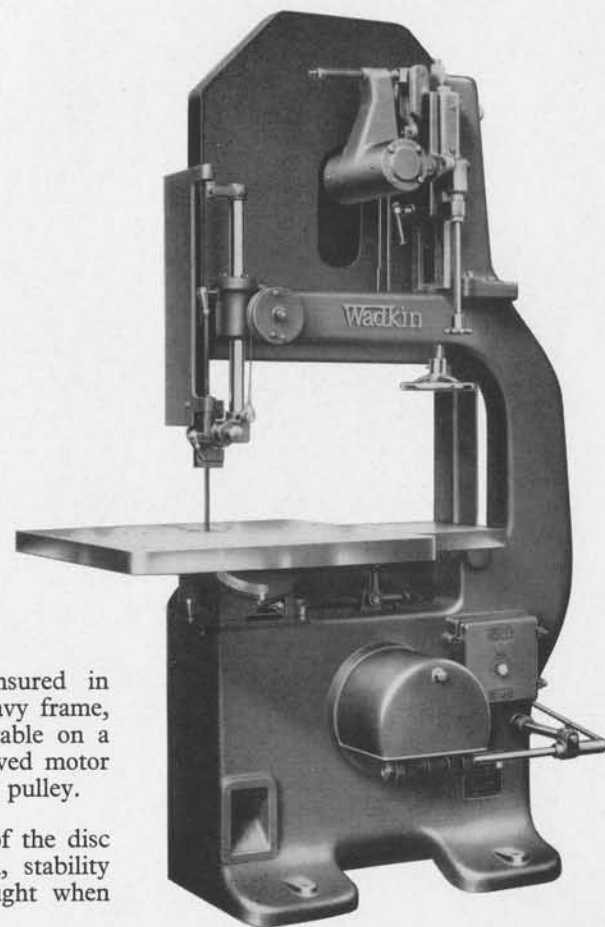
The Sliding Table moves on a patented ball slide ensuring accuracy with easy dust free operation. It is arranged to draw away 6" from the saw. Both the sliding and the fixed tables have tee slots for controlling mitre cut-off fences.

Two Precision Fences are supplied with the machine and extension tables are available.

The Saw is guarded on both sides and ample protection is given with the saw at any angle. Provision is made for efficient dust collection.

The Motor is built into the main frame driving to the spindle by short centre vee belts.

Diameter of saw	18"
Max. Saw projection	5½"
Size of table overall	44" x 51½"
Size of sliding table only	44" x 16½"
Will crosscut	29½" x 5½"
Length cut off using stops on fence	36"
Maximum distance saw and ripping fence	30"
Diameter of spindle end	1½"
Horse power of motor	5
Speed of spindle	2,800 r.p.m.
Floor space	7' 4" x 5' 0"
Net weight	19 cwt. (2100 lb.)



Absolute rigidity is ensured in these machines by a heavy frame, rigid mounting of the table on a quadrant, and an improved motor mounting close up to the pulley.

The Saw Wheels are of the disc type to ensure strength, stability and freedom from draught when running.

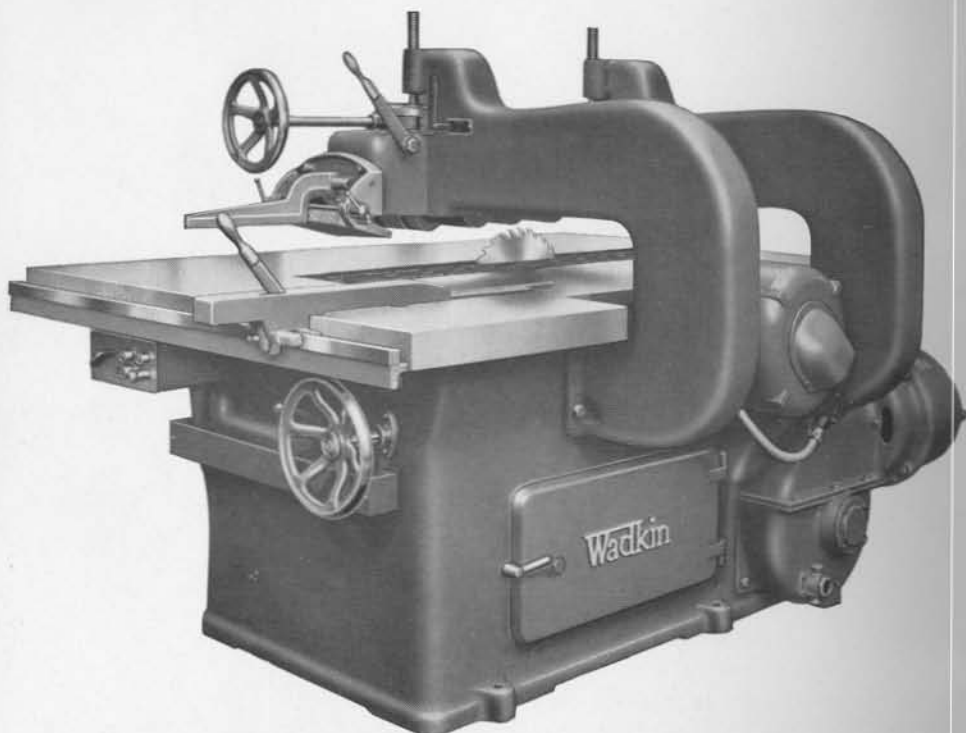
Saw Tensioning is controlled by a spring and an indicator registers the correct tension for any width of saw. Tracking device is provided.

Saw Guide above table is of the ball bearing type and counter-balanced.

Hinged metal guards give instant access to saw.

Belt driven models are also available.

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"	1½"
Max. length of saw ..	17' 0"	20' 0"
Min. length of saw ..	16' 0"	19' 0"
Max. distance between saw guide and table ..	14"	18½"
Table cants 45° to right, 5° to left		
Horse power	3	5
Floor space (electric) ..	4' 8" x 2' 10"	5' 6" x 3' 2"
Net weight	18½ cwt. (2070 lb.)	21½ cwt. (2420 lb.)



The value of this machine lies in its ability to rip stock in a dead straight line at a high rate of feed.

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 handwheel and driven by motor built directly on the saw spindle.

The Chain Feed is driven by a variable speed motor. The chain and chain bed are made of a special nickel cast iron to ensure long life. A unique system of multiple grooves in both the chain and chain bed, ensures that the chain is guided in a normal downward direction, a drive to the rolls is unnecessary. The top rollers are housed in a sturdy casting which is raised and lowered by screw motion.

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

Max. depth of cut	4"	Rates of feed in ft. per min.:	
Max. diam. of saw	17"	50 cycles ..	50, 75, 100 and 150
Saw speed, r.p.m.: 50 cycles ..	3000	60 cycles ..	60, 90, 120, 180
60 cycles ..	3600	Floor space	7' 9" x 5' 9"
Diam. of saw spindle end	2"	Horse power of saw motor ..	15
Size of table	6' 9" x 4' 11 1/2"	(18 or 25 h.p. motor can be	
Max. width of timber on right		supplied to order)	
of saw when cutting 4" deep	24"	Horse power of feed motor ..	3
Timber above 24" up to 30"		Net weight	46 cwt. (5150 lb.)
can be sawn up to	1 1/2" deep		



This machine is built on robust, modern lines. It embodies a number of refinements and advantages ensuring accurate planing with a high grade finish.

The Tables have ground finish and are fitted with steel lips. They are mounted on inclined slides and have draw out motion.

The Fence cants 45° and adjusts across the table by rack motion. Full width of the table can be used without removing the fence.

The Cutterblock is of the two-knife wedge circular type, 5" diameter, running on ball bearings and incorporates screw knife setting.

The Main Frame houses the motor and drive to the cutterblock and embodies chute for the chips.

The Drive consists of a protected squirrel cage type motor driving up to the cutterblock by endless vee belts. It is controlled by direct-on contactor built on to the machine, operated by push buttons.

Surfacing capacity	16"
Max. depth of cut	1 1/2"
Max. depth of rebate	1/2"
Length of tables*	6' 0"
Speed of cutterblock: 50 cycles	4200 r.p.m.
60 cycles	4800 r.p.m.
Horse power of driving motor	4
Floor space	6' 0" x 3' 8"
Net weight	12 1/2 cwt. (1400 lb.)

* Tables may be 7' 6" long to special order.



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

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

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.

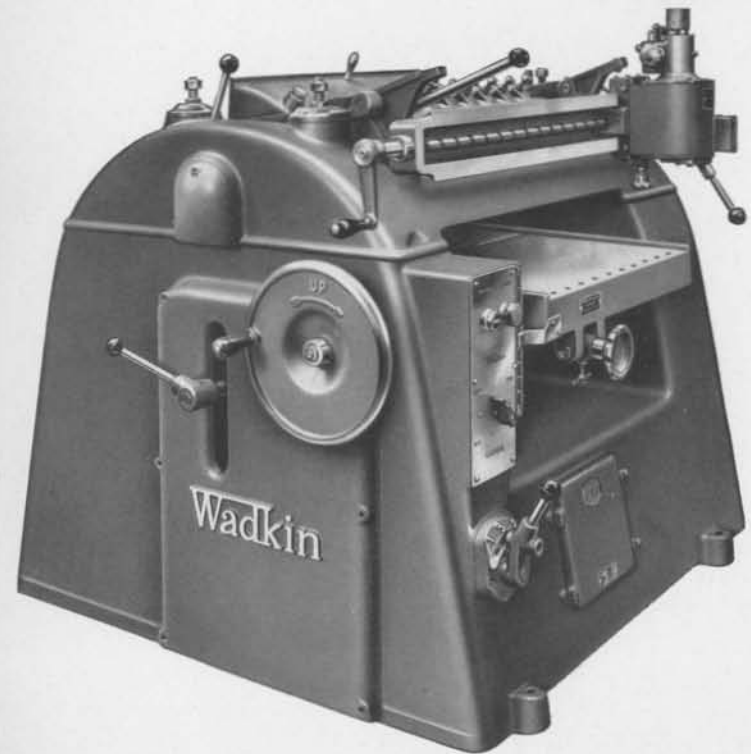
The Table is raised and lowered 10" on a single massive slide by means of screws operated by chain and handwheel. Index scale registers exact thickness being planed.

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

Power Feed Rollers are steel and of large diameter. The feeding-in roller is grooved and the feeding-out roller is plain. All bearings are provided with an oil chamber, making them self-oiling.

The Cutterblock runs at 4500 r.p.m., is square and of the lipped type, carries two knives and has a shearing cut. Moulding irons can be fitted.

Max. size of timber planed	.. .. .	24" x 10"
Speed of cutterblock	.. .. .	4500 r.p.m.
Rates of feed in feet per minute	.. .. .	25, 35, 55
Horse power of motor	.. .. .	7½
Floor space	.. .. .	5' 0" x 3' 10"
Net weight	.. .. .	20½ cwt. (2350 lb.)



This is a thoroughly modern machine embodying new labour-saving features, and designed to produce a superfine finish at fast rates of feed.

The Table rises and falls 9" on screws actuated by handwheel.

Power Feed Rollers are 4" diameter. The infeed roller is sectional. Each section is 3" wide and lifts to permit stock thickness variation of $\frac{3}{16}$ ". A plain or solid roller can be supplied in place of the sectional roller.

Table Rollers are on ball bearings and have quick vertical adjustment by handwheel.

The Cutterblock is of the four knife circular wedge type and has screw knife setting.

The Chipbreaker is mounted concentrically with the block and consists of malleable iron shoes 3" wide, independently spring loaded. The whole chipbreaker unit can be swung back, giving easy access to the cutterblock.

Built-in Mortised Grinder, Jointer and Setter. Provision is made for regrinding the four knives without removing them from the block. The same fixture is used to carry a jointing stone also a setting wheel. A locating device behind the cutterblock accurately positions the knives for the grinding operation.

The Drive to both cutterblock and feed is by one motor. Gearbox provides a range of six feed speeds from 25 to 100 feet per minute. Control is by built-in contactor gear operated by push buttons.

Max. size of timber planed	.. .. .	24" x 9"
Speed of cutterblock in r.p.m. on 50 or 60 cycles	.. .. .	4000
Diam. of cutting circle	.. .. .	5"
Diam. of feed rolls	.. .. .	4"
Rates of feed in ft. per min. : on 50 cycles	.. .. .	25, 40, 45, 60, 72, 100
.. .. . on 60 cycles	.. .. .	25, 40, 45, 60, 72, 100
Horse power of motor	.. .. .	15
Floor space	.. .. .	4' 6" x 4' 2"
Net weight	.. .. .	33 cwt. (3700 lb.)



For thickening timber on a high production basis to exacting limits both for accuracy and finish.

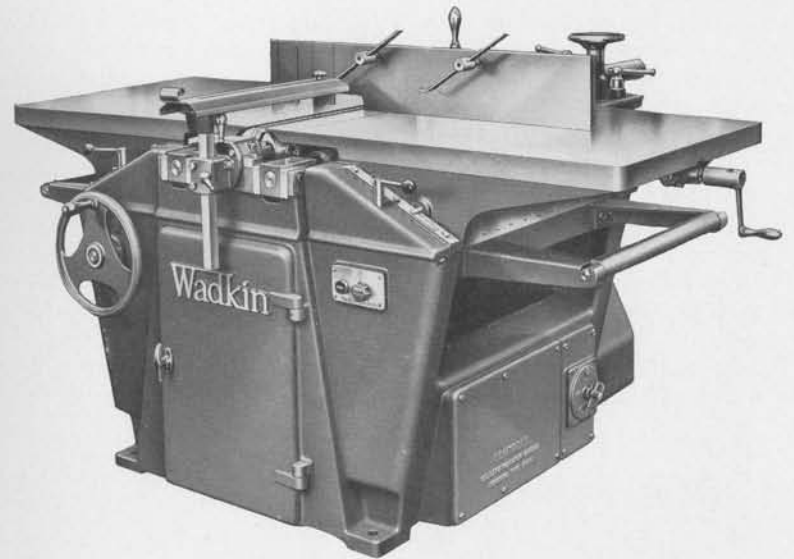
Table rises and falls 9" in a single massive slide with powerful locks on both sides. It embodies driven feed rollers with rise and fall movement also outboard roller. Power rise and fall can be fitted as an optional extra.

The Feed Rolls are all power driven. The top infeed roller is sectional. The drive is through cone vee pulleys to a three speed ball bearing gearbox and through constant mesh fixed centre gears and heavy roller chain. All shafts are in ball or needle roller bearings.

Cutterblock is of the four-knife safety circular wedge type. Built-in cuttergrinder and jointer is provided. The chipbreaker is sectional and radial in operation. The outfeed pressure bar incorporates a rapid adjustment with click stop setting to compensate for cuttergrinding in the block.

Electric Drive is from one motor built into the machine. It carries a vee pulley for driving the cutterblock and an auxiliary cone for driving the gearbox.

Planing and thickening capacity	.. ..	30" x 9"
Speed of cutterblock	.. ..	4000 r.p.m.
Diameter of cutting circle	.. ..	5½"
Diameter top feed rolls	.. ..	5"
Diameter bottom feed rolls	.. ..	4"
Feed in feet per min.	.. ..	20, 35, 45, 50, 75, 100
Horse power of motor	.. ..	15
Net weight	.. ..	38 cwt. (4260 lb.)



This machine represents a big advance on previous machines of this type, and it is unsurpassed for accurate and efficient planing and thickening of all kinds of hard or soft timber. It is designed on unusually robust lines to provide the necessary stability on which the production of high grade work so largely depends.

The Surfacing Tables are long and ground dead true. They have horizontal draw-out motion for access to cutterblock and are fitted with steel lip plates.

The Cutterblock is 5" diameter and runs at 4,500 r.p.m. The two knives give a shearing cut and have a fine screw setting device. Moulding irons can be used.

The Power Feed Rollers are on oil retaining bronze bearings and the three feed rates of 25, 35 and 55 feet per minute are selected by hand lever in front of the machine. The ball bearing mounted table rolls have simultaneous handwheel adjustment.

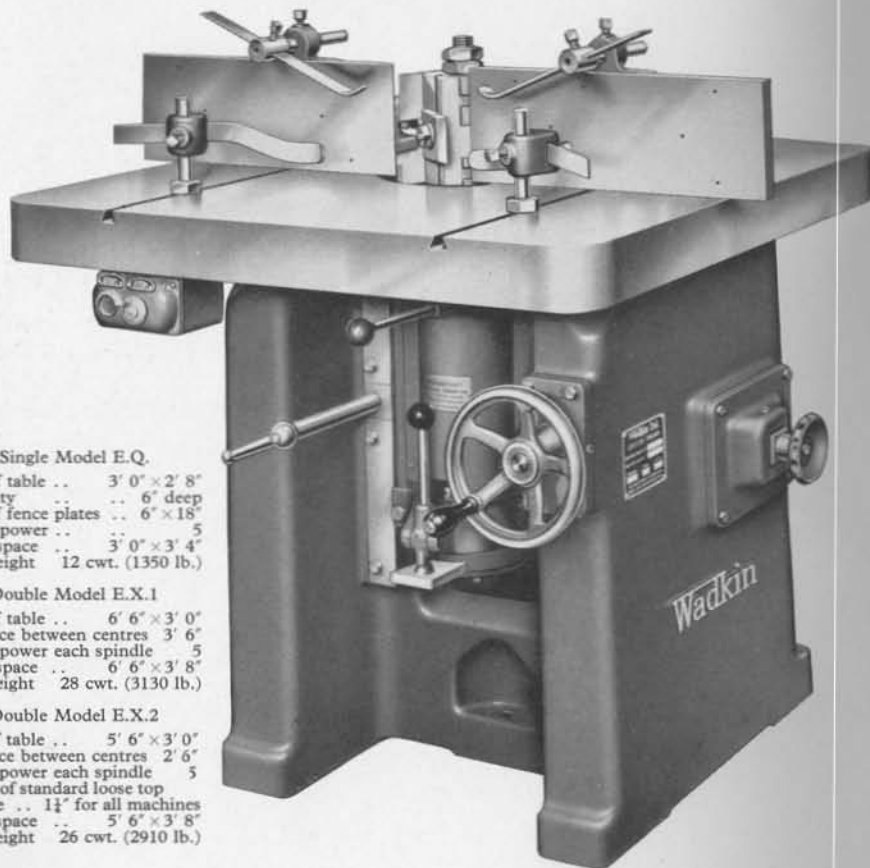
	18" Model	24" Model
Thickening capacity	.. .. 18" x 9"	.. .. 24" x 9"
Surfacing capacity	.. .. 20"	.. .. 26"
Max. depth of cut	.. .. ¾"	.. .. ¾"
Length of surfacing tables	.. .. 6' 1"	.. .. 6' 1"
Length between carrier rolls in thickening table	.. .. 5' 5½"	.. .. 5' 5½"
Cutting circle of cutterblock	.. .. 5"	.. .. 5"
Speed of cutterblock	.. .. 4500 r.p.m.	.. .. 4500 r.p.m.
Rates of feed in feet per minute	.. .. 25, 35, 55	.. .. 25, 35, 55
Horse power of motor	.. .. 5	.. .. 7½
Floor space	.. .. 6' 1" x 4' 3"	.. .. 6' 1" x 4' 9"
Net weight	.. .. 24 cwt. (2690 lb.)	.. .. 29 cwt. (3250 lb.)

These machines are designed as single or double types. They are entirely self contained, and arranged for speeds up to 9,000 r.p.m. without frequency changer. Both single and double machines are identical in design except for the duplication of the details in the case of the double type.

The Spindle runs in heavy precision ball bearings lubricated by patented oil mist system. It is provided with locking device and brake. The spindle has a rise and fall movement of 6".

The Drive to the spindle is by flat endless belt from a motor carried on the rear of the machine. Standard speeds are 4,500 and 6,000 r.p.m. on 50 cycles, but alternative speeds of 6,000 and 9,000 r.p.m. are available. The machines are also offered with four speeds, ranging from 2,250 to 6,000 r.p.m. or from 3,000 to 9,000 r.p.m.

Note: To special order the machine can be supplied with a spindle unit designed to run at a speed of 15,000 r.p.m.



Single Model E.Q.

Size of table .. 3' 0" x 2' 8"
Capacity .. 3" 6" deep
Size of fence plates .. 6" x 18"
Horse power .. 5
Floor space .. 3' 0" x 3' 4"
Net weight 12 cwt. (1350 lb.)

Double Model E.X.1

Size of table .. 6' 6" x 3' 0"
Distance between centres 3' 6"
Horse power each spindle 5
Floor space .. 6' 6" x 3' 8"
Net weight 28 cwt. (3130 lb.)

Double Model E.X.2

Size of table .. 5' 6" x 3' 0"
Distance between centres 2' 6"
Horse power each spindle 5
Diam. of standard loose top piece .. 1 1/4" for all machines
Floor space .. 5' 6" x 3' 8"
Net weight 26 cwt. (2910 lb.)

This machine has an exceptionally wide scope of working, including recessing, panel raising and sinking, fretwork, fluting, veining, etc. In addition to wood it has a useful application on plastics and other synthetic materials, also for non-ferrous metals.

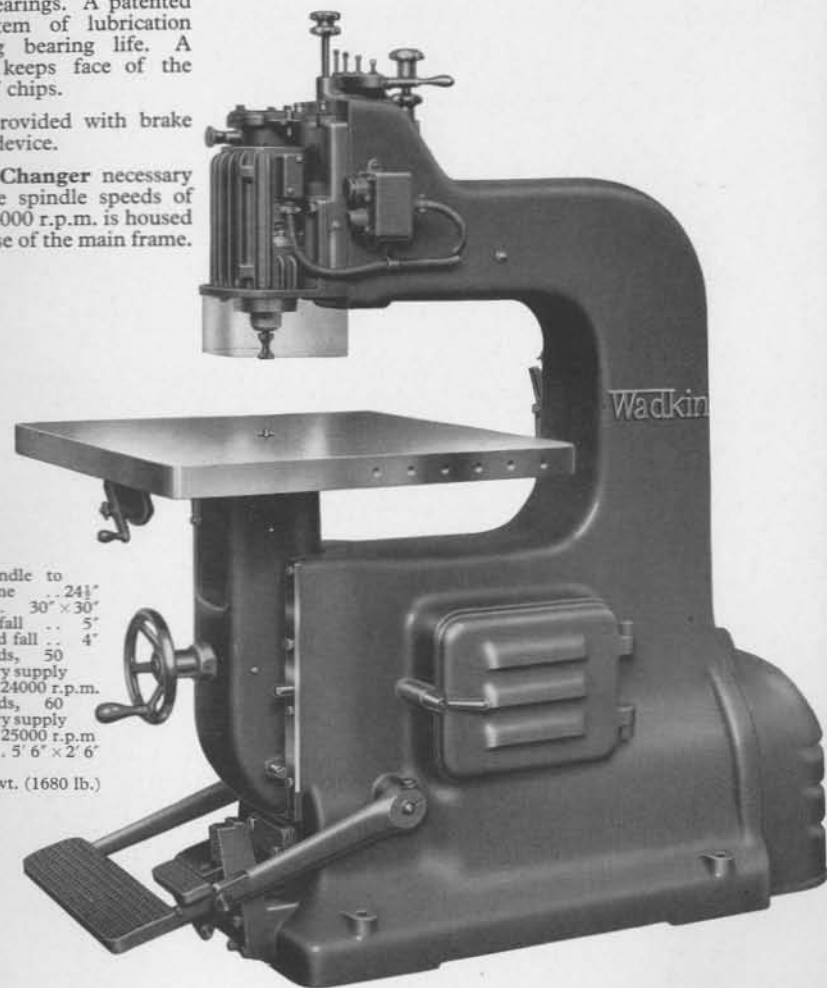
Cutter Spindle Head has a motor directly on the cutting spindle. It has a vertical movement of 4" in vee slides operated by foot lever. Stops are provided to limit the depth of the cut.

Table rises and falls and former pin is arranged to disappear below the table by lever motion. Table has a removable plate for moulding.

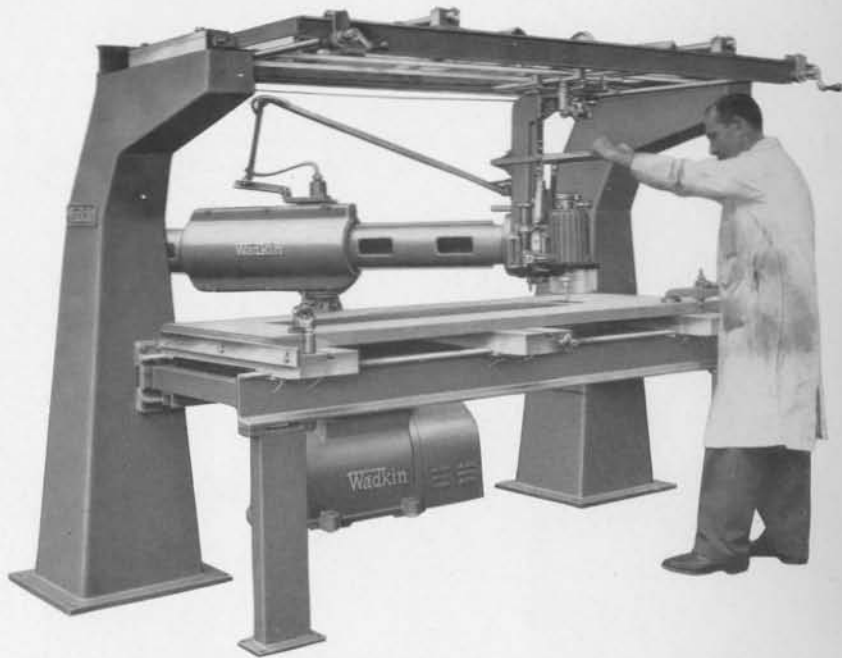
Cutter Spindle is of heat-treated nickel chrome steel, and runs on special precision high speed ball bearings. A patented oil-mist system of lubrication ensures long bearing life. A built-in fan keeps face of the work clear of chips.

Spindle is provided with brake and locking device.

Frequency Changer necessary to obtain the spindle speeds of 18000 and 24000 r.p.m. is housed inside the base of the main frame.



Centre of spindle to
inside of frame .. 24 1/2"
Size of table .. 30" x 30"
Table rise and fall .. 5"
Spindle rise and fall .. 4"
Spindle speeds, 50
cycles primary supply
18000 and 24000 r.p.m.
Spindle speeds, 60
cycles primary supply
18000 and 25000 r.p.m.
Floor space .. 5' 6" x 2' 6"
Net weight
15 cwt. (1680 lb.)



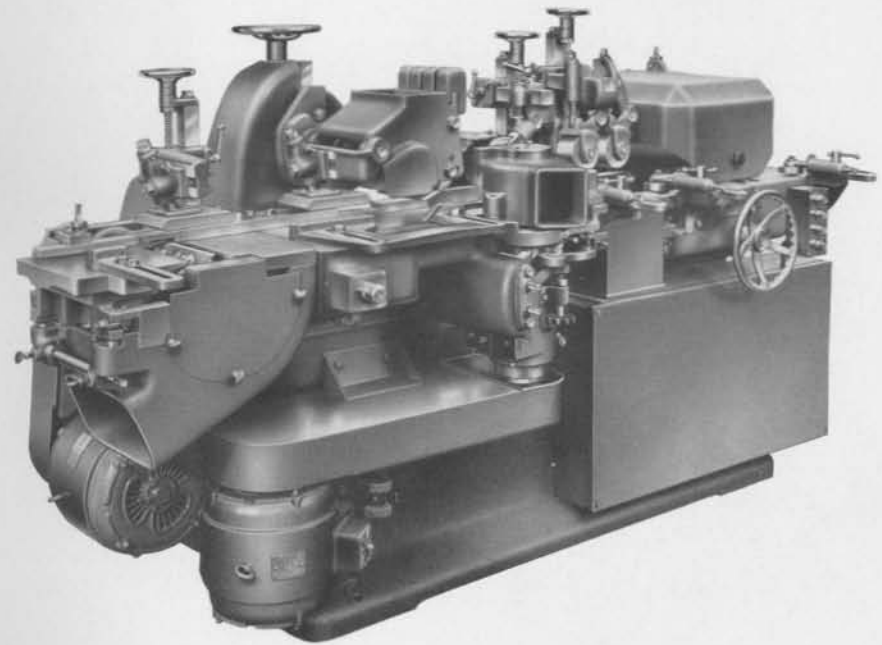
This machine has been specially designed for cutting out window and letter box openings in flush doors, panel raising or recessing coffin sides, stair stringing and for special jobs such as grooving and housing cooling tower units. The principle of operation is based on a high-speed router head being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

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 and template are supported by massive fabricated cantilever columns tied by steel channels. Alternative table arrangements can be offered and consist of a wooden table mounted on two channels or 8" wide cast iron tables sliding along the channels on machined faces and capable of being locked at any point. Normally three such units would be required. One unit can be supplied with a two station former pin so that the machine can be used as a fixed head router.

Maximum radius of arm	59"	Speed of head	18000 and 24000 r.p.m.
Minimum radius of arm	20"	Size of table	7' 6½" x 3' 0½"
Horse power of head	2/8½ h.p.	Net weight	34 cwt. (3808 lb.)



This inexpensive, general purpose moulder gives production and finish at an economic cost. It has the features and operating advantages to ensure the quick set-ups—convenient change-overs—low running costs and minimum maintenance, which add up to economic moulder operation. It is fitted with individually motorised heads running at 5,000 r.p.m.

The machines are supplied with heads arranged as follows:—

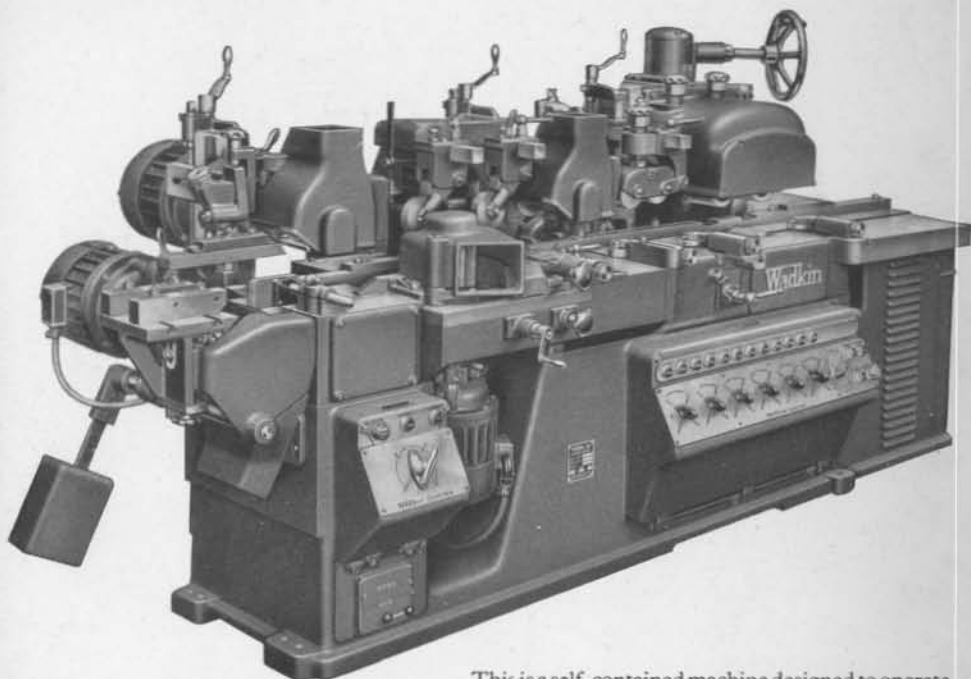
- A.G.C.71. 4 heads. Bottom, fence side, near side, top.
- A.G.C.72. 5 heads. Bottom, fence side, near side, top, bottom.
- A.G.C.75. 5 heads. Bottom, top, fence side, near side, top.
- A.G.C.76. 6 heads. Bottom, top, fence side, near side, top, bottom.

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. The infeed top roller is grooved spirally whilst the other rollers are of the plain type.

Cutterheads. The drive to each head is by means of multiple vee ropes with the spindles revolving at 5,000 r.p.m. The spindles are 1 1/8" diameter. A vertical throating head at the outfeed end of the machine can be supplied to special order.

Capacity	7" x 4"
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	5 h.p.
Height from floor to table	3' 0"
Approximate net weight (4 head machine)	52 cwt. (5820 lb.)



This is a self-contained machine designed to operate on a high frequency supply, giving high spindle speeds with good rates of feed on single knife finish.

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.

Alternatively the machine can be supplied as Type F.J. with 4 heads arranged in this order:—
Top head, fence side head, near side head, bottom head.

Feed is by four rollers. Feed drive is by four speed motor. All gears and chain run in totally enclosed oil baths.

Cutterheads. Totally enclosed, fan cooled motors are mounted direct on the cutter spindles. All spindles are of the same diameter so that all cutter equipment is interchangeable on all heads. All spindles have rise and fall and horizontal adjustments.

Radial Chipbreakers are fitted to top and near side heads giving contact close up to the cutters.

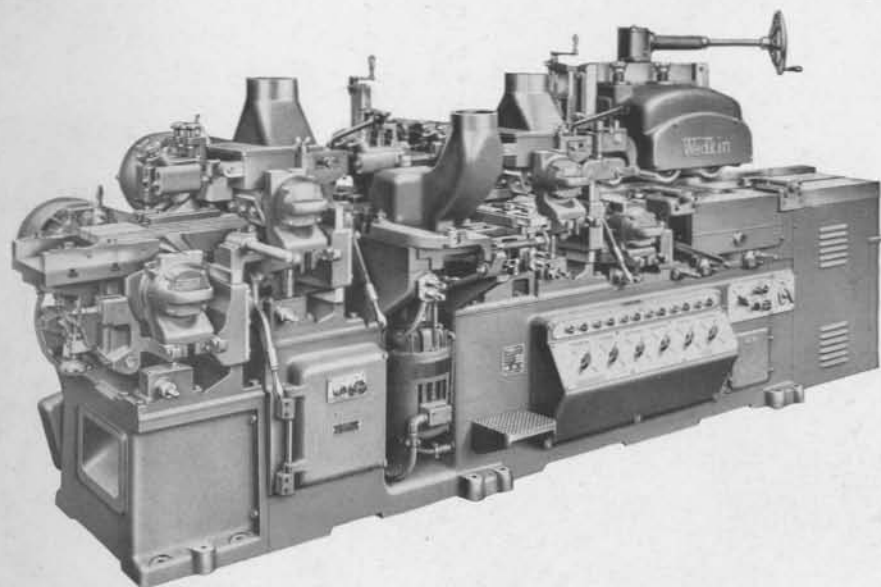
One Piece Bed. The feed works and cutterheads are all mounted on a one-piece bed for alignment and rigidity. Telescopic mounting of bed plates adjacent to side heads gives an unbroken bed on all widths of stock.

The machine is supplied with frequency changer which is mounted on the end of the bed below the feed-in table.

Max. size of finished work	.. .. .	4" x 4"
Horse power of spindle motors	.. .. .	6
Spindle speeds in r.p.m.	.. .. .	7500*
Diam. of spindle ends	.. .. .	1 1/2"
Horse power of feed motor	.. .. .	1 1/2, 2 1/2, 3, 4 1/2
Feed speeds	.. .. .	30 to 120 ft. per min.
Length of blocks	.. .. .	41"
Min. cutting circle	.. .. .	5 1/2" diam.

Max. cutting circle:	.. .. .	6 1/2" diam.
First bottom block	.. .. .	8" diam.
All other heads	.. .. .	6"
Diam. of feed rolls	.. .. .	8"
Centre of feed rolls	.. .. .	9' 3" x 3' 6"
Floor space, 4 heads (F.D.41)	.. .. .	66 cwt. (7400 lb.)
Net weight, 4 heads (F.D.41)	.. .. .	66 cwt. (7400 lb.)

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



This is a self-contained all electric general purpose machine capable of producing high grade moulding. It is designed with cutterheads as follows:—

- 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.

Feed is by four rollers. Gear and chain drive run in totally enclosed oil baths.

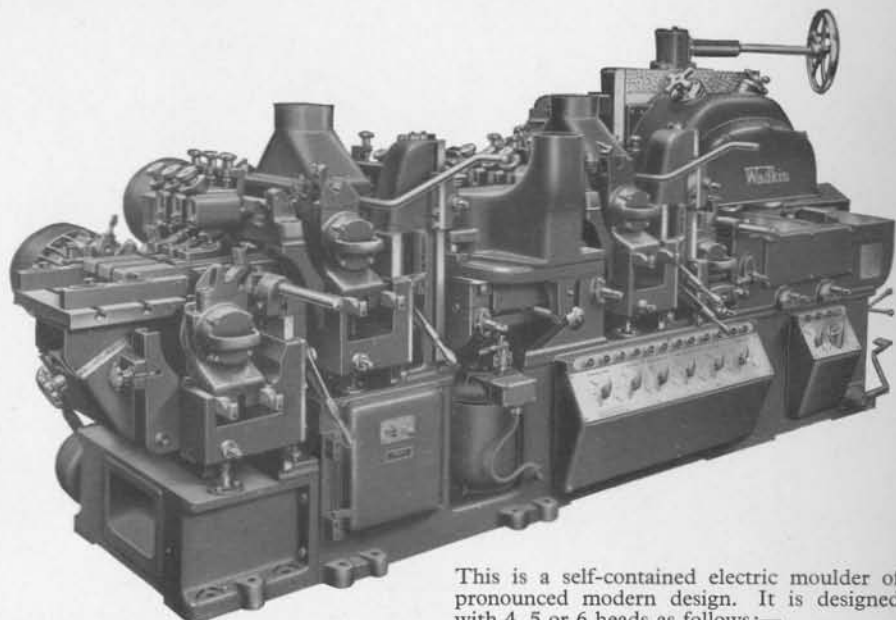
Cutterheads. Totally enclosed fan cooled motors are built directly on to all spindles. Spindles are all of the same diameter. Hinged outboard bearings are fitted to top and bottom heads. All heads have rise and fall, also horizontal adjustments.

Pressures and Chipbreakers. Efficient and easily adjustable pressures and chipbreakers are fitted. In the case of first top head and near side head the chipbreakers are of the radial type.

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. The machine is supplied with frequency changer which is mounted on the end of the bed below the feed-in table.

Max. size of finished work	.. .. .	8" x 4"
Spindle motors	.. .. .	10/7 1/2 h.p., 6000/4500
Spindle speeds on: 50 cycles	.. .. .	4500 and 6000 r.p.m.
60 cycles	.. .. .	4800 and 6000 r.p.m.
Diam. of spindle ends	.. .. .	1 1/2"
(2 1/2" diameter spindle ends can be supplied to special order)	.. .. .
Horse power of feed motor	.. .. .	7 1/2
Feeds	.. .. .	18 to 150 feet per min.
(Alternative range up to 200 f.p.m. available)	.. .. .
Length of cutterblocks:	.. .. .
Top and bottom	.. .. .	8 1/2"

Side	.. .. .	4 1/2"
Min. cutting circle, all heads	.. .. .	6 1/2" diam.
Max. cutting circle:	.. .. .
First bottom head	.. .. .	7 1/2" diam.
Top heads	.. .. .	10 1/2" diam.
Side heads	.. .. .	8 1/2" diam.
Optional second bottom head	.. .. .	10 1/2" diam.
Side heads cant	.. .. .	45° inwards
	.. .. .	15° outwards
Diam. of feed rolls	.. .. .	8"
Floor space, 5 head	.. .. .	14' 0" x 4' 9"
Net weight, 5 head	.. .. .	30 cwt. (14500 lb.)



This is a self-contained electric moulder of pronounced modern design. It is designed with 4, 5 or 6 heads as follows:—

- F.D.121. 4 heads. Bottom, fence side, near side and top.
- F.D.122. 5 heads. Bottom, fence side, near side, top and bottom.
- F.D.123. 5 heads. Bottom, fence side, near side, two 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.

Feed is by four rollers ball bearing mounted and driven by chain. Provision is made for pitching the rolls.

Cutterheads. Totally enclosed fan-cooled motors are built directly on to all spindles. All horizontal units have four bearings including an outboard bearing. Side heads have three bearings. All spindles are the same diameter. Blocks are withdrawable and interchangeable. All spindles have patented oil mist lubrication.

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 heads.

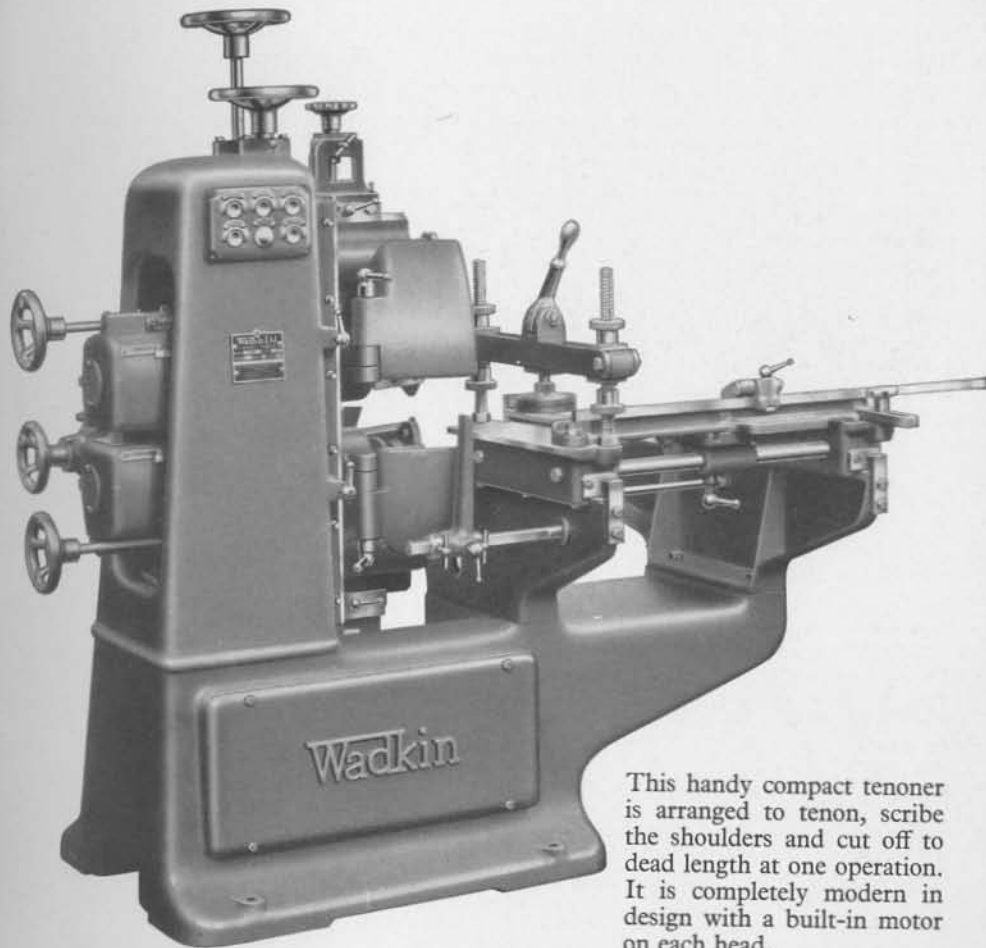
One Piece Bed. All feed works and cutterheads are mounted on a one piece bed with telescopic mounting of bed plates adjacent to side heads.

Jointing. All machines are sent out arranged for jointing.

Exhaust hoods are supplied with the machine.

Max. size of finished work	12" x 6"
Spindle motors:	
Top heads	25/20 h.p., 6000/4500
Bottom heads	15/12 h.p., 6000/4500
Side	10/7½ h.p., 6000/4500
Spindle speeds on: 50 cycles	4500 and 6000 r.p.m.
60 cycles	4800 and 6000 r.p.m.
Diam. of spindle ends	1 1/8"
(2 1/2" diameter spindle ends can be supplied to special order)	
Horse power of feed motor	10
Feed speeds	18 to 150 feet per min.
(Alternative range up to 200 f.p.m. available)	

Diam. of feed rolls	10"
Length of cutterblocks:	
Top and bottom	12 1/2"
Side heads	6 1/2"
Min. cutting circle	6 1/2" diam.
Max. cutting circle:	
First bottom head	7 1/2" diam.
Top heads	10 1/2" diam.
Side heads	9" diam.
Optional second bottom head	10 1/2" diam.
Frequency changer	47 KVA
Floor space, 5 head	12' 6" x 5' 0"
Net weight, 5 head	155 cwt. (17350 lb.)



This handy compact tenoner is arranged to tenon, scribe the shoulders and cut off to dead length at one operation. It is completely modern in design with a built-in motor on each head.

Horizontal Headstocks are adjustable vertically. Horizontal adjustment is also provided.

Vertical Scribing Spindles are each attached to the main headstock slides and are adjustable with them. In addition they have independent vertical and horizontal adjustment.

Cut-off Saw is mounted behind the cutterblocks. **Table** is mounted on ball bearing rollers, for easy movement.

Fence can be swivelled, and is provided with stops. A combined end and shoulder stop is included.

Will admit timber up to	14" x 4 1/2"
Will cut tenons at one operation	4 1/2" long
Top cutterhead will rise above table	4 1/2"
Size of table	2' 6" x 1' 4"
Diam. of spindle ends for tenon and scribe heads	1 1/2"
Diam. of spindle end for cut-off saw	1"
Speed of all motors, r.p.m.:	
50 cycles	3000
60 cycles	3600
H.P. of motors for tenoning and scribe heads	2
H.P. of motor for saw	1 1/2
Floor space	5' 0" x 4' 9"
Net weight	20 1/2 cwt. (2300 lb.)

This machine will tenon, scribe the shoulders and cut off to length at one operation. It will make tenons with unequal shoulders, angle tenons, and double tenons.

The Main Frame is of the swan neck type.

The Tenoning Heads are both arranged with a totally enclosed motor built in. The heads are independently adjustable vertically and horizontally. Hinged guards and brakes are provided.

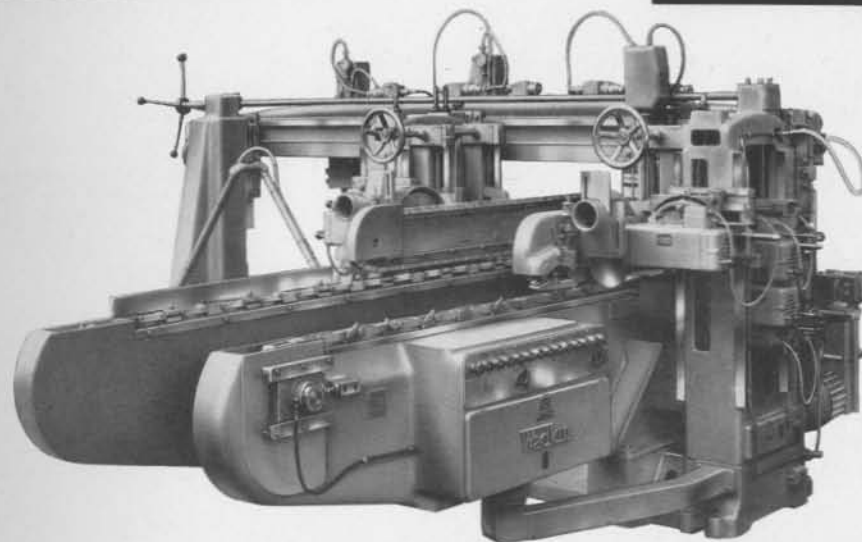
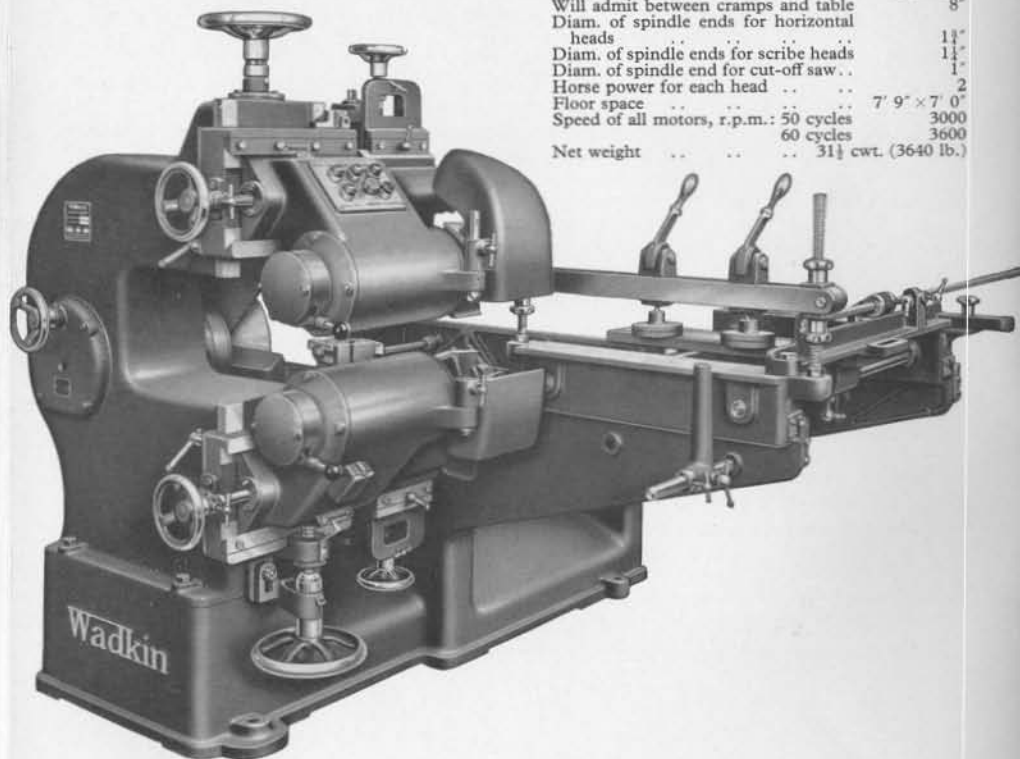
Vertical Scribing Spindles are attached to the main headstocks and adjust with them. Independent vertical and horizontal adjustments are also provided. A separate motor is built into each head.

Cut-off Saw is mounted direct on a motor spindle, housed in the main frame at the rear of the heads.

Table is mounted on ball bearing rollers and provided with fence. It is also fitted with a spring stop, across its full width, for loading narrow stuff. An adjustable dead stop, also two adjustable quick acting lever cramps, are provided.

Trenching or grooving may be done up to 24" wide and any width of groove up to 4" at one operation. Cross cutting may be most efficiently performed up to 24" wide and 2½" deep.

Will admit timber up to	24" x 6"
Will cut tenons at one operation	6" long
Will trench or groove	24" wide
Will cross cut up to	24" x 2½"
Will admit between cramps and table	8"
Diam. of spindle ends for horizontal heads	1½"
Diam. of spindle ends for scribe heads	1"
Diam. of spindle end for cut-off saw	1"
Horse power for each head	2
Floor space	7' 9" x 7' 0"
Speed of all motors, r.p.m.: 50 cycles	3000
60 cycles	3600
Net weight	31½ cwt. (3640 lb.)



Type W.O. is a Double End Tenoner and is offered basically with top and bottom tenon heads. Top and bottom scribing or cope heads are offered as optional extras. Other available extras include under gaining, top gaining, jump dado, relishing and profiling heads, panel slitting etc.

Type W.G. is a Double Cut-off Saw and is offered basically with two 14" cut-off saw units only. Top and bottom scribing units can be supplied to order.

All Heads embody 4 h.p. totally enclosed motor built directly on to the spindles. Each head has a full range of adjustments and is arranged to cant. Hand brakes are provided on each spindle.

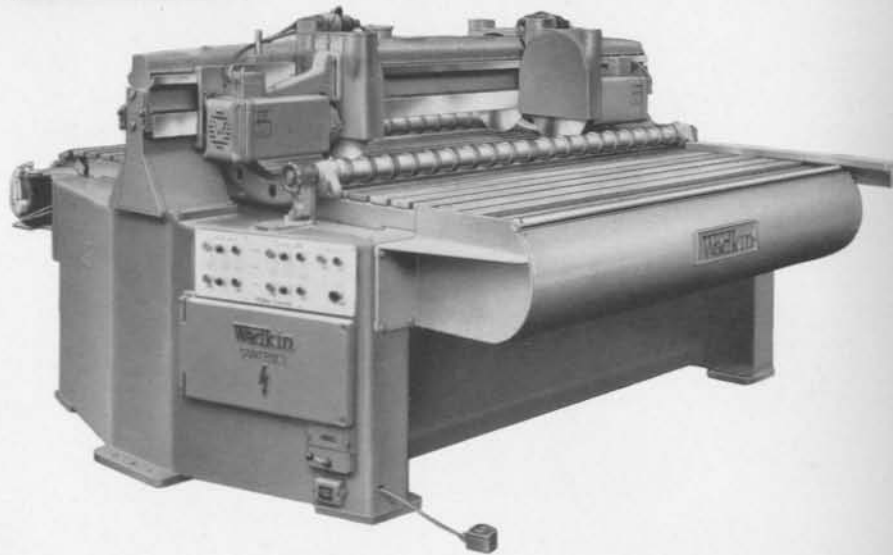
Automatic Feed Chains are mounted on inverted V section bronze rails attached to the beams. The work rests on the moving chain, not on the stationary chainways. Chains have automatic pump lubrication. Provision is made for setting one chain in relation to the other to ensure parallel feeding.

The Feed Drive is from 1½ h.p. motor giving four rates of feed by means of stepped cone pulleys.

Control Gear is of the automatic contactor type operated by push buttons.

Dust Extraction Equipment can be supplied complete with machine.

Max. section of material admitted	30" x 3"
To special order will take material of max. section	42" x 3"
* Max. length of material that will pass between headstocks	7' 9"
* Max. distance over chain track	6' 5½"
* Max. distance between shoulders of tenons	6' 6"
* Max. distance between saws	between 6' 6" and 7' 8"†
†(Max. distance permissible is dependent on the thickness of stock allowing for the necessary overhang from the chain.)	
* Longer beds can be supplied to special order, giving either an extra 2' 0" or an extra 5' 6" to these capacities.	
Min. distance between shoulders of tenons	6½"
Max. length of tenons	4½"
50 cycle supply	
60 cycle supply	
Rates of feed in feet per minute	11, 17, 27 and 40
Horse power and speed all heads	4 h.p., 3000 r.p.m., 5 h.p., 3600 r.p.m.
Horse power feed motor	1½ h.p., 1000 r.p.m., 1½ h.p., 1200 r.p.m.
Horse power traverse motor	1 h.p., 1500 r.p.m., 1 h.p., 1800 r.p.m.
Floor space	13' 0" x 12' 0"
Net weight, type W.O.	120 cwt. (13450 lb.)



The machine is offered in three basic sizes: 4' 0", 6' 0" and 8' 0", and in its simplest form has two saws mounted on an overhead beam for widthing to size. Where more than a simple widthing operation is required, the machine would be fitted with additional saws, as illustrated. On a machine for boards up to 4' 0" wide the beam could carry up to four saw units. For boards 6' 0" wide, up to six units, and for boards 8' 0" wide, a normal maximum of eight saw units can be supplied. Two machines of this type can be set at right angles to each other to enable multiple cuts to be made down the length of the board and subsequently across the resultant panels to produce smaller panels accurately trimmed to size on all four sides.

The Lag Bed. The moving lag bed consists of wooden slats bolted to continuous precision roller chains. The driving sprockets are keyed to a 3" diameter shaft. A fence or sighting line is provided to enable sheet to be positioned correctly.

The Saw Units. 7½ h.p. rotor and stator units are mounted direct on the saw spindles. Saws are set for width of strip by adjusting the units along the beam. Vertical adjustment is provided for each unit to allow saws not in use to be raised out of cut.

Pressures. Of the two long roller pressures, spanning the complete width of the machine, the first is held down on to the sheet by pneumatic cylinders which also lift it to allow entry of next sheet. The second pressure is spring-loaded down. Independent multiple pressures carried from the overhead beam can be fitted to enable small panels to be sawn.

Squaring Device. A special hold-back gate mounted on each of the outer multiple pressures enables accurate squaring of panels to be carried out. The panel is pushed against the gate and squared, and in this position is then beneath the raised infeed pressure roller. The operation of a foot pedal instantaneously and simultaneously depresses the pressure roller and raises the gate, thus giving traction to the panel and also maintaining its squareness.

Maximum width of sheet	.. .. .	4' 0"	6' 0"	8' 0"
Maximum thickness	.. .. .	2"	2"	2"
Diameter of saws	.. .. .	12"	12"	12"
Speed of saws in r.p.m.	.. .. .	3,000	3,000	3,000
Horse power of saw motors	.. .. .	7½	7½	7½
Maximum number of saw units	.. .. .	2 each side of beam	3 each side of beam	4 each side of beam
Height of lag bed from floor	.. .. .	3' 1½"	3' 1½"	3' 1½"
Feed speeds in feet per minute	.. .. .	30 & 60	30 & 60	30 & 60
H.P. of two-speed feed motor	.. .. .	2	2	2
Overall length of machine	.. .. .	9' 10"	9' 10"	9' 10"
Overall width of machine	.. .. .	7' 6½"	9' 6½"	11' 6½"
Overall height of machine	.. .. .	5' 0"	5' 0"	5' 0"
Approximate net weight	.. .. .	60 cwt. (6720 lb.)	70 cwt. (7840 lb.)	80 cwt. (8960 lb.)

This machine is designed to take either mortise chain gear, or square hollow chisel. It is a strong serviceable type of machine, comparatively inexpensive in first cost and a particularly economical machine in running and maintenance cost.

The Table is provided with a cross traverse operated by handwheel and screw, and with longitudinal movement by machine cut steel rack and pinion. Quick acting clamp is provided, and arranged so that the tendency is always to press the timber downwards on to the surface of the table.

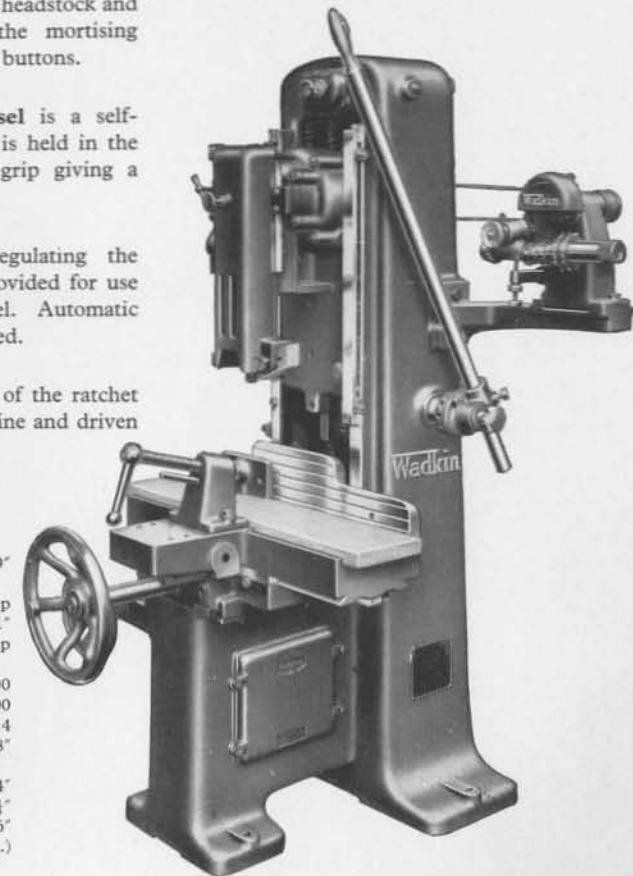
The Headstock, carrying either chain or chisel, slides in wide machined slideways. It is operated by right-hand lever by rack and pinion. Lever is adjustable to suit every class of work. The headstock embodies a chipbreaker and built-in fan to remove chips.

The Motor is built into the headstock and mounted directly on to the mortising spindle. Control is by push buttons.

The Square Hollow Chisel is a self-contained unit. The chisel is held in the head by a powerful split grip giving a positive and rigid hold.

Adjustable Stops for regulating the depth of the mortise are provided for use with both chain and chisel. Automatic Stop Attachment can be fitted.

A Chain Cutter Grinder of the ratchet type is built on to the machine and driven from the headstock motor.



Will take timber up to	.. .. .	11" x 9"
Max. size of mortise using chain	.. .. .	1½" x 3" x 6" deep
Max. size of chisel	.. .. .	1"
Will bore up to	.. .. .	1" x 5½" deep
Speed of motor, r.p.m.	.. .. .
50 cycles	.. .. .	3000
60 cycles	.. .. .	3600
Horse power	.. .. .	4
Size of table	.. .. .	27" x 8"
Longitudinal motion of table	.. .. .	24"
Transverse motion of table	.. .. .	4½"
Floor space	.. .. .	4' 3" x 3' 6"
Net weight	.. .. .	11½ cwt. (1300 lb.)

The Table has longitudinal, transverse and rise and fall movements, operated by handwheels. Provision is made to take an automatic setting-out attachment.

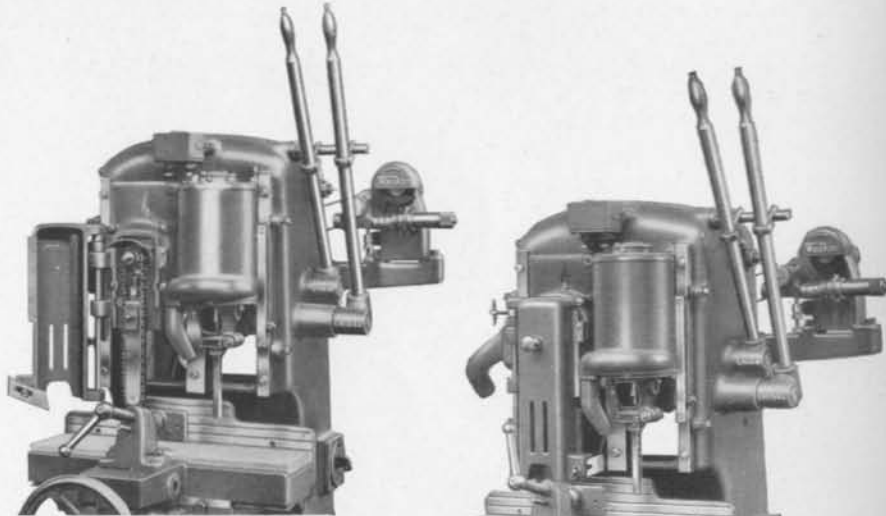
The Chain Headstock has built in motor and is operated by hand lever. The chain can be set either dead in line with the chisel, or out of line for making offset mortises. An exhaust fan and adjustable chipbreaker are fitted.

The Hollow Chisel Headstock has the motor built in. It incorporates a blower for keeping the face of the work clear of chips.

Adjustable Depth Stops are provided on both chain and chisel headstocks.

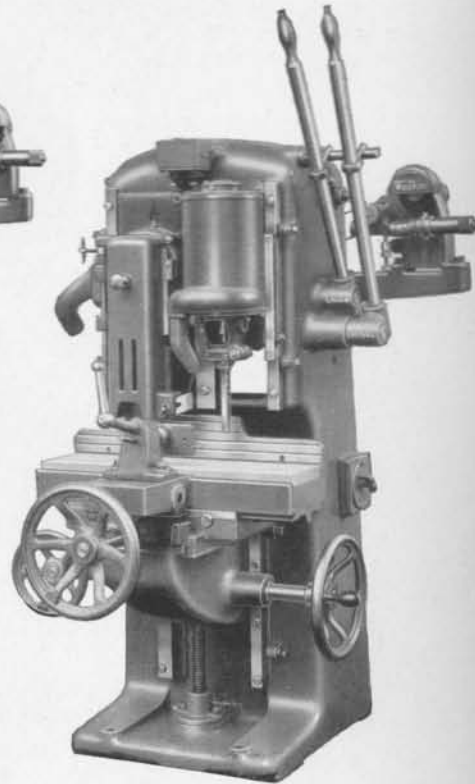
The Control Gear is so arranged that the motors are automatically controlled by the main hand levers. A cut-out switch is provided for completely isolating the motors when necessary.

A Ratchet Type Chain Grinder is self-contained with the machine.



Both chain and chisel headstocks are mounted side by side in the main frame. Guard is swung open to show chain.

Will take timber up to	12' x 9' wide
Max. size of mortise using chain, at one stroke	1 1/4' x 3" x 6" deep
Max. size of chisel	1"
Speed of each motor, r.p.m.:	
50 cycles	3000
60 cycles	3600
Horse power of chain motor	4
Horse power of chisel motor	2
Floor space with max. movements	4' 3" x 3' 6"
Net weight	13 1/2 cwt. (1500 lb.)



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.

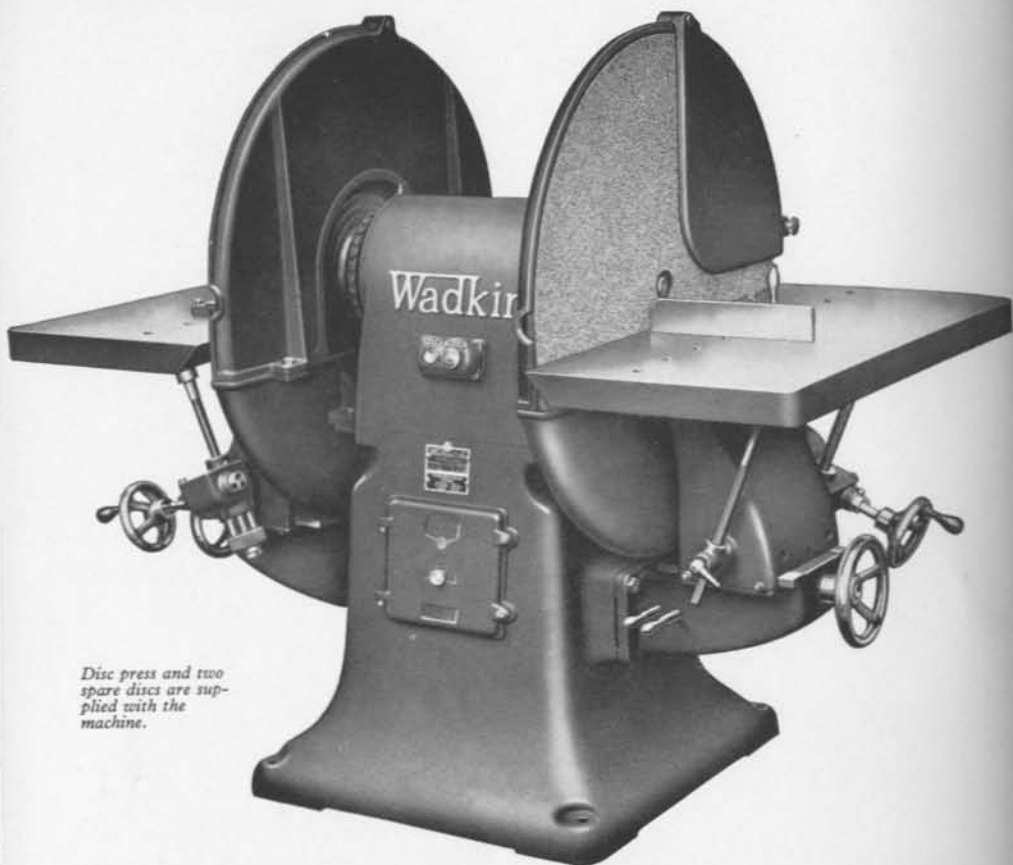
The Disc Spindle forms the shaft of an electric motor built into the head of the machine. **The Disc Work Table** cants 45° below and 10° above horizontal. Table is grooved to receive a graduated fence.

The Bobbin is driven by a motor built on to the vertical spindle. It has reciprocating motion to ensure a smooth finish, and is adjustable in height. All gearing is totally enclosed. The bobbin is of metal, with a unique method of locking, which both stretches and holds the paper.

The Bobbin Table cants 30° below and 10° above horizontal.

Dust Hoods are provided to both disc and bobbin, and a disc press and two spare discs to facilitate renewing of the abrasive paper. An efficient self-contained dust collecting system can be fitted to order.

Diam. of disc	30"	Speed of bobbin in r.p.m.: 50 cycles	3000
Size of bobbin	3 1/2" diam., 9 1/4" long	60 cycles	3600
Max depth of material sanded with bobbin	8"	Diam. of bobbin spindle	1 1/4"
Size of disc table	2' 10" x 1' 5"	Horse power, disc motor	4
Size of bobbin table	2' 2" x 2' 1 1/2"	Horse power, bobbin motor	1 1/2
Speed of disc in r.p.m.	900	Floor space	5' 6" x 2' 10"
		Net weight	18 1/2 cwt. (2000 lb.)



Disc press and two spare discs are supplied with the machine.

An invaluable type of Sanding machine for any woodworking shop where smooth and perfectly square or bevelled faces are required.

The Disc Spindle 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.

The Work Tables cant 45° below and 10° above horizontal. Canting movement is by screw motion. 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.

Diam. of discs	30"
Speed of discs in r.p.m.:	900
Size of tables	2' 10" x 1' 5"
Floor space	2' 10" x 5' 4"
Horse power	5
Net weight	16 cwt. (1800 lb.)



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.

The Table is counterbalanced for ease of movement and rises and falls by means of hand-wheel. 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. The machine can be supplied, as an extra, with a power operated rise and fall table motion.

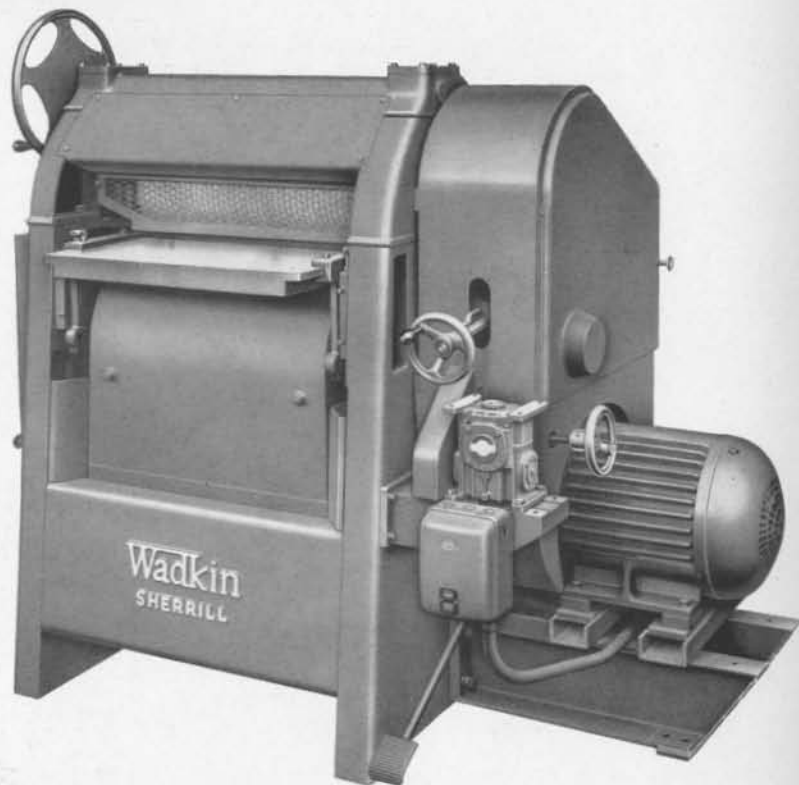
The Endless Travelling Bed consists of an endless serrated rubber band which gives resilience and grip under all operational conditions.

The Sanding Drums are dynamically balanced with the sandpaper spirally mounted having spring loaded automatic "take-up" to compensate for stretching conditions. 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.

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.

Sanding capacity of machine	42" Machine	52" Machine
Diameter of sanding drums	42" wide x 6" thick	52" wide x 6" thick
Speed of 1st and 2nd sanding drums	11½" (nominal)	11½" (nominal)
Speed of 3rd sanding drum	1200 r.p.m.	1200 r.p.m.
Infinitely variable feed speeds from	1335 r.p.m.	1335 r.p.m.
Horse power of sanding drums	15 to 30 f.p.m.	15 to 30 f.p.m.
Horse power of bed feed motor	7½	10
Approximate floor space	2	3
Approximate Net Weight	7' 4" x 7' 7"	7' 4" x 8' 10"
	95 cwt. (10640 lb.)	105½ cwt. (11816 lb.)



The sanding capabilities of this wide belt sander are tremendous in both speed and quality. Every type of flat work can be sanded automatically at speeds up to 75 feet per minute and on many classes of work expensive hand pad sanding can be completely eliminated.

The endless wide belt rotates over two rolls. The top driven contact roll is 14" diameter and rubber covered.

Feed Mechanism embodies an 8" spirally serrated rubber covered feed roll which presses the stock firmly whilst moving it over the abrasive belt at any selected speed. A 4" diameter serrated rubber covered outfeed roll follows the main feed roll. All rolls are on ball bearings and are mounted in slides to give a rise and fall of 3".

The Drive to the sanding roll is by a vee belt from totally enclosed motor. The main feed roll drive is taken from the sanding roll through a variable speed unit and an integral geared reduction unit.

Work Tables. A cast iron work table mounted on slides is provided at the feed-in end. Outfeed table comprises two idler rolls also on slides.

Belt width	24"	38"
Belt length	93"	93"
Stock capacity	24" x 3"	38" x 3"
minimum width	$\frac{1}{8}$ "	$\frac{1}{8}$ "
minimum thickness	$\frac{1}{8}$ "	$\frac{1}{8}$ "
Speed of belt in f.p.m.	3860	3860
Rates of feed per min.	30-75 ft.	30-75 ft.
Horse power of motor	10	20
Floor space	64" x 36"	80" x 36"
Net weight	24 cwt. (2690 lb.)	31 cwt. (3450 lb.)

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



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

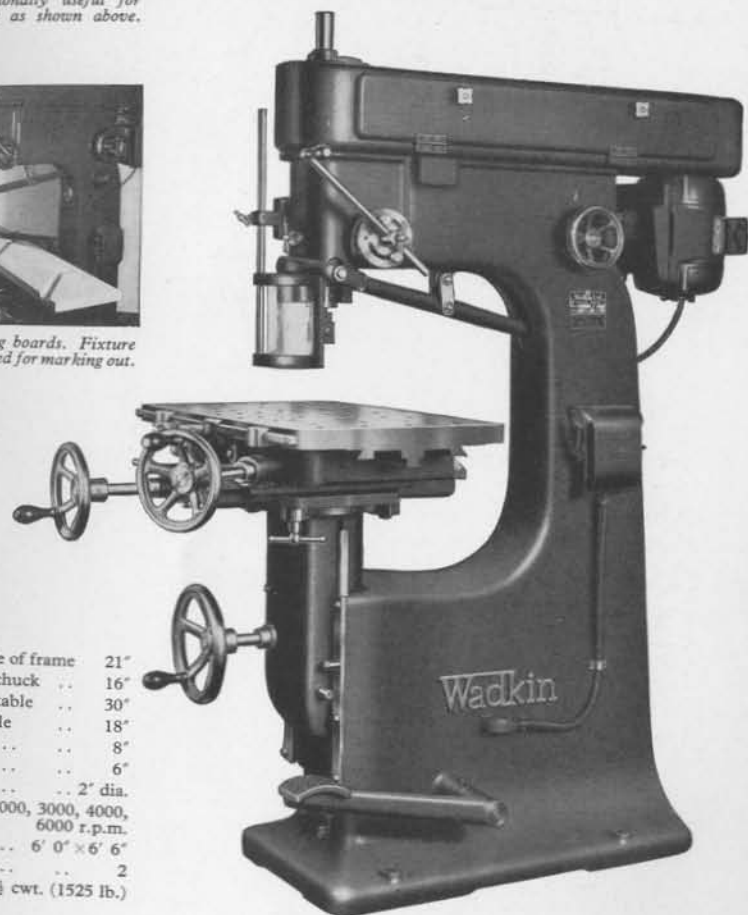


Cutting housings for string boards. Fixture in use dispenses with the need for marking out.

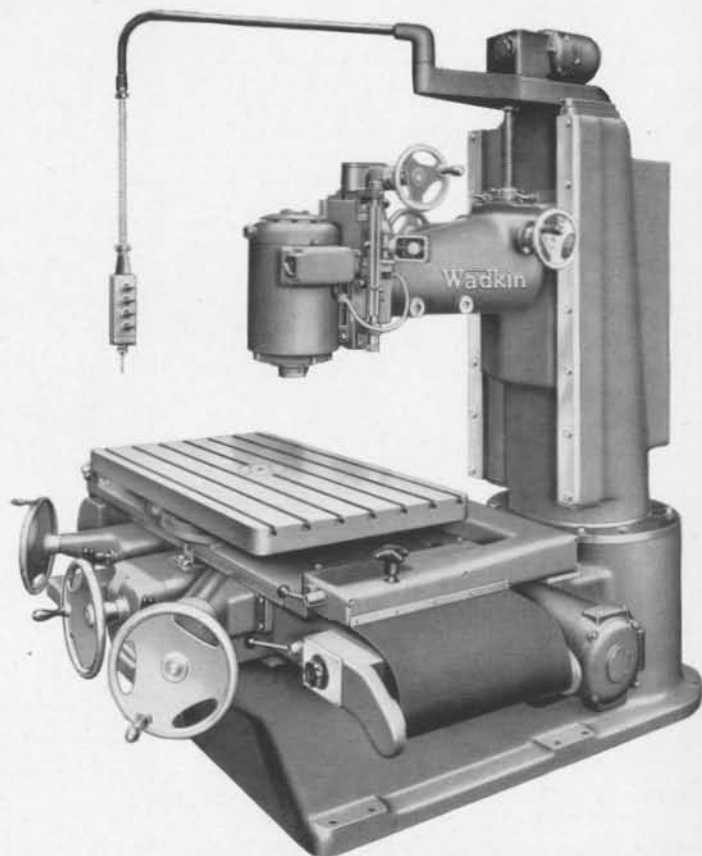
The Table has rise and fall, also compound movements, including a swivelling movement.

The Cutter Spindle revolves on heavy ball bearings and is carried in a balanced sleeve. The spindle may be securely locked at any position. Stops are provided for controlling the stroke of the cutter spindle.

The machine is driven by motor as shown and provision is made for keeping the belt at the correct tension. Belt driven machine is available.



Centre of spindle to inside of frame	21"
Max. distance table and chuck	16"
Longitudinal traverse of table	30"
Transverse motion of table	18"
Rise and fall of table	8"
Rise and fall of spindle	6"
Will bore up to	2" dia.
Spindle speeds	2000, 3000, 4000, 6000 r.p.m.
Floor space	6' 0" x 6' 6"
Horse power of motor	2
Net weight	14½ cwt. (1525 lb.)



This machine is designed for pattern work in wood or metal, both ferrous and non-ferrous.

The Milling Head is carried on a rising and falling arm and can be canted through 140°. Six speeds are provided with reverse. The head can be raised and lowered 9° on the arm. Coarse and fine feed are provided.

Power Operated Table has longitudinal and cross feeds also rotary feed. All power movements are infinitely variable in 4 ranges derived from a gearbox. All table movements can also be operated manually. All slideways are fitted with locks.

The Column carrying the arm is designed for maximum rigidity when cutting ferrous metals and can be swivelled 340° for large diameter work.

Spindle speeds	3000, 1500, 1000, 500, 150, 75 r.p.m.
Spindle end	No. 40 International
Max. capacity between arm and table	36"
Max. throat capacity	35"
Max. diameter worked	100"
Size of table	4' 0" x 2' 2"
Table speeds infinitely variable	1½" to 116" per min.
Horse power of spindle motor	3/3
Table movements: Cross	31"
Longitudinal	48"
Approx. Net weight	66 cwt. (7500 lb.)

This is a self-contained type of lathe, requiring no countershaft. It is particularly suitable for the needs of Engineers' pattern makers.

The Bed is of heavy design, with wide machined surfaces, and removable gap plate.

The Headstock Spindle runs in heavy ball bearings. It is screwed at both ends, and bored out No. 2 Morse taper at the front end. Either four or eight speeds are provided. Speeds of 4 speed machines are: 240, 600, 1,250, 2,880 r.p.m.

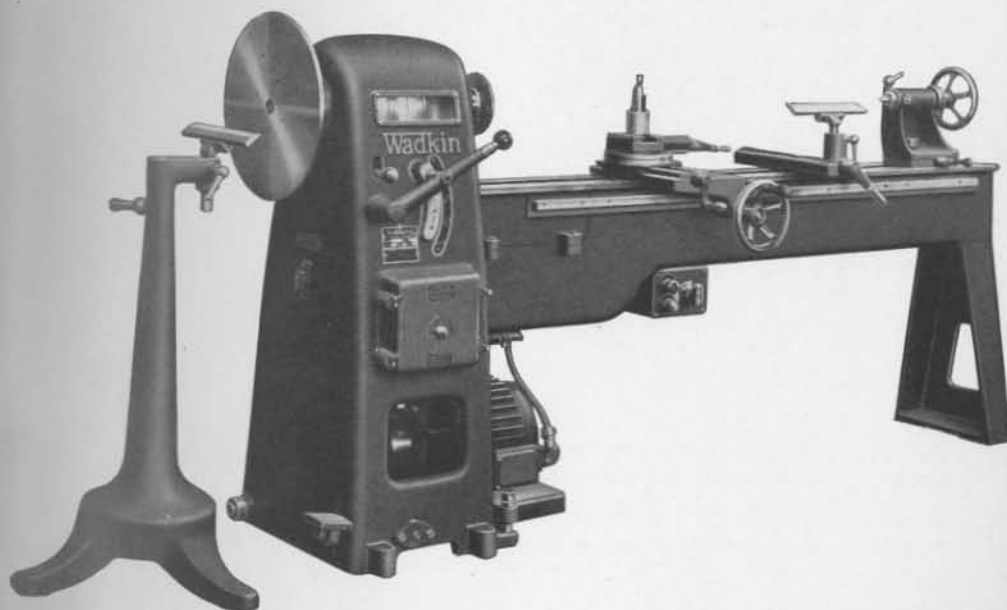
" " 8 " " " " 200, 320, 500, 750, 960, 1,440, 1,850, 2,880 r.p.m.

The Motor is carried inside the headstock and drives on to a four speed cone pulley by belt, also inside the frame. When eight speeds are required, a two speed motor is fitted.

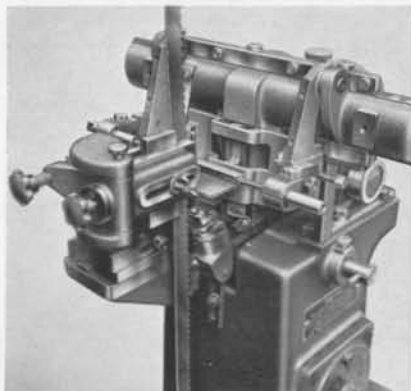
The Tailstock is bored out and fitted with steel poppet controlled by handwheel and square thread screw. The front end is bored out No. 2 Morse taper same size as headstock. Centres are self-discharging. Tailstock is arranged with set over motion for taper turning.

Hand Turning Rest is supplied, but **Travelling Rack Slide Rest** can be fitted.

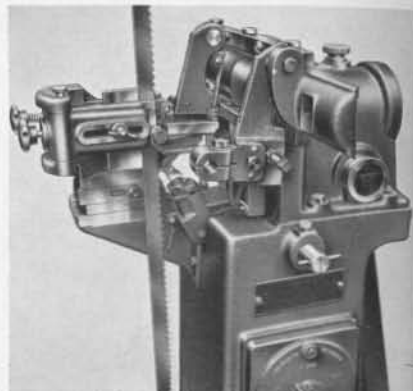
Tripod and Stand can be supplied for outside turning.



	6" Model	8" Model	10" Model
Height of centres	6½"	8½"	10½"
Will take between centres	3' 6"	5' 6"	7' 6"
Diam. turned with gap bed	2' 0"	2' 4½"	2' 8½"
Width turned with gap bed	12"	12"	12"
Diam. turned over rests	9"	13"	17"
Horse power	1½	1½	1½
Floor space	7' 0" x 2' 3"	9' 0" x 2' 3"	11' 0" x 2' 3"
Net weight	12½ cwt. (1375 lb.)	13½ cwt. (1485 lb.)	15½ cwt. (1700 lb.)



Close up view showing the machine set up for filing.



View of the machine arranged for setting.

This machine will sharpen and set Band Saws quickly and efficiently.

Each tooth is sharpened and set to the correct depth and angle with accuracy and uniformity.

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.

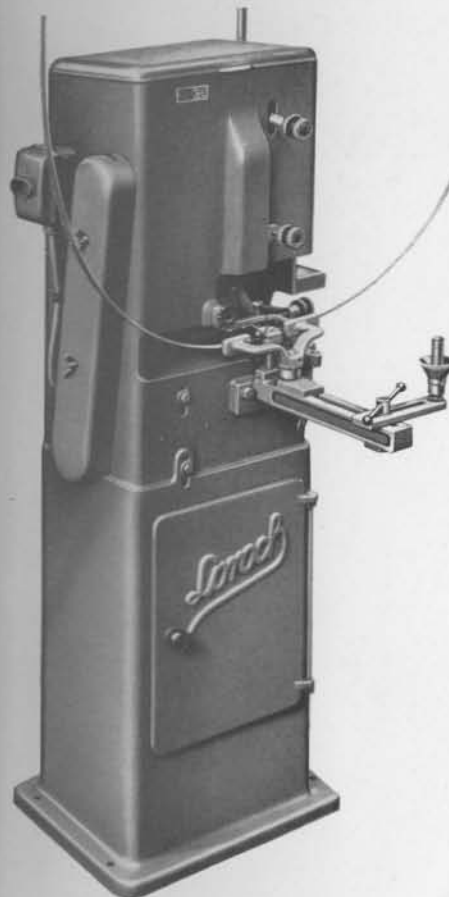
The file can be swivelled to any angle of tooth.

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.

Motor is self-contained with the machine. A belt driven model is also available.

Any length of saw can be handled

Max. width of saw	.. .. .	2 1/2'
Will file up to	.. .. .	1" pitch
Will set teeth in saws up to	.. .. .	1 1/2" wide
Floor space	.. .. .	3' 0" x 2' 0"
Horse power	.. .. .	1/2
Net weight	.. .. .	2 1/2 cwt. (280 lb.)



This machine provides an efficient and inexpensive means of resharpening band-saws up to 2 1/2" wide by any length. In addition circular slitting saws or any circular saws having no face bevel can be ground between 4" and 23 1/2" diameter.

The grinding wheel moves into the tooth to a preset limit, "dwells" in the root if necessary and returns. The saw remains stationary whilst the grinding wheel moves down the face of the tooth and is fed forward by a pawl to enable the root and back to be ground as the wheel retracts.

The Grinding Head consists of a pivoting arm carrying a grinding wheel spindle. The spindle is mounted on ball bearings, and driven by vee-belt from an intermediate shaft. This shaft is vee-belt driven from a motor and mounted on ball bearings. In addition to transmitting power to the wheel, this shaft actuates by means of gearing the two sets of cam gear for the grinding wheel pivoting motion and the feed pawls.

The Saw Carrier. Band saws are rigidly held close up to the teeth in an adjustable spring-loaded vice. An adjustable self-aligning guide contacts the back of the saw on both sides of the vice and prevents all possibility of lateral movement during grinding. A double feed pawl operating on two teeth is embodied in the feeding mechanism to ensure positive movement of saws having broken teeth.

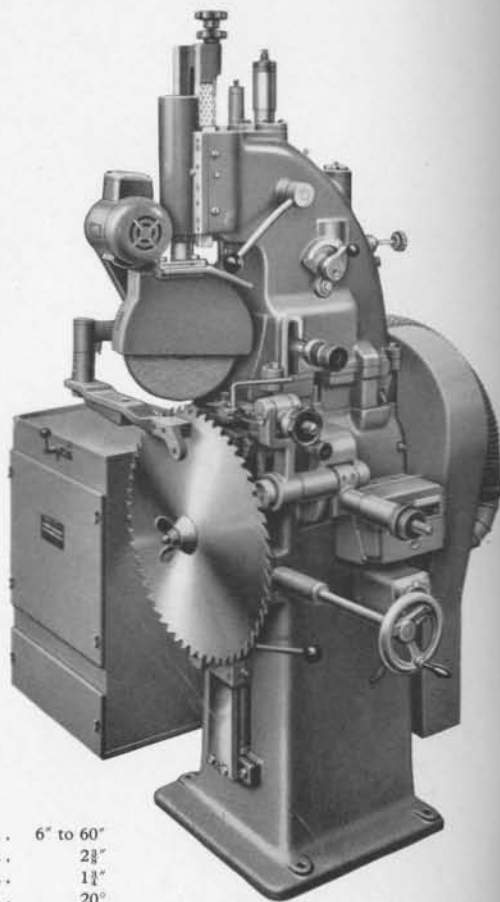
Maximum width of saw	.. .. .	2 1/2"
Maximum tooth pitch	.. .. .	1 1/8"
Maximum tooth depth	.. .. .	1"
Will take circular saws up to	.. .. .	23 1/2" diam.
With centre holes	.. .. .	1/2" to 1 1/4"
Rates of grinding	.. .. .	50 and 80 teeth per min.
Speeds of wheel	.. .. .	2850 and 4500 r.p.m.
Floor space	.. .. .	24" x 20"
Horse power of motor	.. .. .	1/2
Net weight	.. .. .	3 1/2 cwt. (395 lb.)

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 year out can be depended on to maintain your saws in good condition, and save you time, trouble, money and manpower.

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



Diameter of saws accommodated	6" to 60"
Maximum tooth pitch	$2\frac{3}{8}$ "
Maximum tooth depth	$1\frac{1}{2}$ "
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	$\frac{1}{2}$
Horse power of main drive	$\frac{1}{2}$
Net weight	7 cwt. (784 lb.)



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

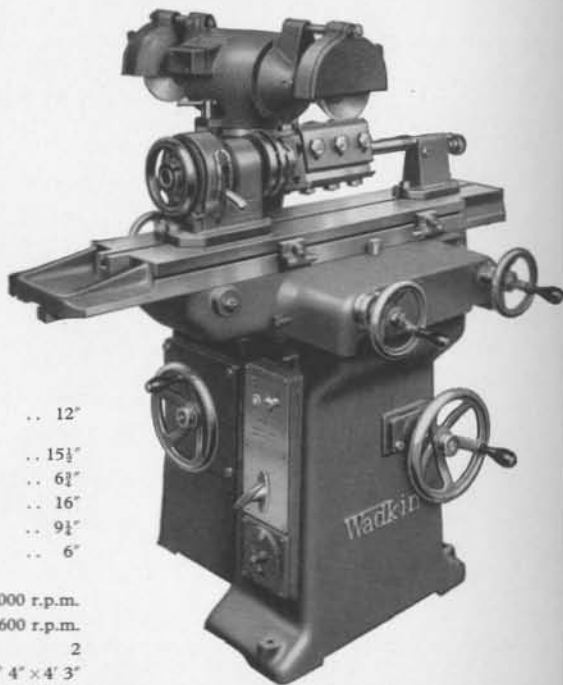
The Machine consists of an open tank mounted on a pedestal.

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 wheel head. An automatic trip is provided to the down feed to prevent wasteful grinding.

The Spindle is arranged with vertical adjustment for setting, also canting movement 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, giving complete protection from burning.

Max. length of knife	36"
Max. length of knife to special order	48"
Max. knife section	$4\frac{1}{2} \times \frac{1}{8}$ "
Max. section if slotted	$6\frac{1}{2} \times \frac{1}{8}$ "
Min. knife section	$\frac{1}{2} \times \frac{1}{8}$ "
Speed of traverse	27 f.p.m.
Speed of grinding wheel: on 50 cycles	3000 r.p.m.
on 60 cycles	3600 r.p.m.
Horse power, wheel head	2
Horse power, traverse motor	$\frac{1}{2}$
Wheel size	6 $\frac{1}{2}$ " dia. \times 3" cup, $\frac{3}{8}$ " bore
Floor space: 36" size	6' 6" \times 2' 6"
48" size	7' 6" \times 2' 6"
Net weight: 36" size	15 $\frac{1}{2}$ cwt. (1750 lb.)
48" size	17 cwt. (1900 lb.)



Max. length of knife ground	12"
(To special order 24")	
Max. height wheel centre to table ..	15½"
Min. height wheel centre to table ..	6½"
Longitudinal travel of table by rack ..	16"
Transverse travel of table by screw ..	9½"
Diam. of cup grinding wheel	6"
Speed of grinding wheels:	
on 50 cycles ..	3000 r.p.m.
on 60 cycles ..	3600 r.p.m.
Horse power of motor	2
Floor space with max. movements	5' 4" x 4' 3"
Net weight	13½ cwt. (1500 lb.)

This machine has been specially designed for maintaining all the cutter equipment used on a modern moulder. It will grind all types of multi-knife cutters as well as cutters for square or circular blocks, thick or thin knives up to 12" long. It is also capable of regrinding tungsten carbide tipped saws 8" to 18" diameter.

The Grinding Wheel Head swivels 240°. Head rises and falls by handwheel and screw and has horizontal adjustment. Spindle is mounted on precision preloaded bearings and is arranged to take grinding wheels at each end. Grinding wheel head has motor built in. All slides are covered at every position to prevent entrance of dust.

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 movement is by handwheels, those for the transverse movement being graduated in either .001" or 1 mm.

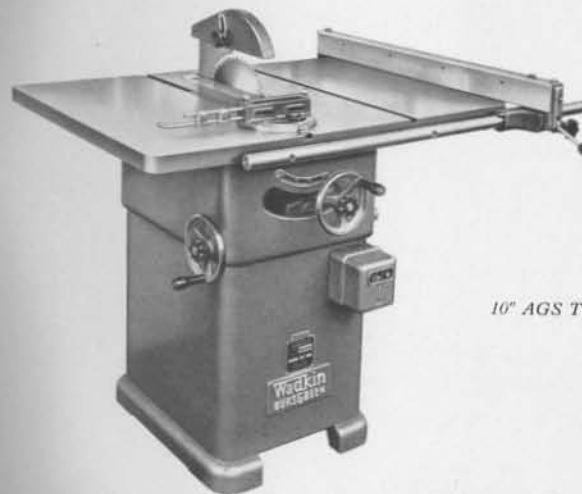
A feature of the machine is that all control handwheels are duplicated so that the machine can be operated from either the front or the rear of the table.

A complete range of table fixtures to carry every type of cutter head is supplied with the machine.

The BURSGREEN range of Wadkin Woodworking Machinery consists of small, efficient and robust types for each of the basic woodworking operations of SAWING, PLANING, MOULDING, SHAPING, MORTISING AND TENONING, SANDING, also TURNING. It also includes the necessary GRINDING machines for the efficient maintenance of the cutter equipment used on the machines.

Modern design, powerful construction and sound engineering principles have been combined in this range to produce machines that for quality of work done, accuracy of cutting and all round performance are comparable with many larger and more expensive types.

Although relatively small, both in size and capacity, Bursgreen machines are essentially high production tools, capable of continuous operation under normal working conditions. They are machines that will appeal to the small user on grounds of space saving and economy, whilst in the larger shops, they fill a most useful role in supplementing the work of bigger machines and providing a solution to production bottlenecks, with a minimum capital outlay.



10" AGS Tilting Arbor Sawbench

Wadkin

BURSGREEN



14" Universal Radial Saw BRA



12" x 7" Combined Planer and Thicknesser BAO/S



6" and 9" Hand Feed Surface Planers BFT

Sawbenches

- 10" AGS Tilting Arbor Sawbench
- 12" AGS Tilting Arbor Sawbench
- 14" AGS Tilting Arbor Sawbench
- 10" Sliding Table Sawbench BGS
- 20" Circular Sawbench BSW
- 26" Circular Sawbench BSX

Cross-Cut Saws

- 14" Universal Radial Saw BRA
- Air-operated Single and Double Overhead Saw BRA
- Snipper Cross Cut Saw BCT

Band Saws

- 16" Band Saw MZF
- 24" Band Saw BZB

Planers

- 6" and 9" Hand Feed Surface Planers BFT
- 12" x 7" Planer and Thicknesser BAO
- 12" x 7" Combined Planer and Thicknesser BAO/S
- 18" x 5" Planer and Thicknesser UO/2
- 18" x 9" Planer and Thicknesser UO/3
- 18" x 9" Combined Planer and Thicknesser UO/S

Moulders

- Planer and Moulder BFO
- Single Spindle Moulder BRS
- Double Spindle Moulder BRS/2

Mortiser

- Hollow Chisel Mortiser DM

Borer

- Vertical Boring Machine BLM

Lathe

- 6" Woodturning Lathe BZL

Sanders

- 6" Belt Sander BGA
- Disc and Belt Sander BGY

Grinders

- Woodworkers' Tool Grinder BZG
- Moulding and Planing Cutter Grinder BES
- Planing and Moulding Iron Grinder BNL