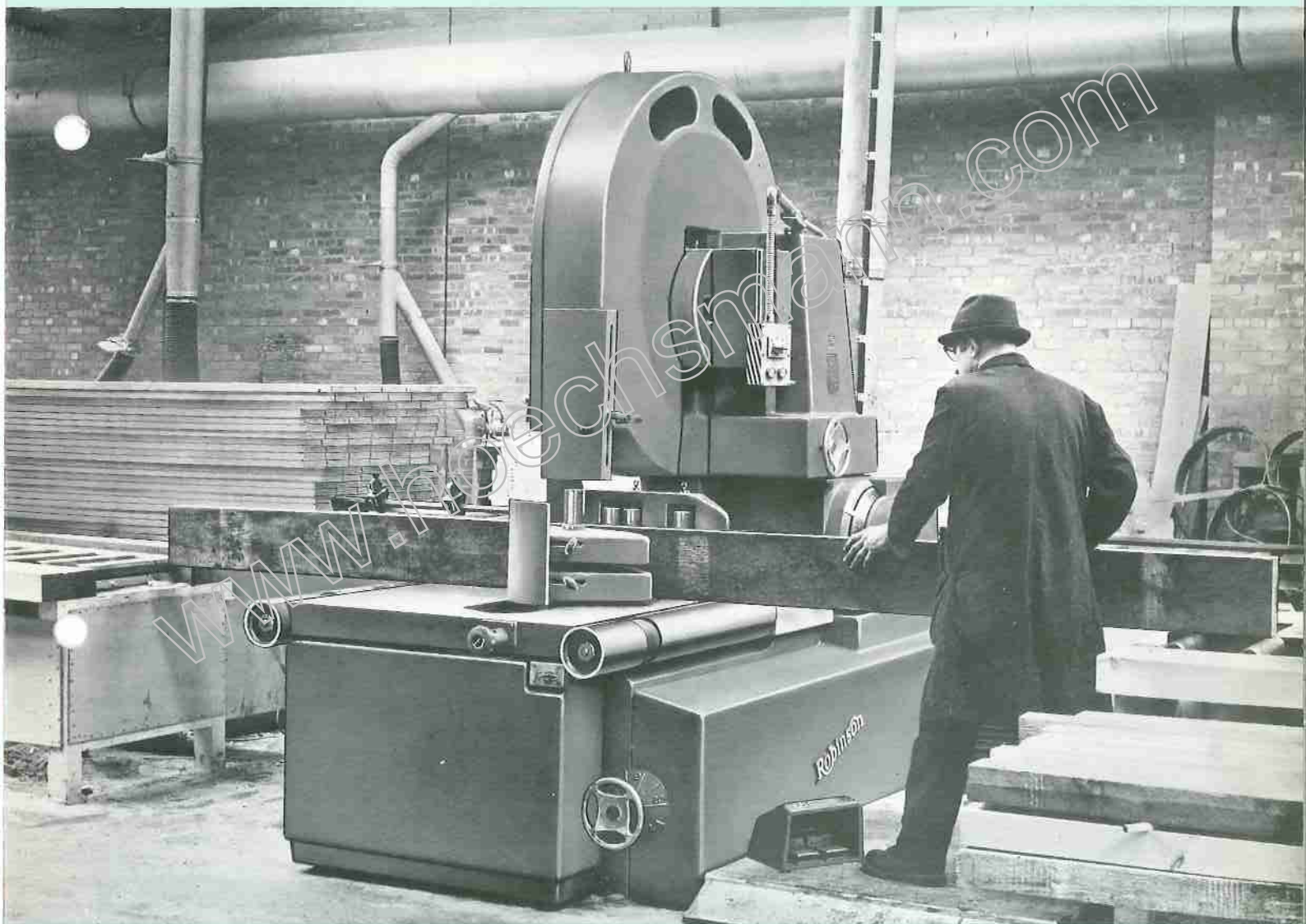


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Robinson

Band Resaw Type DF/T 1200 & 1400 (48" & 54")



Band Resaw Type DF/T 1200 at Haydock & Co., Chorley.

The Robinson 1200 and 1400 mm Band Resaws Type DF/T embody the latest and most advanced concepts of hydraulic and electric controls. With finger-tip dial selection they possess unmatched convenience of operation to give fast, accurate and economic conversion of all types of timber.

Robinson

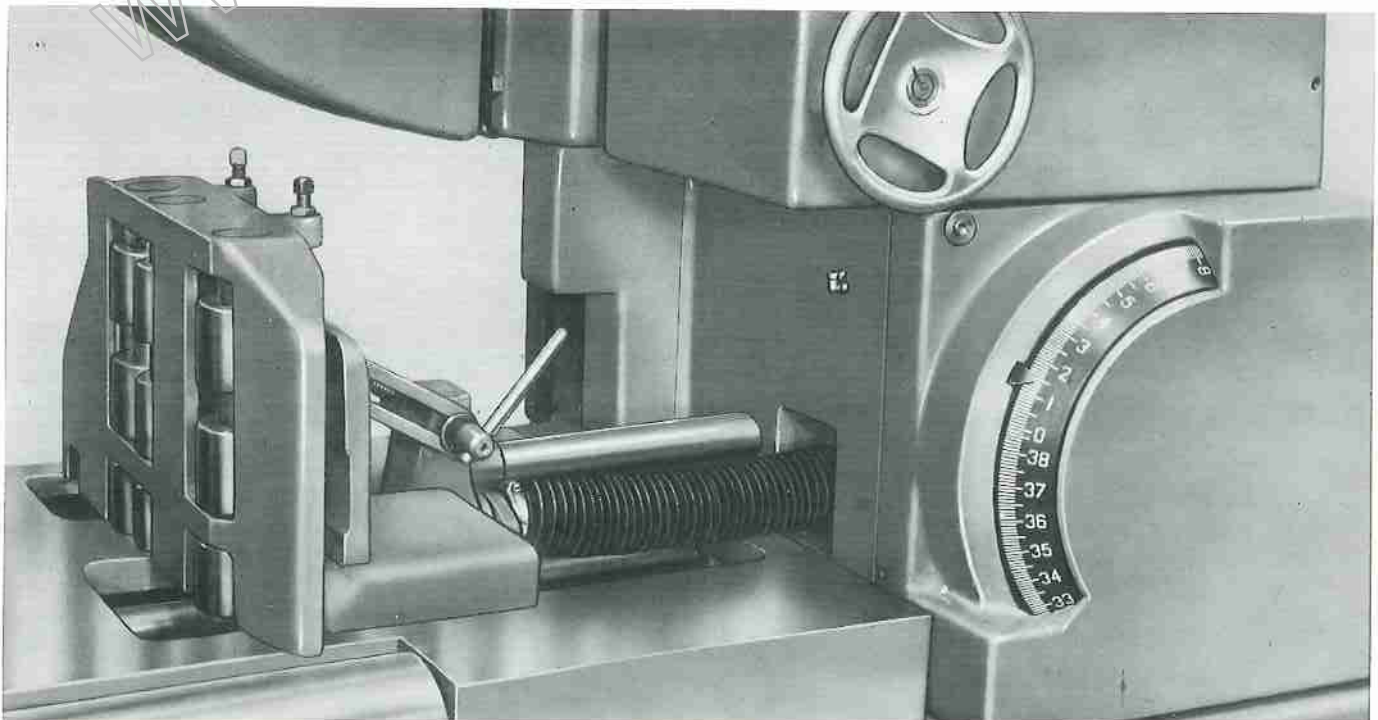
Band Resaw

Type DF/T 1200 & 1400 (48" & 54")

Over the past decade Band Resawing has become firmly established as the fastest and most economical method of converting square logs, deals, hardwoods or softwoods by deep, flat or bevel sawing. Hitherto, these machines have changed little since their inception – but now we announce the Robinson DF/T – a new approach to better Resawing. The machine is newly designed and engineered to embody the latest innovations to make operations simple, safe and, most important, even more economical in general Sawmill work – and as reliable for precision cutting at high feed speeds as only Robinson can make them. Backed by 139 years of Robinson know-how that made the predecessors of the DF/T the pride of Sawmills throughout the world, the machine represents the very best that modern technology can offer.

MAIN FEATURES

1. Feed rates infinitely variable through hydraulic gear controlled by conveniently placed handwheel.
2. Vertical feed rollers arranged to tilt. Quickly positioned by power via a foot switch and easily removable to clear table for flat cutting.
3. Power drive to horizontal table rollers with reverse feature. Optional on 1200 mm machine.
4. Handy tilting ball-bearing roller fence with easy adjustment across the table. Power-operated pre-selector type fence optional.
5. Every facility for easy fitting and control of saw.
6. The top saw wheel is mounted on a rocker shaft through which the saw tension is applied. A method giving maximum response to any variation in the strain of the saw.
7. Infinitely variable saw strain applied by weights – with a front indicator facing the operator. When saw strain is by power a future indicator is fitted on the wheel side of the machine. The saw strain motor is automatically cut out when balance position is reached.
8. Tilting adjustment to upper saw wheel within sawyer's reach.
9. Pressure saw guides above and below table fitted with sectional adjustment and interchangeable pads. The upper guide is adjustable on the 1400 mm machine and fixed on the 1200 mm machine.
10. Self-adjusting scrapers and pads provided, to clean saws and wheels. Centralised reservoir for cleaning fluid. Lightweight, easily removable guards complete enclosure of all but cutting position of saw blade.



Power operated fence.

GENERAL DISCRPTION

The main frame

is a substantial and heavily ribbed casting forming an exceptionally rigid base on which all other parts of the machine are firmly supported.

The upper saw wheel

is made from high-duty cast iron, plate and rim accurately machined all over, and finely balanced. It runs on extra heavy roller bearings mounted within wheel rim width, the spindle being mounted on spherical roller bearing and a spherical plain bearing. This method of mounting ensures true running even under the heaviest loads. The top saw wheel and the tensioning mechanism is mounted on a vertical slide, thus providing adjustment for tensioning the saw. Tilting adjustment is provided to determine and control the position of the saw blade on the wheel faces.

The straining device

for the saw is particularly sensitive and consists of an eccentric sleeve on the top saw wheel spindle adjusted by an arrangement of levers and weights carried on the slide and contained in the column. The tension is indicated on a front indicator facing the operator, also on a second dial inside the saw wheel guard when saw strain is by power.

Power vertical adjustment

for the top saw wheel is fitted as standard for the 1400 mm machine and optional for the 1200 mm machine. The drive is from a self-contained motor via a chain drive and is controlled by a conveniently placed three-position rotary switch of the spring return "centre-off" type. The motor operates only when the switch is held in the "on" position and cuts out either when the switch is released or automatically when saw system is balanced.

The bottom saw wheel

is also made from high-duty cast iron and being heavier than the top wheel, prevents the latter overrunning on heavy cuts. The spindle is mounted in roller and ball bearings.

The faces

of both top and bottom saw wheels are crowned.

Guards

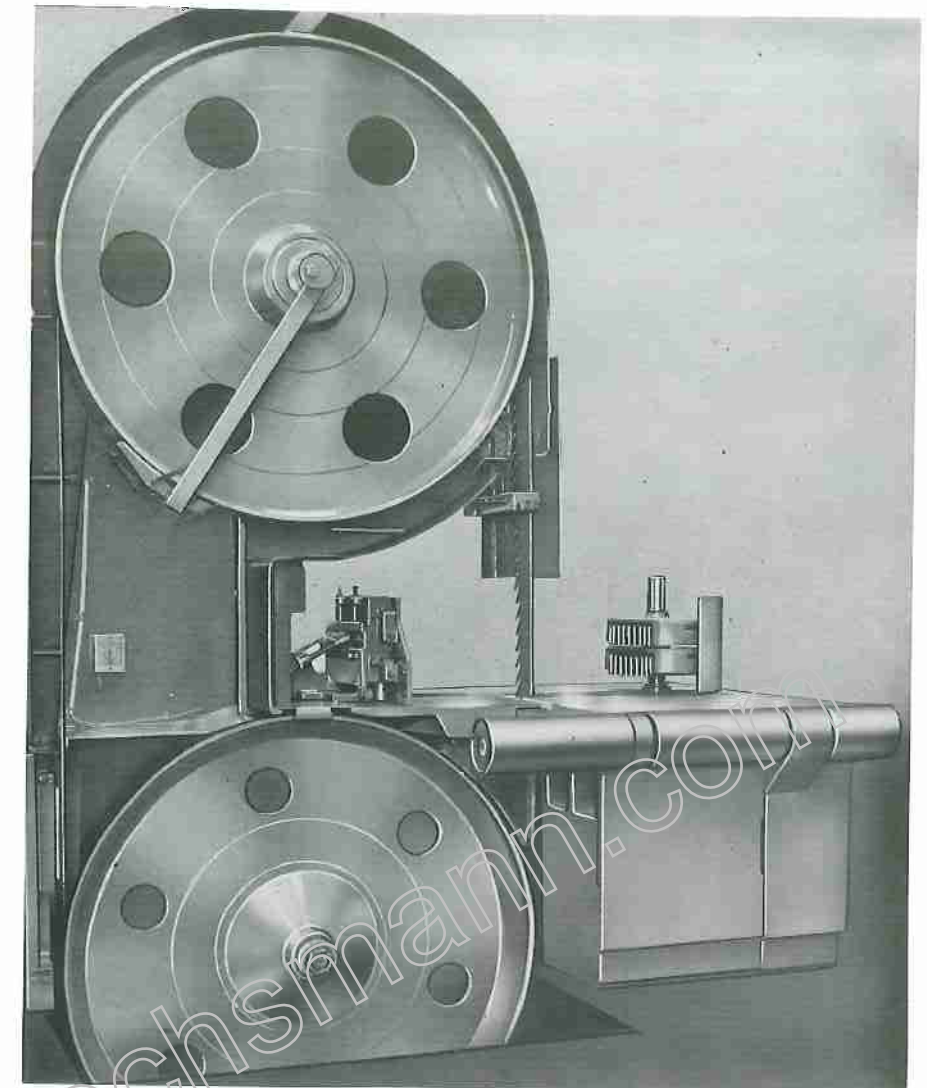
are provided for the top saw wheel, the portion of the saw which is not actually cutting, and that part of the bottom saw wheel which is above floor level. These guards are light in weight and are easily removable or swung away when changing saws.

Cleaning devices

keep the saw wheels clean and free of dirt and gum. They consist of scrapers for both saw wheels, and felt pads on the saw and saw wheels. The pads are fed with cleaning fluid from a centralised reservoir. The top wheel scraper and pad maintain consistent relationship to wheel irrespective of the tracking movement. A chute prevents splinters dropping between the saw and bottom wheel.

Pressure saw guides

with adjustable and interchangeable pads made from lignum vitae are fixed above and below the table. This type of guide deflects the line of saw slightly outwards between the saw wheels, thus making it exceptionally rigid in this cutting section to promote accuracy at high feed speeds.



▲ Arrangement of pads and scrapers for saw cleaning.

◀ Power rise and fall mechanism.

The table

is of cast iron, accurately machined, well ribbed on the underside, and of ample dimensions and carries horizontal rollers mounted on ball bearings in front of and beyond the saw.

The feed

is by vertical fluted feed rollers 305 mm (12") diameter carried from a radial arm arranged below the table. They will tilt up

to 30 degrees for bevel sawing, and when extra-wide flat cutting is required they can be removed along with the shaft to clear the table top so the powered table rollers alone can be used.

All power driven shafts in the feed gear are ball bearing mounted.

Feed roller guards are included and can be easily removed or adjusted with the rollers. The radial arm is carried on its own shaft driven by gearing from a hydraulic unit.

The feed rollers are quickly adjusted towards or away from the fence by power, control being by means of two foot-switches mounted in a self-contained unit. The switch can be positioned as required by the machine operator.

The feed gear is powered by an infinitely variable hydraulic unit driven from the main drive motor via the bottom wheel shaft. Feed speed is infinitely variable and controlled by handwheel conveniently placed at the infeed end of the machine, and graduations on an adjacent dial indicate the feed speed.

The feed can be stopped quickly by zeroing the variable speed gear handwheel without stopping the main motor drive.

The fence

which is fitted with rollers mounted in sealed ball bearing spindles is supplied as standard with quick acting lateral adjustment by rack and pinion – allowing extremely rapid setting for any cutting width. Fine screw adjustment is also provided, the distance, saw to fence, being indicated by dial.

Power units

Power Driven table rollers (Standard for 1400 mm machine). When these are fitted the extreme left-hand roller beyond the saw is arranged to run in the reverse direction to return the timber to the operator, whilst the extreme left-hand roller in front of the saw serves as an idle roller. This unique arrangement combines maximum tractive power and convenience for the operator, and provides the best means of obtaining greater productivity from the same effort.

Power operated pre-selector fence (optional)

A power fence actuated by a built-in motor can be provided. Control of the saw to

fence dimension is through a pre-selector unit giving either eight pre-set sizes for the 1200 mm machine or twelve for the 1400 mm machines.

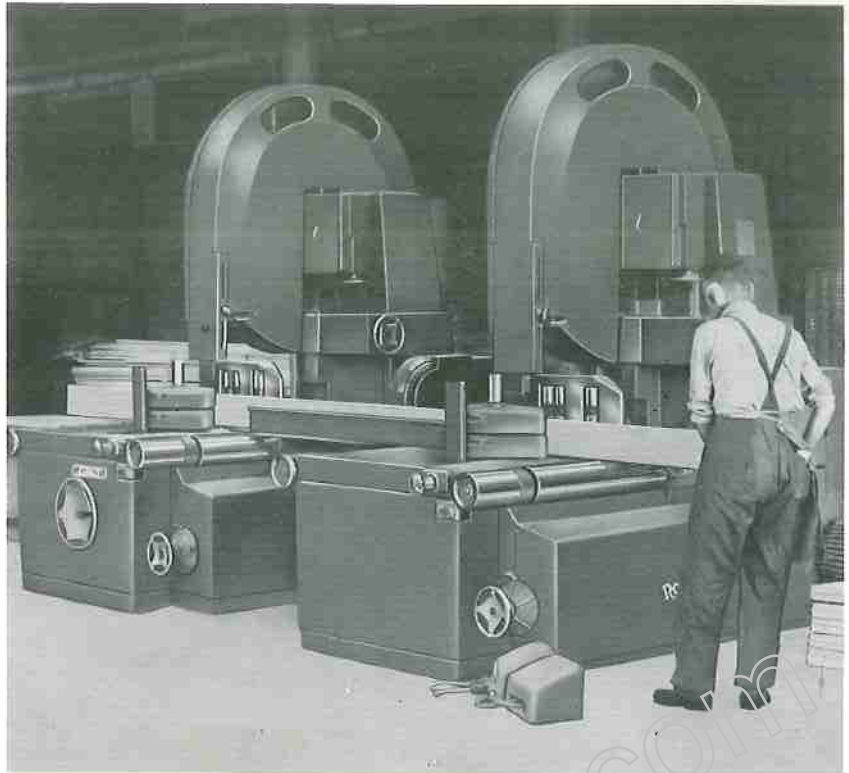
The basic pre-selector unit

embodies eight rotating electrical contact fingers (twelve for 1400 mm machines) linked to the fence movement. Two of these act as maximum traverse limit switches, whilst the remaining are set to correspond with standard fence settings. In use, the operator turns a selector switch to the number corresponding to the required setting, and presses the appropriate "in or out" pushbutton. The fence then immediately moves to the position selected under power. The pushbuttons and switch are embodied in a pendant suspended from the frame of the machine and is adjustable to be readily reached from the operating position.

The mechanism is pre-set at the Works before the machine is despatched, but alteration of the contact fingers – any of which can be independently set to correspond with any position across the full fence movement – can be readily carried out when required.



Band Re-Saw Type DFIT 1400 (54")



Band Resaws Type DF/IT 1200 arranged as Twinliner at G. & N. Wright, Blythe.

Method of driving

The standard machine has short centre drive from a motor mounted on the frame. this drives the bottom saw wheel and the hydraulic variable speed gear. The powered movement (when provided) of the top saw wheel, feed rollers and fence are by separate electric motors driving chains or gears. Guards are provided for all drives.

Electrical control gear for the main motor varies according to local regulations and any type required can be supplied.

Electrical motors, when supplied, are suitable for standard, 3 phase A.C. supplies, 380/440 volts, 50 cycles.

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Principal dimensions and code words

Principle dimensions

	1200	1400
Diameter of saw wheels	1200 mm (48")	1400 mm (54")
Maximum width of saw	125 mm (5")	180 mm (7")
Length of saw	Maximum 7240 mm (23' 9") Minimum 7010 mm (23' 0")	8350 mm (27' 5") 8200 mm (26' 8")
Maximum depth of cut	510 mm (20")	680 mm (27")
Max. distance saw to fence	380 mm (15")	380 mm (15")
Max. distance saw to feed rollers	240 mm (9 $\frac{3}{8}$ ")	380 mm (15")
Feed rates	0-49 m/min (0-160 ft/min)	0-75.7 m/min (0-248 ft/min)
R.P.M. of saw wheels	600	530
Table height	700 mm (2' 3 $\frac{1}{2}$ ")	700 mm (2' 3 $\frac{1}{2}$ ")
Overall height from floor level	2565 mm (8' 5")	2820 mm (9' 3")
Space occupied, length	2057 mm (6' 9")	2360 mm (7' 9")
Width in direction of feed	2616 mm (8' 7")	3050 mm (10' 0")
Net weight	2940 kg (6470 lb)	3810 kg (8400 lb)
Gross weight	3560 kg (7870 lb)	4650 kg (10240 lb)

Thomas Robinson & Son Limited
Rochdale England

