

# STARTRITE VERTICAL METALCUTTING BANDSAWS



**STARTRITE**

THE CHOICE OF  
BRITISH INDUSTRY  
FOR OVER 50 YEARS

## VERTICAL METAL CUTTING BANDSAWS

Vertical band sawing is the fastest and most efficient method of external and internal shape forming. Vertical band saws are extensively used for intricate sawing of dies, cams and all shaped component parts. Machines fitted with power feed sliding tables are used in many production slotting, shaping and slicing operations.

Stortrite build and manufacture one of the widest and broadest range of Vertical Bandsaws available. From our popular "V" series through to the heavy duty range.

With over 50 years of experience in this type of machinery, a Stortrite Vertical Bandsaw will offer you years of trouble free running.

### 20V & 30V

The "V" series is an excellent basic choice for a wide range of industries. Manufactured at our Rochester Site, the heavy welded box frame construction, cast iron tables and trunnions, are built to withstand continuous use. A fixed table, along with preselected speeds, make it possible to cut almost any material.



Heavy duty bandwheels are made with a layer of bonded rubber to the outside edge of the wheel which is then ground and dynamically balanced and mounted on sealed for life bearings, ensuring vibration free operation. Bandwheels are interchangeable and are easily replaced. Correct blade tension may be quickly applied and then accurately checked through the indicator window.

An auxiliary blade guard is supplied enabling the machine to be used with two bandwheels only.

(30V, 30RWF + 30RWS,  
V900F + V900H only)



A powerful 1.1Kw motor, cast iron dynamically balanced five step pulleys and dual range totally enclosed gear transmission, provide smooth, efficient power to the blade.



Precision replaceable guide inserts are standard on all "V" and "RW" models. The upper guide elevation is counter-balanced for easy operation. Quick change inserts are available for blades 3mm - 16mm.



30V model shown

## ACCESSORIES

No other manufacturer offers this range of accessories. A complete vertical sawing system is available only from Startrite.



Rip fence, attaches to the front "T" slot and is equipped with lateral fine adjustment, allowing fine straight and accurate cuts.  
Part No. SM302 shown.



Rack and pinion pusher, attaches to the front "T" slot of the fixed table for precision cuts using a mechanical feed.  
Part No. SM46/A shown.



Mitre gauge with pusher, attaches to front "T" slot of fixed table for precision mitre cuts.

Part No. SM198/B shown.



Roller guides featuring side and backup rollers allowing frictionless sawing, especially useful for high speed applications.

Part No. SM1559/A (Top)  
SM1559/B (Bottom)

The full range of accessories for "V" series are listed below:

- |             |                           |
|-------------|---------------------------|
| 1) SM1559/A | Roller Guides (Top)       |
| SM1559/B    | Roller Guides (Bottom)    |
| 2) SM454    | Universal Guides (Top)    |
| SM455       | Universal Guides (Bottom) |
| 3) SM290    | Angled Guides (x2)        |
| 4) SM302    | Rip Fence                 |
| 5) SM46/B   | Rack and Pinion Pusher    |
| 6) SM198/B  | Mitre Gauge with Pusher   |
| 7) SM260    | Circle Cutting Attachment |
| 8) SM1975/D | Blade Welder and Grinder  |
| 9) SM2068   | Low Volt Worklight        |

Below is a list of spare parts that we recommend you keep to avoid any downtime of your machine:

- |           |   |       |
|-----------|---|-------|
| A) 2922   | Table Insert  | 1 off |
| B) 2473   | Bandwheel   | 3 off |
| C) 2270   | Bandwheel Brush   | 1 off |
| D) B02149 | Drive Belt  | 1 off |
| E)        | Full range of blade guide inserts depending upon guides fitted & blades used. |       |

## FEATURES & BENEFITS

- 500mm & 760mm throat sizes available.
- A highly accurate blade guidance system for precision work, giving full 250mm capacity.
- Solid cast iron table, 520mm x 520mm, featuring two way tilt mechanism. (from 0° to 45°)
- Solid cast iron tilt trunnion.
- Powerful 1.1Kw 3ph motor is connected to a dual range transmission totally enclosed gearbox, providing ten preselected speeds.
- Solid heavy duty steel bandwheels are made with a layer of bonded rubber to the outside edge of the wheel, which is then ground and dynamically balanced for vibration free running.
- Rigid box frame welded construction, ensures maximum stability for all sawing applications.
- Both front and rear doors are fitted with an interlock, ensuring that if a door is opened whilst the machine is running the machine will automatically switch off.
- Telescopic blade guards ensure the blade is always enclosed above and below the table.
- On the 30V the machine is equipped with an auxiliary blade guard, enabling the machine to be used with two bandwheels only.
- Low voltage control and overload protection.
- Wide range of blade widths, 3mm, 5mm, 6mm, 10mm, 13mm, 16mm.
- Quick change inserts are available for the blades listed immediately above.
- Blade tension indicator.
- Solid ground tool posts.
- Lockable door handles.
- Bandwheel cleaning brush.
- Eccentric cam operation bell/speed change.
- "T" slot on front edge of table for a wide range of accessories.
- Operation and parts manual, toolkit for machine adjustments.
- One year warranty cover.



## 20RWF, 20RWS, 30RWF, 30RWS

Offering many of the features found on the "V" series, the "RW" series extends the machines versatility with fixed (RWF) or sliding tables (RWS) to suit. Infinitely variable speed comes as standard, giving a speed range of 15 - 90 M/Min 152 - 914 M/Min to enable almost any type of material to be cut.

These high specification machines feature strength and accuracy and are capable of tackling virtually all of your sawing needs.



A heavy duty, infinitely variable speed selection from a 1.1Kw 3PH motor and dual speed range in totally enclosed gear transmission.



The variable speed is easy to adjust. A variable speed handle is mounted on the machine and incorporates a graduated scale.

RW Series Machine



An air chip blower is built into the machine and allows the cutting areas to remain free of chips whilst cutting.

On the "RWS" series (shown above), a mechanical sliding table featuring a rack and pinion feed offers easy and sensitive control. Workpieces are clamped to the table via "T" slots and then the table is fed through. Work stops are also provided as standard.



20RWS model shown

## ACCESSORIES

No other manufacturer offers this range of accessories.  
A complete vertical sawing system is available only from Startrite



**Mitre Gauge**, attaches to the front "T" slot of a sliding table for precision mitre cuts. Please note the accessory listed above will only be compatible with 20RWS + 30RWS. (Mitre Gauge for 20RWF + 30RWF can be seen on page 3.) Part No. SM35B shown



**Complete universal roller guides**. Carbide side guides with roller back-up will adjust to any width or thickness of blade. Part No. SM454 & SM455 shown



**Universal Work Holder**, used only with sliding tables. A multitude of shapes and sizes may be held while sawing. Part No. SM2001 shown



A blade and speed selector dial is available as an optional accessory to accurately inform the operator the optimum blade and speed for a wide range of materials.

Part No. SM216 shown

### Other optional equipment includes:

- 1) SM 2068 High illumination low volt light.
- 2) SM 302 Rip Fence.
- 3) SM 198/B Mitre Gauge for fixed table models.
- 4) SM 46/A Geared pusher for fixed table model.
- 5) SM 1559/A Universal roller guides. (Upper)  
SM 1559B Universal roller guides. (Lower)
- 6) SM 260 Circle cutting attachment.
- 7) SM 454 Universal guides w/- carbide inserts. (Upper)  
SM 455 Universal guides w/- carbide inserts. (Lower)
- 8) SM 290 Combination angle guides (x2)
- 9) SM 1975/D Butt welder, flash grinder, shear and gauge
- 10) SM 2004 Contour Work Holder
- 11) SM 2002 Universal work holder
- 12) SM 358 Mitre gauge sliding table
- 13) SM2021 Gravity feed mist spray

Below is a list of spare parts that we recommend you keep to avoid any downtime of your machine:

- A) 2922 Table Insert 1off
- B) 2473 Bandwheel 3off
- C) 2270 Bandwheel Brush 1off
- D) 802149 Drive Belt 1off
- E) Full range of blade guide inserts depending upon guides fitted & blades used.

### FEATURES & BENEFITS

- 500mm & 760mm throat sizes available.
- A highly accurate blade guidance system for precision work, giving full 250mm capacity.
- Solid cast iron table 520mm x 520mm, featuring two way tilt mechanism. (from 0° to 45°) "RWS" series feature a manual rock and pinion sliding table, providing easy and sensitive control. "RWF" series feature a fixed table.
- Solid cast iron tilt trunnion.
- Heavy duty drive featuring infinitely variable blade speed selection from a 1.1Kw 3PH motor and dual range totally enclosed gear transmission.
- Built-in air chip blower, ensuring the cutting area is kept clear.
- Solid heavy duty steel bandwheels, are made with a layer of bonded rubber to the outside edge of the wheel, which is then ground and dynamically balanced for vibration free running.
- Rigid box frame welded construction, ensures maximum stability for all sawing applications.
- Both, front and rear doors are fitted with an interlock, ensuring that if a door is opened whilst the machine is running the machine will automatically switch off.
- Telescopic blade guards ensure the blade is always enclosed above and below the table.
- On the 30RWF and 30RWS the machine is equipped with an auxiliary blade guard, enabling the machine to be used with two bandwheels only.
- Low voltage control and overload protection.
- Wide range of blade widths, 3mm, 5mm, 6mm, 10mm, 13mm, 16mm.
- Quick change inserts are available for the blades listed immediately above.
- Blade tension indicator.
- Solid ground tool posts.
- Lockable door handles.
- Bandwheel cleaning brush.
- Eccentric cam operation for belt change
- "T" slot on front edge of table for a wide range of accessories.
- Operation and parts manual, toolkit for machine adjustments.
- One year warranty cover.

## V500 & V900 SERIES HEAVY DUTY VERTICAL BANDSAWS.

These heavy duty, high performance machines are driven by a 2.2Kw motor through a variable speed system, giving a speed range of 16 - 1585 M/Min. Such a large speed range suits almost all material types. These machines are fitted with large and extremely heavy duty tables. All models have two way tilting tables. Sliding table models have built-in hydraulic power feed with rapid traverse cutting controls.



A powerful 2.2Kw drive with dual range gearbox and infinitely variable speeds provides smooth and easy sawing of virtually all materials.



Heavy duty precision trunnions are constructed of rugged meehanite cast iron and are fitted with calibrated scales to indicate the degree of tilt 45° R 15° L. Also shown is the chevron blade guidance system. This comprises of double ended interchangeable carbide blade guides and back-up thrust roller with carbide face, all designed for high speed sawing.



The two models carrying the 'H' designation have a built-in hydraulic system which allows the work piece to be clamped to the table 'T' slots whilst the entire table is fed through the blade. Adjustable speed feed 0.890mm/min, and feed force of 0.95kg. Allowing precise control of cut and rapid traverse for quick, efficient set up and operation.



A bandsaw butt-welder, flash grinder shear and gauge for checking the finished weld are all standard equipment on the V500/V900 range. Optional on all other vertical bandsaws. (Part No. SM1925/D 16mm Welder/Grinder)



V900H



# STARTRITE SAWING ADVICE

Always use the widest sawblade possible - the blade will be stronger and will withstand greater feed pressures. Blade tooth pitch is decided by the work piece and machinability. A minimum of two teeth should be in contact with the work. Coarse teeth are generally used for soft materials, fine teeth for hard materials and thin sections. The larger the workpiece the fewer the number of teeth per inch required.

The best surface finish is produced by fine tooth pitch, high saw speed and slow feed rate. Increased cutting rates are obtained by using a coarser tooth pitch, higher saw speed and faster rate of feed. Maximum Blade Life is achieved by selecting a medium pitch blade, slow saw speed and medium rate of feed.

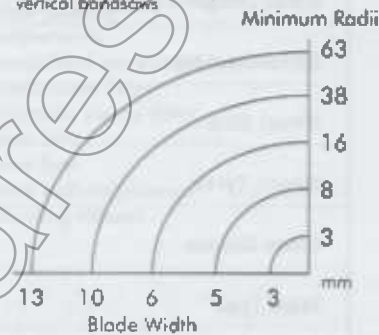
Material:	Teeth per inch & saw Type Size of material - mm					Blade Speed - m/min Size of material - mm				
	Up to 6mm	6-13mm	13-25mm	25-75mm	over 75mm	Up to 6mm	6-13mm	13-25mm	25-75mm	over 75mm
Aluminium	18 R	10 R	6 SK	3 SK	3 SK	1230	920	860	740	615
Aluminium Alloy	14 R	8 R	6 SK	6 SK	3 SK	460	370	310	275	155
Brass, Hard	10 R	8 R	8 R	6 SK	6 SK	160	120	120	55	46
Brass, Soft	10 R	10 R	8 R	6 SK	6 SK	310	245	185	135	92
Bronze, Aluminium	18 R	14 R	10 R	8 R	6 SK	50	43	37	30	25
Cast Iron	14 R	10 R	10 R	10 R	8 R	50	43	37	30	25
Dural	14 R	10 R	8 R	6 H	3 H	570	212	120	82	52
Fibre	18 R	14 R	10 R	8 R	6 SK	370	310	182	90	77
Fibre Glass	14 R					310				
Graphite	18 R	18 R	18 R	14 R	14 R	770	770	770	770	770
Magnesium	14 R	10 R	8 R	6 H	3 H	1080	925	770	615	310
Phosphor Bronze	10 R	8 R	6 SK	3 SK	3 SK	460	370	245	215	150
Plastic (all types)	18 R	14 R	6 R	6 H	6 H	770	615	460	390	310
Rubber (hard)	10 R	8 R	6 R	6 H	6 H	1080	920	920	815	615
Steels:										
Mild Steel F.M.	14 R	10 R	8 R	6 SK	6 SK	71	68	62	62	62
Mild Steel, Bright	18 R	14 R	10 R	8 R	6 H	62	55	50	43	40
Mild Steel, Black	18 R	14 R	10 R	8 R	6 R	46	40	31	31	31
Al Chrome Steel	18 R	14 R	10 R	8 R	6 R	46	40	31	31	31
General Chrome Steel	18 R	14 R	10 R	8 R	6 H	38	31	28	19	15
High Speed Steel	14 R	10 R	8 R	6 R	6 R	38	24	19	19	19
Tool Steel	18 R	14 R	10 R	8 R	6 H	31	26	26	23	23
Stainless Steel	18 R	14 R	10 R	10 R	8 R	26	23	19	17	15
Tubes and Sections	14 R	10 R	10 R	6 R	6 R	77	62	55	53	38

R=Regular Tooth, SK=Skip Tooth, H=Hook Tooth

Tooth Set: Raker Throughout with Exceptions of tubes and thin sections where wavy set should be used.

Speeds indicated are for carbon steel blades when using Bi-metal blades increase speeds by approximately 10%.

Radius Cutting  
The table shows the recommended blade widths for contour sawing on vertical bandsaws



## VERTICAL BANDSAW BLADES

<b>20V, 20RWF &amp; 20RWS.</b> BLADE WIDTH 1/8" 3/16" 1/4" 3/8" 1/2" 5/8"	<b>CARBON STEEL</b> AVAILABLE T.P.I. 14, 18, 24 10, 14, 18, 24 4 & 6 SKIP, 4 & 6 HOOK, 10, 14, 18, 24 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18, 24 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18, 24 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18	<b>BI-METAL</b> AVAILABLE T.P.I. N/A N/A (10&14TPI only) (10&14TPI only) (6,8,10,14 & 4 Hook only) N/A
<b>30V, 30RWF &amp; 30RWS.</b> BLADE WIDTH 1/8" 3/16" 1/4" 3/8" 1/2" 5/8"	<b>CARBON STEEL</b> AVAILABLE T.P.I. 14, 18, 24 10, 14, 18, 24 4 & 6 SKIP, 4 & 6 HOOK, 8, 10, 14, 18, 24 3, 4 & 6 SKIP, 6, 8, 10, 14, 18, 24 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18, 24 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18	<b>BI-METAL</b> AVAILABLE T.P.I. N/A N/A (10&14TPI only) (14TPI only) (6,8,10,14 & 4 Hook only) N/A
<b>V500F &amp; V500H</b> BLADE WIDTH 1/8" 3/16" 1/4" 3/8" 1/2" 5/8" 3/4" 1"	<b>CARBON STEEL</b> AVAILABLE T.P.I. 14, 18 10, 14, 18, 24 4 & 6 SKIP, 4 & 6 HOOK, 10, 14, 18, 24 4 & 6 SKIP, 8, 10, 14 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18, 24 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 8, 10, 14 3, 4 & 6 SKIP, 2, 3, 4 & 6 HOOK, 6, 8, 10, 14	<b>BI-METAL</b> AVAILABLE T.P.I. N/A N/A (10&14TPI only) (14TPI only) (6,8,10,14 & 4 Hook only) N/A (6,8,10,14 & 3 Hook only) (4,6,8,10,14 & 3 Hook only)
<b>V900F &amp; V900H</b> BLADE WIDTH 1/8" 3/16" 1/4" 3/8" 1/2" 5/8" 3/4" 1"	<b>CARBON STEEL</b> AVAILABLE T.P.I. 14, 18, 24 10, 14, 18, 24 4 & 6 SKIP, 4 & 6 HOOK, 8, 10, 14, 24 4 & 6 SKIP, 8, 10, 14, 18 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18, 24 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14, 18 3, 4 & 6 SKIP, 3, 4 & 6 HOOK, 6, 8, 10, 14 3, 4 & 6 SKIP, 2, 3, 4 & 6 HOOK, 6, 8, 10, 14	<b>BI-METAL</b> AVAILABLE T.P.I. N/A N/A (10&14TPI only) (14TPI only) (6,8,10,14 & 3 Hook only) N/A (6,8,10,14 & 3 Hook only) (4,6,8,10,14 & 3 Hook only)

**ACCESSORIES FOR STARTRITE VERTICAL BANDSAWS.**

Part No./Machine	20V/30V	20RWF/30 RWF	20RWS/30RWS	V500F/V900F	V500H/V900H
Rip Fence	SM302	SM302	SM305	SM388	SM388
Mitre Gauge	SM198	SM198	SM358	SM198	SM358
Mitre Gauge - Rack & Pinion	SM46/A	SM46/A	SM46/A	SM46/B	SM46/B
Low Volt Light	SM2068	SM2068	SM2068	SM2068	SM2068
Circle Cutting Attach	SM260	SM260	SM260	SM1377	SM1377
Universal Workholder	n/a	n/a	SM2002	n/a	SM2002
Roller Guides	SM1359/A - Top SM1359/B - Bottom			SM416 + Rollers	
Universal Guides	SM454 - Top SM455 - Bottom			n/a	
Angled Guides	SM260			n/a	
Blade Welder	SM1975/D			Fitted as Standard	
Contour Workholder	n/a	n/a	SM2004	n/a	SM2004
Gravity Feed	SM2021				
Mist Spray	(Please note SM2042 must be fitted)				
Chip Blower	SM2042	Fitted as Standard			

**RECOMMENDED SPARE PARTS.**

Desc./Machine	20V/30V	20RWF/30 RWF	20RWS/30RWS	V500F/V900F	V500H/V900H
Table Insert			2922		
Bandwheels	2473 x 3off	2473 x 3off	2473 x 3off	7791 x 2off	7911 x 2off
Cleaning Brush	2270 x 1off				2270 x 2off
Drive Belts	BO2149	BO2154 & BO2155		BO2140 x 2off	BO2157 x 1off
Air Chip Blower - Drive Belt	Chip Blower not standard	BO2141		BO2148 x 1off	
Grinding Wheel	Only Required if welder fitted			BO2570 x 1off	
Chipblower Filter	Not Standard	BO2355 x 1off			
Hydr. Filter		n/a	BO2680 - Hydraulic models only		

**OTHER MACHINES AVAILABLE FROM STARTRITE - CONTACT CUSTOMER SERVICES (01634 298200) FOR FULL DETAILS.**



**Demonstration Centre**

As part of Startrite's ongoing commitment to providing a fully comprehensive service to its customers, a fully equipped training / demonstration centre has been built at our 33 acre manufacturing site in Sheffield.

Startrite build the finest and broadest range of metalworking saws available, with features, benefits and attention to detail simply not found on imported machines. This is why it is important for Startrite to offer customers and distributors hands on experience of our machines to fully appreciate the advantages of Startrite machines over the competition.

The demonstration centre is located in the centre of the United Kingdom, at Sheffield, just a five minute drive from junction 33 of the M1 motorway.

A comprehensive range of British built Startrite machines can be viewed including the market leading Vertical Bandsaws, Horizontal Bandsaws, a complete range of Circular Cut Off Saws, Pull Down Bandsaws, Heavy Duty Grinding Machines, Industrial Belt Linishers, Magnetic Based Drilling Machines and Industrial Drilling Machines.

So if you are interested in a new machine why not contact Startrite on 01634 298200 and we will be happy to demonstrate why Startrite has been the choice of British industry for over 50 years.



**STARTRITE®**

THE CHOICE OF BRITISH  
INDUSTRY FOR OVER 50 YEARS