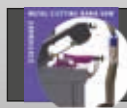




# METAL-CUTTING BAND SAWS



**Stationary machines**  
Page 196 - Page 207



**Transportable machines**  
Page 208 - Page 213

**Manual metal-cutting circular saws for steel, iron, light alloys, solid materials and sections**

**Facts that impress in terms of quality, performance and price**

- ▶ Swivel range of  $\pm 45^\circ$
  - ▶ Easily readable angle scale supports precise work
  - ▶ Mitre adjustment within seconds
  - ▶ Protected vice spindle
  - ▶ Solid machine chassis with drill holes on both sides for attaching the MSR material stand
  - ▶ Long handle supports sawing without applying excessive force, includes integrated pushbutton (on/off)
  - ▶ Automatic coolant pump switch-on during sawing
  - ▶ Functional protection device, closed design, mobile
  - ▶ Fast opening mechanism for optimal safety during cutting
  - ▶ Centrally clamping vise, 4x guided with individually adjustable clamping jaws Cut always occurs in optimal position relative to workpiece
- ▶ Solid machine chassis
  - ▶ Protected vice spindle
  - ▶ Machine chassis sizes:
    - CS 275 - 460 x 515 x 775 mm and
    - CS 315 - 546 x 620 x 801 mm
  - ▶ The saw is delivered without a circular saw blade (saw blade division freely selectable)



Fig.: CS 315

Material supports	Article no.
MSR 4	3357610
MSR 4H	3357001
MSR 7	3357611
MSR 7H	3357002
MSR 10	3357613
MSR 10H	3357003

Information“MSR 4 / MSR 7 / MSR 10” on page 218



## Technical specifications, accessories and dimensions

Model	CS 275	CS 315
Article no.	3302275	3302300
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor output	1.4 / 2.0 kW	0.75 / 1.5 kW
Coolant pump motor	40 W	
General instructions		
Cutting angle	-45° to +45°	
Cutting angle adjustment	Via rotating bearing block	
Feed	manual	
Cutting speed	41 / 82 rpm	19 / 38 rpm
Saw blade diameter	Ø 275 mm Internal Ø 40 mm	Ø 315 mm Internal Ø 40 mm
Vice jaw width	110 mm	135 mm
Dimensions		
Length	460 mm	560 mm
Width	830 mm	902 mm
Height	1 700 mm	1 765 mm
Weight	175 kg	235 kg

### Scope of supply

- › Coolant system
- › Machine chassis

Cutting areas				
CS 275	0°	Ø 60 mm	60 mm	60 x 100 mm
CS 315		Ø 85 mm	85 mm	70 x 130 mm
CS 275	45°	Ø 60 mm	60 mm	60 x 70 mm
CS 315		Ø 85 mm	85 mm	70 x 90 mm

### Circular saw blades - information

4 mm/T: tube/sections (wall thickness)

- › up to 1 mm: Aluminium/Bronze/Copper/Brass
- › up to 1.5 mm: steels up to 1 500 N/m²/stainless steels
- › up to 2 mm: Steels up to 1 200 N/m²

6 mm/T: tube/sections (wall thickness)

- › up to 1.5 mm: Aluminium/Bronze/Copper/Brass
- › as of 3 mm: Steels up to 1 800 N/m²

6 mm/T: solid materials (cross-section)

- › 10-20 mm: Aluminium/Bronze/Copper/Brass
- › 20-40 mm: Steels up to 1 800 N/m²/stainless steels

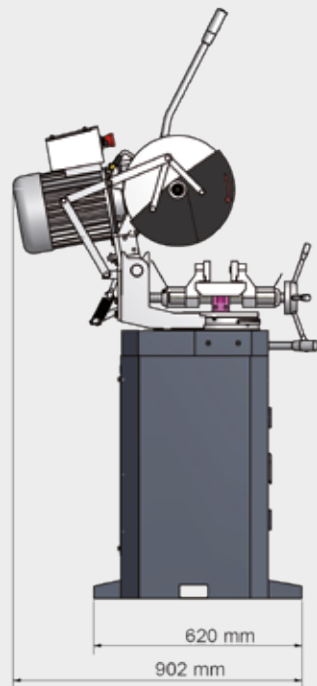
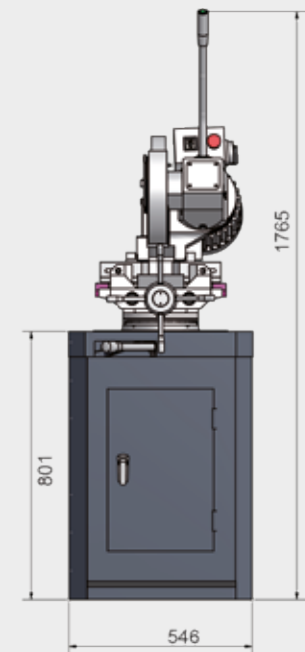
8 mm/T: tube/sections (wall thickness)

- › as of 3 mm: Aluminium/Bronze/Copper/Brass

8 mm/T: solid materials (cross-section)

- › 20-40 mm: Steels up to 1 800 N/m²: Aluminium/Bronze/Copper
- › 40-60 mm: Steels up to 1 200 N/m²/stainless steels

### Dimensions



### Metal-cutting circular saw blade CS 275

mm/per tooth	Teeth	Blade width	Article no.
4 mm/T	220 teeth	2.5 mm	3357444
6 mm/T	140 teeth	2.5 mm	3357446
8 mm/T	110 teeth	2.5 mm	3357448

### CS 315

mm/per tooth	Teeth	Blade width	Article no.
4 mm/T	240 teeth	2.5 mm	3357454
6 mm/T	150 teeth	2.5 mm	3357456
8 mm/T	120 teeth	2.5 mm	3357458

## Semi-automatic double mitre metal cutting band saw with inverter Vario drive

### Facts that impress in terms of quality, performance and price

- ▶ Heavy-duty industrial design
- ▶ Low-noise running action
- ▶ Manual or semi-automatic operation
- ▶ Saw band speed continuously adjustable from 0 to 80 m/min.
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Mitre adjustment to 60° by pivoting the entire saw head
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ End stops adjustable to degree accuracy
- ▶ Chip brush
- ▶ Microswitch for automatic limit position cut-off
- ▶ Roller support adjustable for long and heavy workpieces
- ▶ Coolant pump
- ▶ Ball bearing borne saw band guide with carbide shims for optimal

### cutting results

- ▶ Easy adjustment of the lowering speed via feed control valve in control panel
- ▶ Generously dimensioned, hydraulic quick-action vice, self-closing, adjustable for large cross-sections
- ▶ Machine with full equipment set; the user can immediately start productive work

### Semi-automatic operating mode

- ▶ Vice closes and motor is activated
- ▶ Lower the saw head to cut
- ▶ Motor stops and saw head returns to original position

### Saw band tension



- › Easy and correct adjustment of the saw band tension by pressure gauge



Fig.: SD 350AV



## Technical specifications, accessories and dimensions

Model	SD 350AV
Article no.	3292355
<b>Technical specifications</b>	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	3.8 kW
Saw motor	2.2 kW
Hydraulic pump	1.4 kW
Coolant pump motor	50 W
<b>General instructions</b>	
Lifting the saw head	
› Manual operation	Hydraulic via pushbutton
› Semi-automatic operation	automatic
Feed	continuously variable
Saw band speed	0 - 70 m/min
Saw band dimensions	2 925 x 27 x 0.9 mm
Cutting angle	-45° to 60°
<b>Dimensions</b>	
Length	1 750 mm
Width without/with material stop	1 075 / 1 415 mm
Height bottom/top limit position	1 420 / 2 000 mm
Weight	600 kg

Cutting areas			
0°	Ø 270 mm	230 mm	230 x 350 mm
45°	Ø 230 mm	200 mm	210 x 220 mm
60°	Ø 140 mm	140 mm	140 x 220 mm
-45°	Ø 230 mm	170 mm	140 x 200 mm
The cutting area was determined for a full section. The cutting range can be larger in case of cut-off sections.			

Saw bands HSS bi-metal M 42		
Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357541
4 - 6 tpi	6°	3357540
6 - 10 tpi	0°	3357542
10 - 14 tpi	0°	3357543
Saw band set HSS bi-metal M 42		3357501
1 pc. saw band 6 - 10 tpi; 0°		
1 pc. saw band 5 - 8 tpi; 0°		
1 pc. saw band 4 - 6 tpi; 6°		
„General saw band information“ on page 220		

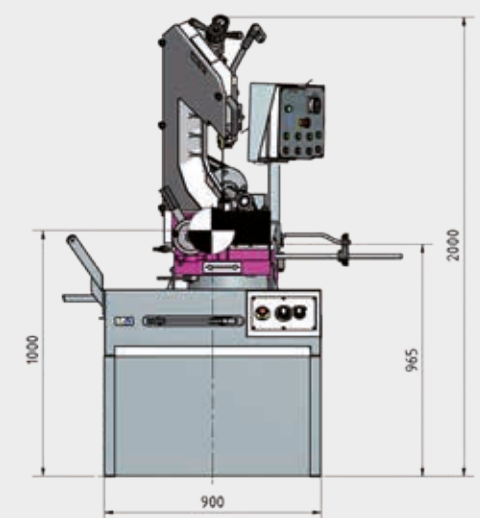
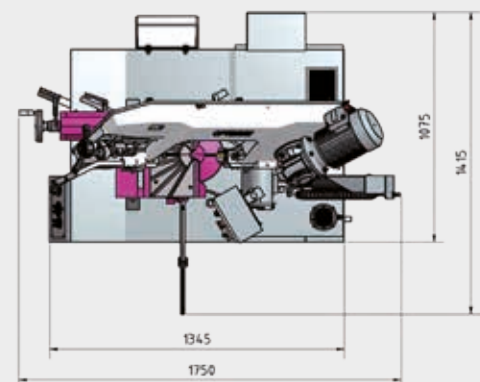
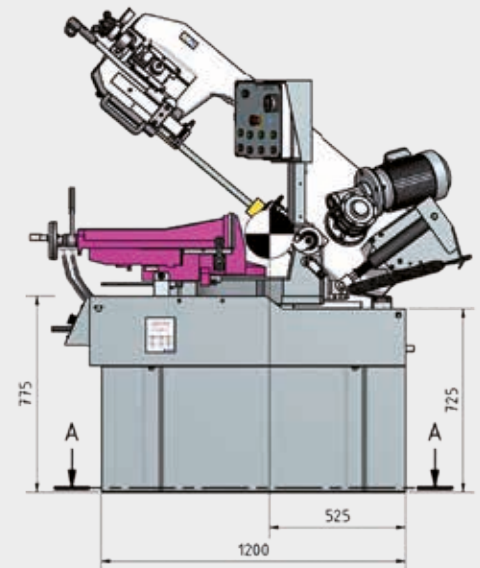
AQUACUT C1	3530030
› For mixing emulsions, for cooling along the cut	
› 10 litres	

Material supports	Article no.
<b>MSR 4H</b> L x W 1 000 x 440 mm	3357001
<b>MSR 7H</b> L x W 2 000 x 440 mm	3357002
<b>MSR 10H</b> L x W 3 000 x 440 mm	3357003
<b>Table extension MSR 1</b>	3357006
<b>PVC rollers for MSR</b>	3357609



Important information on „Operation of machines with frequency converters“ on page 253  
The metal-cutting bandsaw (frequency converter) complies with the DIN EN 55011:2011-04 standard: class C3

### Dimensions



### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis



## Metal-cutting band saw with double mitre in heavy-duty design

### Facts that impress in terms of quality, performance and price

- ▶ Heavy-duty industrial design
- ▶ Low-noise running action
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Two switchable speeds 36/72 m/min.
- ▶ Mitre adjustment to -60° by pivoting the entire saw head
- ▶ Generously dimensioned, rugged quick clamping vice, adjustable via hand wheel Workpiece is clamped using a handy quick-clamping lever
- ▶ Quick clamping vice movable for large materials
- ▶ Easy and accurate adjustment of the saw band tension by pressure gauge
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ End stops adjustable to degree accuracy
- ▶ Chip brush
- ▶ Ball bearing borne saw band guide with carbide shims for optimal cutting results
- ▶ Precise, continuously adjustable saw band movement via hydraulic cylinder
- ▶ Coolant pump
- ▶ Easy adjustment of the lowering speed via feed control valve in control panel
- ▶ Emergency stop button
- ▶ Rugged machine chassis
- ▶ Microswitch for automatic limit position cut-off
- ▶ Roller support adjustable for long and heavy workpieces
- ▶ Fully equipped; the user can immediately start productive work after commissioning

Saw band tension



- › Easy and correct adjustment of the saw band tension by pressure gauge



Fig.: S 350DG



## Technical specifications, accessories and dimensions

Model	S 350DG
Article no.	3290350
<b>Technical specifications</b>	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor output	2.2 kW
Coolant pump motor	50 W
<b>General instructions</b>	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	36/72 m/min.
Saw band dimensions	2 925 x 27 x 0.9 mm
Cutting angle	-45° to 60°
<b>Dimensions</b>	
Length	1 750 mm
Width without/with material stop	1 075 / 1 415 mm
Height bottom/top limit position	1 420 / 2 000 mm
Weight	550 kg

Scope of supply
› Material stop
› Bi-metal saw band
› Machine chassis
› Coolant pump

Cutting areas			
0°	Ø 270 mm	230 mm	230 x 350 mm
45°	Ø 230 mm	200 mm	210 x 220 mm
60°	Ø 140 mm	140 mm	140 x 220 mm
-45°	Ø 230 mm	170 mm	140 x 200 mm

The cutting area was determined for a full section.  
The cutting range can be larger in case of cut-off sections.

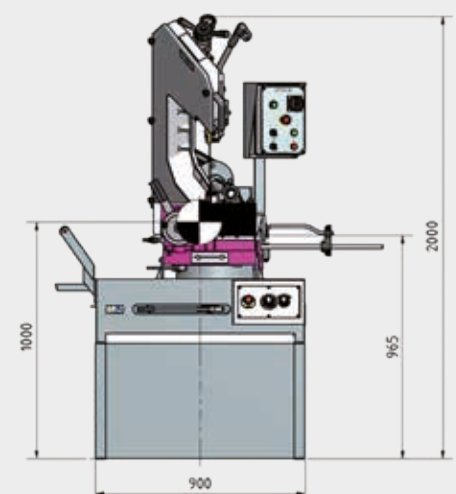
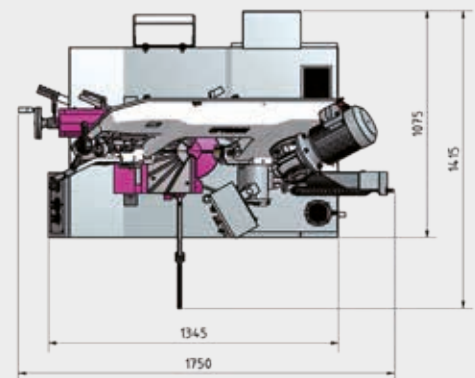
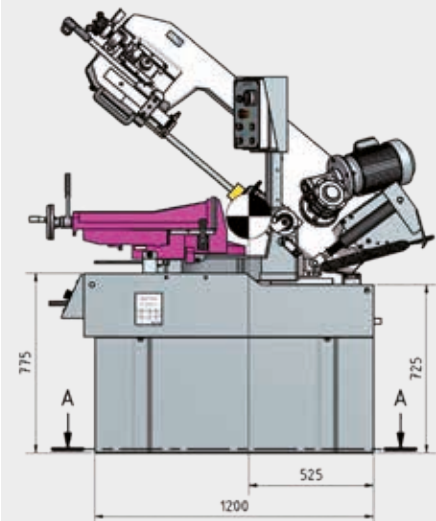
Saw bands HSS bi-metal M 42		
Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357541
4 - 6 tpi	6°	3357540
6 - 10 tpi	0°	3357542
10 - 14 tpi	0°	3357543
Saw band set HSS bi-metal M 42		3357501
1 pc. saw band 6 - 10 tpi; 0°		
1 pc. saw band 5 - 8 tpi; 0°		
1 pc. saw band 4 - 6 tpi; 6°		

„General saw band information“ on page 220

AQUACUT C1	3530030
› For cooling the cut	
› 10 litres	

Material supports	Article no.
MSR 4H	L x W 1 000 x 440 mm
MSR 7H	L x W 2 000 x 440 mm
MSR 10H	L x W 3 000 x 440 mm
Table extension MSR 1	3357006
PVC rollers for MSR	3357609

### Dimensions



## Band saw for metal working with pivoting saw head. S 300DG Vario with continuously adjustable saw band speed

### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Heavy cast design
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Ball-bearing borne saw band guide
- ▶ Chip brush
- ▶ Microswitch for automatic limit position cut-off
- ▶ Pushbutton - manual saw band run - on the lever switches the saw band run on and off
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Material stop with scaling
- ▶ Quick clamping vice, adjustable via hand wheel. Workpiece is clamped using a handy quick-clamping lever
- ▶ Rugged machine chassis
- ▶ End stops adjustable to degree accuracy

### S 300DG Vario

- ▶ Saw band speed continuously adjustable from 20 to 90 m/min.



**Roller support**  
› For supporting long materials



Fig.: S 300DG

### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis
- › Coolant pump

Model	S 300DG
Article no.	3290290
Model	S 300DG Vario*
Article no.	3290295

Technical specifications	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor output	1.5 kW
Coolant pump motor	100 W
General instructions	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	35/70 m/min.
Vario saw band speed	20 - 90 m/min
Saw band dimensions	2 750 x 27 x 0.9 mm
Cutting angle	45° to -60°
Dimensions	
Length	1 680 mm
Width without/with material stop	700 / 1 300 mm
Height bottom/top limit position	1 600 / 1 850 mm
Weight	335 kg

### Pressure gauge



- › Easy and correct adjustment of the saw band tension

### Coolant pump



- › Powerful
- › 100 W

### Roller support



- › For supporting long
- › materials

### Cutting areas

0°	Ø 255 mm	190 mm	190 x 310 mm
45°	Ø 215 mm	190 mm	190 x 200 mm
-60°	Ø 135 mm	135 mm	135 x 135 mm
-45°	Ø 220 mm	190 mm	135 x 190 mm

The cutting area was determined for a full section.  
The cutting range can be larger in case of cut-off sections.

### AQUACUT C1

3530030

- › For cooling the cut
- › 10 litres

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357751
5 - 8 tpi	10°	3357752
6 - 10 tpi	0°	3357753
10 - 14 tpi	0°	3357754

### Saw band set HSS bi-metal M 42

1 pc. saw band 6 - 10 tpi; 0° 1 pc. saw band 5 - 8 tpi; 0° 1 pc. saw band 5 - 8 tpi; 10°	3357700
--	---------

„General saw band information“ on page 220



## Metal-cutting band saw with turntable and pivoting saw head for economic and precise work



### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Heavy cast design
- ▶ Carbide guide
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Saw band speed continuously adjustable via frequency inverter
- ▶ Professional inverter technology
- ▶ High motor output even at low speeds
- ▶ Microswitch for automatic limit position cut-off
- ▶ Precise, re-adjustable and durable saw band guide
- ▶ End stops adjustable to degree accuracy
- ▶ Chip brush
- ▶ Coolant pump
- ▶ Quick clamping vice, adjustable via hand wheel. Workpiece is clamped using a handy quick-clamping lever
- ▶ Rugged machine chassis
- ▶ Control unit facilitates machine setup
- ▶ Fully equipped; the user can immediately start productive work after commissioning



### Pressure gauge



- › Easy and accurate adjustment of the saw band tension

### Turntable






- › Any angle between 45° and -60° can be sawed as the cutting gap pivots with the saw arm
- › Easily legible angle scale

### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis
- › Coolant pump

### Cutting areas

			
0 °	Ø 255 mm	255 mm	200 x 270 mm
45°	Ø 190 mm	160 mm	160 x 160 mm
-60°	Ø 110 mm	110 mm	110 x 210 mm
-45°	Ø 190 mm	140 mm	140 x 210 mm

The cutting area was determined for a full section. The cutting range can be larger in case of cut-off sections.

Model	S 310DG Vario
Article no.	3290335
<b>Technical specifications</b>	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor output	1.5 kW
Coolant pump motor	100 W
<b>General instructions</b>	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	20 - 90 m/min
Saw band dimensions	2 750 x 27 x 0.9 mm
Cutting angle	45° to -60°
<b>Dimensions</b>	
Length	1 680 mm
Width without/with material stop	700 / 1 330 mm
Height bottom/top limit position	1 600 / 2 000 mm
Weight	380 kg

### AQUACUT C1

3530030

- › For cooling the cut
- › 10 litres

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357751
5 - 8 tpi	10°	3357752
6 - 10 tpi	0°	3357753
10 - 14 tpi	0°	3357754

### Saw band set HSS bi-metal M 42

1 pc. saw band 6 - 10 tpi; 0°	3357700
1 pc. saw band 5 - 8 tpi; 0°	
1 pc. saw band 5 - 8 tpi; 10°	

„General saw band information“ on page 220

## Metal-cutting band saw with pivoting saw head and continuously adjustable saw band speed

### Facts that impress in terms of quality, performance and price

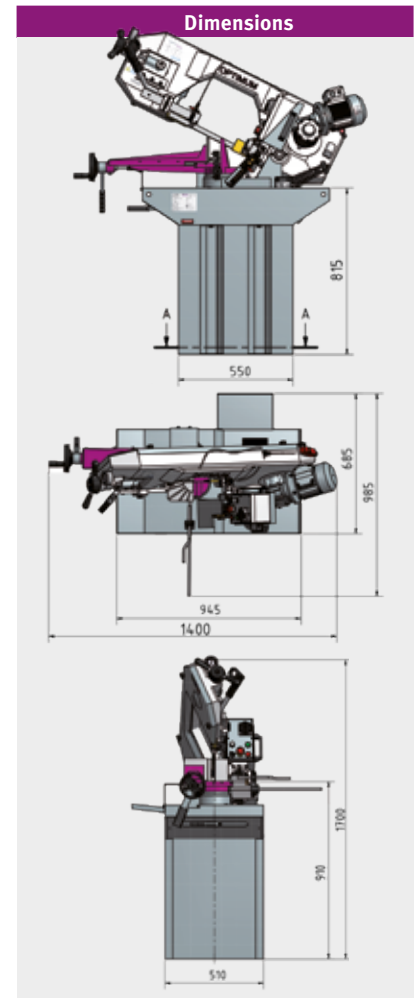
- ▶ Low-noise running action
- ▶ Rugged cast design
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Variable cutting speeds
- ▶ Saw band lowering via hydraulic cylinder continuously adjustable by throttle valve
- ▶ Powerful 100 Watt coolant system
- ▶ Carbide guide
- ▶ Microswitch for automatic limit position cut-off
- ▶ Clear-cut keyboard for ease of use
- ▶ Ball-bearing borne saw band guide
- ▶ Quick clamping vice, adjustable via hand wheel. Workpiece is clamped using a handy quick-clamping lever
- ▶ Easily legible scale for adjusting the angle
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Adjustable material stop for batch work



**Pressure gauge**  
 › Easy and accurate adjustment of the saw band tension



Fig.: SD 280V



### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis
- › Coolant pump

### Cutting areas

0°	Ø 225 mm	190 mm	150 x 235 mm
45°	Ø 155 mm	155 mm	155 x 210 mm
60°	Ø 90 mm	90 mm	90 x 120 mm

The cutting area was determined for a full section.  
 The cutting range can be larger in case of cut-off sections.

Model	SD 280V
Article no.	3300280
<b>Technical specifications</b>	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor output	1.5 kW
Coolant pump motor	100 W
<b>General instructions</b>	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	20 - 90 m/min
Saw band dimensions	2 480 x 27 x 0.9 mm
Cutting angle	0° to 60°
<b>Dimensions</b>	
Length	1 400 / 1 700 mm
Width without/with material stop	685 / 985 mm
Height bottom/top limit position	1 300 / 1 700 mm
Weight	185 kg

AQUACUT C1	3530030
› For cooling the cut	
› 10 litres	

Saw bands HSS bi-metal M 42		
Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357511
5 - 8 tpi	6°	3357512
6 - 10 tpi	0°	3357524
10 - 14 tpi	0°	3357525
Saw band set HSS bi-metal M 42		3357504
1 pc. saw band 6 - 10 tpi; 0°		
1 pc. saw band 5 - 8 tpi; 0°		
1 pc. saw band 5 - 8 tpi; 6°		
„General saw band information“ on page 220		

## Metal-cutting band saw with pivoting saw head for economic and precise work

### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Heavy cast design
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Ball-bearing borne saw band guide
- ▶ Chip brush
- ▶ Automatic saw switch-off after completing the cut
- ▶ Rugged machine chassis
- ▶ Generously dimensioned control unit
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Material stop with scaling
- ▶ Quick clamping vice, adjustable via hand wheel. Workpiece is clamped using a handy quick-clamping lever
- ▶ End stops adjustable to degree accuracy
- ▶ Fully equipped; the user can immediately start productive work after commissioning



Fig.: S 285DG

Scope of supply	
▶ Material stop	
▶ Bi-metal saw band	
▶ Machine chassis	
▶ Coolant pump	

Model	S 285DG
Article no.	3300285

Technical specifications	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor output	1.1 kW
Coolant pump motor	100 W
General instructions	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	45 / 90 m/min
Saw band dimensions	2 480 x 27 x 0.9 mm
Cutting angle	-45° to 60°
Dimensions	
Length	1 720 mm
Width without/with material stop	870 / 1 270 mm
Height bottom / top limit position	1 280 / 1 800 mm
Weight	295 kg

### Pressure gauge



- ▶ Easy and correct adjustment of the saw band tension

### Coolant pump






- ▶ Powerful
- ▶ 100 W

### Roller support



- ▶ For supporting long materials

### Cutting areas

			
0°	Ø 225 mm	180 mm	150 x 245 mm
45°	Ø 150 mm	150 mm	150 x 190 mm
60°	Ø 90 mm	90 mm	90 x 180 mm
-45°	Ø 150 mm	150 mm	120 x 150 mm

The cutting area was determined for a full section.  
The cutting range can be larger in case of cut-off sections.

### AQUACUT C1

3530030

- ▶ For cooling the cut
- ▶ 10 litres

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357511
5 - 8 tpi	6°	3357512
6 - 10 tpi	0°	3357524
10 - 14 tpi	0°	3357525

### Saw band set HSS bi-metal M 42

1 pc. saw band 6 - 10 tpi; 0°	3357504
1 pc. saw band 5 - 8 tpi; 0°	
1 pc. saw band 5 - 8 tpi; 6°	

„General saw band information“ on page 220

## Metal band saw with pivoting saw head. S 275NV with continuously adjustable saw band speed

### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Rugged cast design
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Saw band lowering via hydraulic cylinder continuously adjustable by throttle valve
- ▶ Microswitch for automatic limit position cut-off
- ▶ Coolant system
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Adjustable material stop for batch work
- ▶ Rugged machine chassis
- ▶ Ball-bearing borne saw band guide
- ▶ Quick clamping vice, adjustable via hand wheel. Workpiece is clamped using a handy quick-clamping lever
- ▶ Easily legible scale for adjusting the angle
- ▶ Overload protection

#### S 275N

- ▶ Motor circuit switch
- ▶ Two switchable speeds

#### S 275NV

- ▶ Saw band speed continuously adjustable from 20 to 90 m/min.
- ▶ Speed change possible during operation

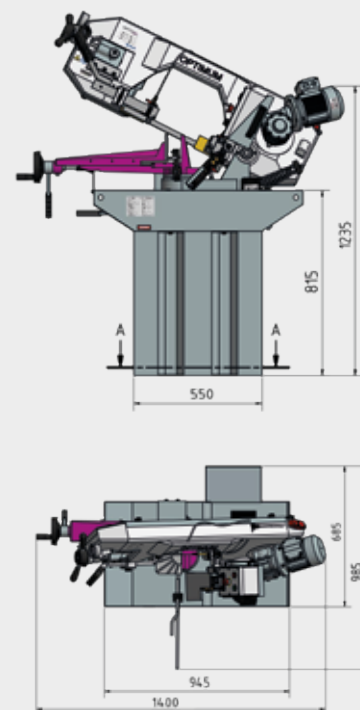
### Pressure gauge

- › Easy and accurate adjustment of the saw band tension



Fig.: S 275N




### Dimensions



### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis
- › Coolant pump

### Cutting areas

			
0 °	Ø 225 mm	170 mm	150 x 245 mm
45°	Ø 145 mm	145 mm	145 x 180 mm
60°	Ø 90 mm	90 mm	90 x 120 mm

The cutting area was determined for a full section.  
The cutting range can be larger in case of cut-off sections.

Model	S 275N	S 275NV
Article no.	3300260	3300265
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor output	1.1 kW	1.5 kW
Coolant pump motor	90 W	
General instructions		
Lifting the saw head	manual	
Feed	continuously variable	
Saw band speed	45 / 90 m/min	20 - 90 m/min
Saw band dimensions	2 480 x 27 x 0.9 mm	
Cutting angle	0° to 60°	
Dimensions		
Length	1 400 mm	
Width without/with material stop	685 mm / 985 mm	
Height bottom/top limit position	1 235 mm / 1 700 mm	
Weight	185 kg	

### AQUACUT C1

3530030

- › For cooling the cut
- › 10 litres

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Art.no.
5 - 8 tpi	0°	3357511
5 - 8 tpi	6°	3357512
6 - 10 tpi	0°	3357524
6 - 10 tpi	6°	3357510
10 - 14 tpi	0°	3357525

### Saw band set HSS bi-metal M 42

1 pc. Saw band 6 - 10 tpi; 6°	3357504
1 pc. Saw band 5 - 8 tpi; 0°	
1 pc. Saw band 5 - 8 tpi; 6°	

„General saw band information“ on page 220



## Metal-cutting band saw with pivoting saw head and two saw band speeds

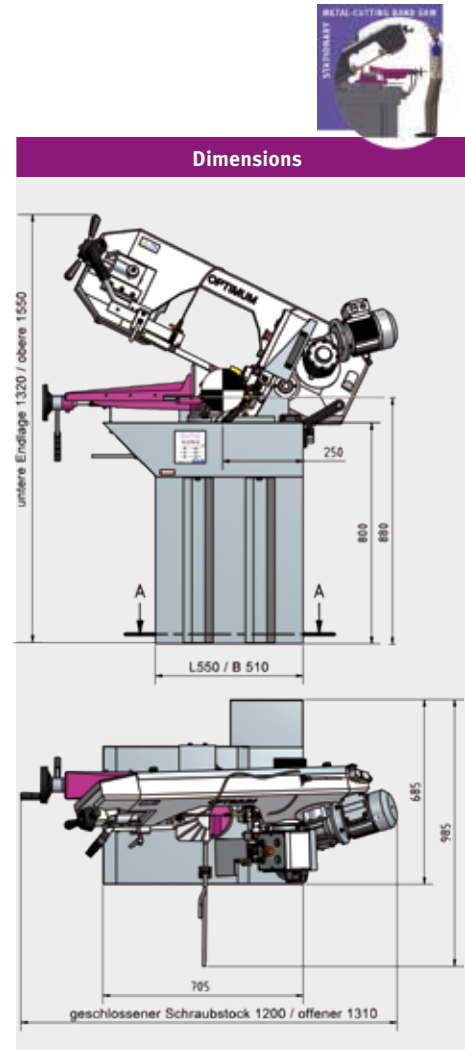
### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Rugged cast design
- ▶ Excellent cutting precision thanks to vibration-free action
- ▶ Two switchable speeds
- ▶ Saw band lowering via hydraulic cylinder continuously adjustable by throttle valve
- ▶ Microswitch for automatic limit position cut-off
- ▶ Easily legible scale for adjusting the angle
- ▶ Coolant system
- ▶ Rugged machine chassis
- ▶ Ball-bearing borne saw band guide
- ▶ Quick clamping vice, adjustable via hand wheel. Workpiece is clamped using a handy quick-clamping lever
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Adjustable material stop for batch work
- ▶ Fully equipped; the user can immediately start productive work after commissioning



Fig. S 210

Model	S 210G
Article no.	3300210
<b>Technical specifications</b>	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor output	750 W
Coolant pump motor	90 W
<b>General instructions</b>	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	40 / 80 m/min
Saw band dimensions	2 080 x 20 x 0.9 mm
Cutting angle	0° to 45°
<b>Dimensions</b>	
Length of closed/open vise	1 200 / 1 310 mm
Width without/with material stop	685 / 985 mm
Height bottom/top limit position	1 320 / 1 550 mm
Weight	152 kg






### Dimensions

### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis
- › Coolant pump

### Cutting areas

			
0 °	Ø 170 mm	140 mm	140 x 190 mm
45°	Ø 125 mm	125 mm	95 x 140 mm

The cutting area was determined for a full section.  
The cutting range can be larger in case of cut-off sections.

### AQUACUT C1

3530030

- › For cooling the cut
- › 10 litres

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357503
5 - 8 tpi	6°	3357505
6 - 10 tpi	0°	3357514
10 - 14 tpi	0°	3357515

### Saw band set HSS bi-metal M 42

1 pc. saw band 6 - 10 tpi; 0°	3357502
1 pc. saw band 5 - 8 tpi; 0°	
1 pc. saw band 5 - 8 tpi; 10°	

„General saw band information“ on page 220



## The metal-cutting band saw for challenging sawing tasks. With drive belt and 4 sawing speeds



### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Rugged cast design
- ▶ Saw band lowering via hydraulic cylinder continuously adjustable by throttle valve
- ▶ Microswitch for automatic limit position cut-off
- ▶ Easily legible scale for adjusting the angle
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Saw band tensioning at front, adjustable via handwheel
- ▶ Ball-bearing borne saw band guide
- ▶ Rugged machine chassis with large wheels and handy transport bar allows trouble-free relocation of the machine
- ▶ Adjustable material stop for batch work
- ▶ Circuit breaker for belt cover
- ▶ Fully equipped; the user can immediately start productive work after commissioning



### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis

### Model

Article no. 3300181

### Technical specifications

Electrical connection 400 V / 3 Ph ~50 Hz  
 Motor output 750 W  
 Coolant pump motor 90 W

### General instructions

Lifting the saw head manual  
 Feed continuously variable  
 Saw band speed 21 / 33.5 / 45 / 50 m/min  
 Saw band dimensions 2 362 x 19 x 0.9 mm  
 Cutting angle 0° to 45°

### Dimensions

Length 1 295 mm  
 Width  
 Without material stop 450 mm  
 With material stop 600 mm  
 Height  
 Saw head bottom limit position 1 060 mm  
 Saw head top limit position 1 550 mm  
 Weight 130 kg

### Belt



- › Four speeds
- › Adjustable by shifting the drive belt

### Quick clamping vice






- › Clamping jaws adjustable from 0° to 45° for mitre cuts

### Coolant equipment



- › Integrated in chassis
- › Tank capacity 11 litres

### Cutting areas

			
0 °	Ø 180 mm	180 mm	180 x 240 mm 50 x 300 mm
45°	Ø 110 mm	150 mm	110 x 170 mm

The cutting area was determined for a full section.  
 The cutting range can be larger in case of cut-off sections.

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357522
5 - 8 tpi	6°	3357516
6 - 10 tpi	0°	3357521
10 - 14 tpi	0°	3357520

### Saw band set HSS bi-metal M 42

1 pc. saw band 6 - 10 tpi; 0°  
 1 pc. saw band 5 - 8 tpi; 0°  
 1 pc. saw band 5 - 8 tpi; 6°

3357500

„General saw band information“ on page 220

## The metal-cutting band saw for challenging sawing tasks. With manual gearing and 3 sawing speeds

### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Rugged cast design
- ▶ Saw band lowering via hydraulic cylinder continuously adjustable by throttle valve
- ▶ Microswitch for automatic limit position cut-off
- ▶ Easily legible scale for adjusting the angle
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Ball-bearing borne saw band guide
- ▶ Rugged machine chassis with large wheels and handy transport bar allows trouble-free relocation of the machine
- ▶ Saw band tensioning at front, adjustable via handwheel
- ▶ Adjustable material stop for batch work
- ▶ Fully equipped; the user can immediately start productive work after commissioning



### Scope of supply

- ▶ Material stop
- ▶ Bi-metal saw band
- ▶ Machine chassis

Model	S 181G
Article no.	3300182

Technical specifications	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor output	750 W
Coolant pump motor	90 W
General instructions	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	45 / 67 / 77 m/min
Saw band dimensions	2 362 x 19 x 0.9 mm
Cutting angle	0° to 45°
Dimensions	
Length	1 200 mm
Width	
Without material stop	450 mm
With material stop	600 mm
Height	
Saw head bottom limit position	1 060 mm
Saw head top limit position	1 550 mm
Weight	130 kg

### Gear



- ▶ Three speeds
- ▶ Switchable via gearbox

### Quick clamping vice






- ▶ Clamping jaws adjustable from 0° to 45° for mitre cuts

### Coolant equipment



- ▶ Integrated in chassis
- ▶ Tank capacity 11 litres

### Cutting areas

			
0 °	Ø 180 mm	180 mm	180 x 240 mm 65 x 300 mm
45°	Ø 110 mm	150 mm	110 x 170 mm

The cutting area was determined for a full section. The cutting range can be larger in case of cut-off sections.

### AQUACUT C1

3530030

- ▶ For cooling the cut
- ▶ 10 litres

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357522
5 - 8 tpi	6°	3357516
6 - 10 tpi	0°	3357521
10 - 14 tpi	0°	3357520

### Saw band set HSS bi-metal M 42

1 pc. saw band 6 - 10 tpi; 0°	3357500
1 pc. saw band 5 - 8 tpi; 0°	
1 pc. saw band 5 - 8 tpi; 6°	

„General saw band information“ on page 220

## Band saw for metal working with mitre-pivoting saw head and continuously adjustable saw band speed

### Facts that impress in terms of quality, performance and price

- ▶ Low-noise running action
- ▶ Grey cast base plate and saw head
- ▶ Stable saw frame for smooth, low-vibration action
- ▶ Easily legible scale for adjusting the angle
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Saw band tensioning at front, adjustable via handwheel
- ▶ Adjustable material stop for batch work
- ▶ Fast workpiece clamping thanks to quick clamping vice
- ▶ Fully equipped; the user can immediately start productive work after commissioning

#### Pushbutton

##### Manual saw band run

- › Switches the saw band run on and off

#### Ball-bearing borne saw band guide

#### Machine chassis

- › Robust

#### Control unit



- › Generously dimensioned
- › Emergency stop button
- › Coolant pump switch
- › Potentiometer

#### Vario drive





- › Continuously variable saw band speed

#### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis
- › Coolant system

#### Cutting areas

			
0°	Ø 150 mm	160 mm	150 x 160 mm
45°	Ø 105 mm	105 mm	105 x 130 mm
60°	Ø 65 mm	65 mm	65 x 65 mm

The cutting area was determined for a full section.  
The cutting range can be larger in case of cut-off sections.

Model	S 150G Vario
Article no.	3300150

Technical specifications	
Electrical connection	230 V / 1 Ph ~ 50 Hz
Motor output	1.1 kW
Coolant pump motor	50 W
General instructions	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	20 - 65 m/min
Number of speeds	Continuously variable
Saw band dimensions	1 735 x 12.7 x 0.9 mm
Cutting angle	0° to 60°
Dimensions	
Length of vice open/closed	1 120 / 930 mm
Width without/with material stop	510 / 720 mm
Height of saw head bottom/top limit position	1 240 / 1 590 mm
Weight	100 kg

AQUACUT C1	3530030
------------	---------

- › For cooling the cut
- › 10 litres

#### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
6 tpi	10°	3351521
6 - 10 tpi	0°	3351522
10 - 14 tpi	0°	3351538

Saw band set HSS bi-metal M 42	
1 pc. saw band 6 tpi; 10°	3351501
1 pc. saw band 6 - 10 tpi; 0°	
1 pc. saw band 10 - 14 tpi; 0°	

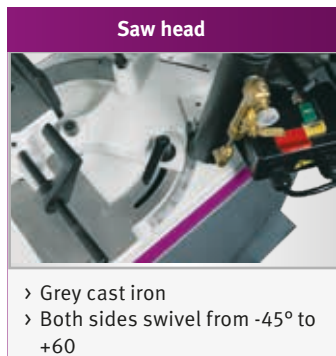
„General saw band information“ on page 220

## Metal-cutting band saw ideal for light sawing work. Mitre cutting from -45° to 60° via pivoting saw head



### Facts that impress in terms of quality, performance and price

- ▶ Circuit breaker for belt cover and saw band cover, low-voltage version
- ▶ Separate emergency stop button
- ▶ Low-voltage electronics 24 V
- ▶ Low-noise running action
- ▶ Mobile machine chassis
- ▶ Ball-bearing borne saw band guide
- ▶ Three gears for a wide choice of materials
- ▶ Microswitch for automatic limit position cut-off
- ▶ Easily legible scale for adjusting the angle
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Saw band tensioning at front, adjustable via handwheel
- ▶ Adjustable material stop for batch work
- ▶ Quick clamping vice for fast workpiece clamping



**Saw head**

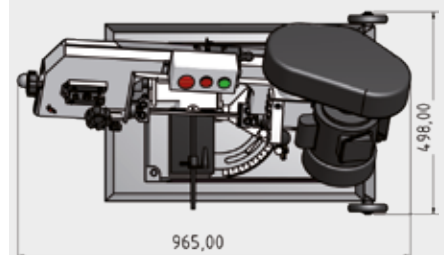
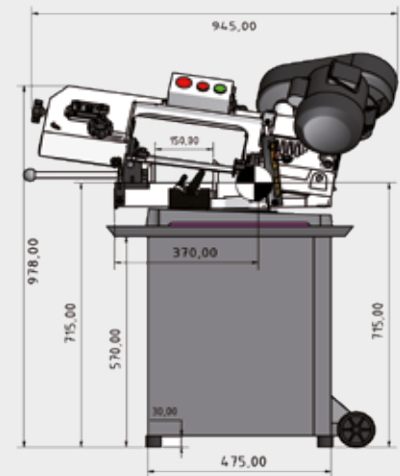
- › Grey cast iron
- › Both sides swivel from -45° to +60



Fig.: S 131GH

Model	S 131GH
Article no.	3300131
<b>Technical specifications</b>	
Electrical connection	230 V / 1 Ph ~50 Hz
Motor output	1.1 kW
<b>General instructions</b>	
Lifting the saw head	manual
Feed	continuously variable
Saw band speed	22 / 31 / 55 m/min
Saw band dimensions	1 638 x 13 x 0.65 mm
Cutting angle	-45° to 60°
Weight	78 kg

### Dimensions



### Scope of supply

- › Material stop
- › Bi-metal saw band
- › Machine chassis

### Cutting areas

0°	Ø 128 mm	145 mm
45°	Ø 90 mm	100 mm
60°	Ø 45 mm	45 mm
-45°	Ø 90 mm	100 mm

The cutting area was determined for a full section.

The cutting range can be larger in case of cut-off sections.

### Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
<b>6 - 10 tpi</b>	<b>0°</b>	3351512
<b>8 - 12 tpi</b>	<b>0°</b>	3351517
<b>10 - 14 tpi</b>	<b>0°</b>	3351518
<b>6 tpi</b>	<b>10°</b>	3351511

### Saw band set HSS bi-metal M 42

1 pcs. Saw band 10 - 14 tpi; 0°	3351500
1 pc. Saw band 6 tpi; 0°	
1 pc. Saw band 6 - 10 tpi; 6°	

„General saw band information“ on page 220



**Light and handy metal band saw.** Ideal for universal deployment on construction sites, on jobs, in customer service vehicles, workshops, hobby workshops and in agriculture



## Facts that impress in terms of quality, performance and price

- ▶ Quick clamping vice for fast workpiece clamping
- ▶ Saw head swivels from 0° to 45° to allow angled sawing
- ▶ Easily legible scale for adjusting the angle
- ▶ Microswitch for automatic limit position cut-off
- ▶ Automatic lowering of the saw head via three-stage adjustable saw head lowering pressure
- ▶ Equipped as a factory standard with bi-metal saw blade
- ▶ Large, handy handle and light weight allow for trouble-free transport to the construction site
- ▶ Adjustable material stop for batch work
- ▶ Fully equipped; the user can immediately start productive work after commissioning
- ▶ Transportation lock



Fig.: S 100 G

## Optional accessory Machine chassis MUG 1

- › Stable, space-saving, folding, easy to transport
  - › Dimensions L x W x H: 500 x 470 x 780 mm
- Art. no. 3630000**

Model	S 100G
Article no.	3300100

Technical specifications	
Electrical connection	230 V / 1 Ph ~ 50 Hz
Motor output	370 W
General instructions	
Saw band speed	45 m/min
Saw band dimensions	1 470 x 13 x 0.65 mm
Cutting angle	0° to 45°
Dimensions	
Length of vice open / closed	950 / 850 mm
Width without/with material stop	300 / 660 mm
Height bottom/top limit position	680 / 820 mm
Weight	23 kg

## Automatic limit switch cut-off



- › Switches the saw band off at the bottom stop

## Saw band guide



- › Ball-bearing borne 3-point guide

## Transport



- › Large, handy handle and light weight allow for trouble-free transport to the construction site

## Scope of supply

- › Material stop
- › Operating tool
- › Bi-metal saw band

## Cutting areas

0 °	Ø 100 mm	100 mm	100 x 150 mm
45°	Ø 65 mm	60 mm	60 x 100 mm

The cutting area was determined for a full section.  
The cutting range can be larger in case of cut-off sections.

## Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
<b>10 - 14 tpi</b>	<b>0°</b>	3351110
<b>6 tpi</b>	<b>10°</b>	3351109
<b>Saw band set</b> HSS bi-metal M 42		3351100
1 pcs. Saw band 10 - 14 tpi; 0°		
2 pcs. Saw band 6 tpi; 10°		
„General saw band information“ on page 220		

„General saw band information“ on page 220



## Transportable mitre bandsaws with excellent cutting precision, extremely low-noise. With continuously adjustable saw band speed



### Facts that impress in terms of quality, performance and price

- Equipped as a factory standard with bi-metal saw blade
- Adjustable material stop for batch work
- Pushbutton for saw band run switches the saw band run on and off
- Base plate with anti-slip feet
- Low vibration and wear thanks to special gearbox with two hardened steel gears
- Vario drive motor with low speed and carbon brushes for up to 10x longer service life

#### SP 11V

- Saw head swivels from 0° to +45° to allow angled sawing

#### SP 13V

- Saw head swivels from 0° to +60° to allow angled sawing



Fig.: SP13V

#### optional accessory

Machine chassis MUG 1

Stable, space-saving, folding, easy to transport

► Dimensions L x W x H: 500 x 470 x 780 mm

Art. no. 3630000

Model	SP 11V	SP 13V
Article no.	3300070	3300075
<b>Technical specifications</b>		
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor output	850 W	1 kW
<b>General instructions</b>		
Saw band speed	30 - 80 m/min	30 - 80 m/min
Saw band dimensions	1 335 x 13 x 0.65 mm	1 440 x 13 x 0.65 mm
Cutting angle	0° - 45°	0° - 60°
<b>Dimensions</b>		
Length	650 mm	720 mm
Width without/with material stop	290 / 670 mm	300 / 650 mm
Height bottom/top limit position	450 / 630 mm	420 / 680 mm
Weight	19 kg	19.5 kg

#### Mitre square



- Easily legible scale for adjusting the angle

#### Saw band guide



- Ball-bearing borne; for an excellent band run and thus optimal cutting

#### Vario drive



- Continuously adjustable saw band speed from 30 - 80 m/min.

#### Scope of supply

- Material stop
- Bi-metal saw band

Cutting areas				
SP 11V	0°	Ø 105 mm	100 mm	100 x 100 mm
SP 13V		Ø 125 mm	125 mm	125 x 125 mm
SP 11V	45°	Ø 65 mm	60 mm	60 x 65 mm
SP 13V		Ø 85 mm	85 mm	85 x 85 mm
SP 13V	60°	Ø 45 mm	45 mm	45 x 50 mm

The cutting area was determined for a full section. The cutting range can be larger in case of cut-off sections.

#### Saw bands HSS bi-metal M 42

	Teeth per inch	Tooth angle	Article no.
SP 11V	6 - 10 tpi	0°	3351542
	10 - 14 tpi	0°	3351543
SP 13V	6 - 10 tpi	0°	3351546
	10 - 14 tpi	0°	3351547

„General saw band information“ on page 220

## Height-adjustable MSR material stand as a manual aid for supporting and moving workpieces on metal-cutting saws. H version variably adjustable up to 1 050 mm

### Facts that impress in terms of quality, performance and price

- Trouble-free and material transport when feeding and unloading workpieces
- Universally deployable for metal-cutting band saws, circular saws, etc.
- Roller support, continuously adjustable
- Safe workpiece support due to solid steel rollers with high load-bearing capacity
- Infinitely extensible
- Extension options for LMS length measuring systems
- Stable frame design with strong custom profile
- Steel bearing rollers, ball-bearing borne on both sides



Fig.: MSR 4

Fig.: MSR 7

Fig.: MSR 10

### PVC rollers



- Item No. 3357009
- Additionally attachable
- Made of non-slip PVC
- To avoid scratches
- Simply slot the rollers into the holder provided
- With practical wall-mount

### Tischverlängerung MSR 1



- Item No. 3357006
- Additionally attachable
- Can be fitted in both directions

### Scope of supply

- Fastening material for extension

Model	MSR 4	MSR 7	MSR 10
Article no.	3357610	3357611	3357613
Model	MSR 4H	MSR 7H	MSR 10H
Article no.	3357001	3357002	3357003

Technical specifications			
Idler roller diameter	60 mm	60 mm	60 mm
Idler roller width	360 mm	360 mm	360 mm
Static table load	500 kg	700 kg	700 kg
Dimensions			
Length x width	1 000 x 440 mm	2 000 x 440 mm	3 000 x 440 mm
height	650 - 950 mm	650 - 950 mm	650 - 950 mm
Height H version	660 - 1 050 mm	660 - 1 050 mm	660 - 1 050 mm
Weight	30/33 kg	58/61 kg	78/83 kg

### Anschlussplatte



- Item No. 3357005
- Additionally attachable
- With add-on parts right and left
- Slots

Accessories	PVC rollers 3 pcs.	Table extension MSR 1	Connecting plate
Article no.	3357609	3357006	3357005

**Digital trimming and length measuring systems for attaching to MSR material stand.**  
For perfect length measurement and precise positioning

**Facts that impress in terms of quality, performance and price**

- ▶ Magnetic measuring system with magnetic strip
  - ▶ For recurring measuring tasks with high precision 0.05 mm
  - ▶ Automatic display switch-on
  - ▶ Material stop for small pieces with extension
  - ▶ Positioning slide right- and left-hand, folds up
  - ▶ In case of longer breaks, the measuring system switches off and keeps the last stored dimension
  - ▶ Measuring precision:  $\pm(0.025 + 0.02 \times \text{measuring length [m]})$
  - ▶ Battery life of up to 10 years
- › Display: LCD
  - › Switching functions:
  - › Display reset
  - › Reset
  - › Directional display  $\pm$
  - › Absolute dimension and chain dimension function
  - › Right and left stop



Fig.: MSR 4 material stand with LMS 10 length measuring system

Model	LMS 10	LMS 20	LMS 30	LMS 40
Article no.	3383851	3383852	3383853	3383854
<b>Technical specifications</b>				
Rail length	1 000 mm	2 000 mm	3 000 mm	4 000 mm
Travel	830 mm	1 830 mm	2 830 mm	3 830 mm

Other lengths on request

**Slide**



- › Easily movable
- › Precisely guided
- › Replaceable, long-life dry plain bearings
- › Easy self-assembly

**Linear guide**



- › Lubrication-free
- › Very quiet action
- › Wear resistant
- › Corrosion-resistant
- › Low friction values
- › High static load bearing capacity

**Manuel trimming and length measuring systems LMS 1M / LMS 2M for attaching to MSR material stand.**

- ▶ For perfect length measurement and precise positioning
- ▶ For recurring measuring tasks with high precision



trimming and length measuring system	Article no.
LMS 1M (1 000 mm)	3383841
LMS 2M (2 000 mm)	3383842

Digital displayDRO1	Article no.
Mounting kit for LMS 1M / 2M	3383845



## General saw band information

### Workpiece

The workpiece to be machined must be firmly clamped so that it cannot vibrate or twist. Do not use damaged, bent or severely deformed workpieces. The closer the band saw guides are fixed relative to the workpiece, the more precise the cut becomes.



### Teeth per inch

This figure describes the number of teeth per inch (25.4 mm).

As a general rule:

The shorter the cut length (e.g., sections), the finer the tpi you need to select. The greater the material attack (e.g., solid material), the coarser the tpi value used.

Too large a tpi value can cause the cut to run out as chips clog the gullet thus forcing the saw band out of its cutting line. Too small a tpi value can cause teeth to break out as the cutting pressure on the individual tooth becomes too great. At least 3 teeth need to be engaged to achieve economical results.

### Running in saw bands

- ▶ Correct running in guarantees a long service life.
- ▶ Sharp cutting edges with extremely small edge radii are the precondition for high cutting capacity of the saw bands.
- ▶ To achieve an optimal service life, we recommend running in the saw band appropriately.
- ▶ Depending on the material and the dimension of the material you are cutting, determine the correct cutting speed (m/min.) and feed rate (mm/min.).
- ▶ The important thing is that the new saw band should be deployed at approx. 50 % of the determined feed rate only. The idea is to avoid the extremely sharp cutting edges on the teeth being damaged by micro fracturing in case of large chip thicknesses.
- ▶ New saw bands can tend to vibrate and cause vibration noise initially. If this happens, reduce the cutting speed slightly. In case of small workpiece dimensions, the run-in should be over approx. 300 - 500 cm<sup>2</sup> of the material you are cutting.
- ▶ If you are processing large workpiece dimensions, we recommend running in for a period of approx. 15 min. After running in, gradually increase the feed rate to the target value determined previously.

### Optimal chip formation

- › Chips are the best indicator of a correctly adjusted feed and the correct saw band speed. Take a look at the chips you generate and set the feed correctly.

### Thin chips that look like powder

- › Increase the feed rate or reduce the saw band speed.



### Burnt, heavy chips

- › Reduce the feed rate and/or the saw band speed



### Crinkly, silver and warm chips

- › Optimal feed rate and sawing speed



Materials	Cutting speed (M42)
Construction steel/Machining steel	80 - 90 m/min
Case-hardened steels/Heat-treated steels	45 - 75 m/min
Unalloyed tool steels/Rolled steels	40 - 60 m/min
Alloyed tool steels/high-speed steels	30 - 40 m/min
Stainless steels	20 - 35 m/min
Heat resistant steels/Highly heat-resistant alloys	15 - 25 m/min

### Teeth per inch when using HSS bi-metal bands

Standard tpi		Combined tpi		Sawing tubes and sections						
Section cross-section	Number of teeth per inch	Section cross-section	Number of teeth per inch	diameter	Ø 40	Ø 80	Ø 100	Ø 150	Ø 200	Ø 300
				Wall thickness	Teeth per inch					
< 12 mm	14 tpi	< 25 mm	10 - 14 tpi	3 mm	8 - 12	8 - 12	8 - 12	8 - 12	6 - 10	6 - 10
12 - 30 mm	10 tpi	20 - 40 mm	8 - 12 tpi	8 mm	8 - 12	6 - 10	6 - 10	5 - 8	4 - 6	4 - 6
30 - 50 mm	8 tpi	25 - 70 mm	6 - 10 tpi	12 mm	6 - 10	5 - 8	5 - 8	4 - 6	4 - 6	4 - 6
50 - 80 mm	6 tpi	35 - 90 mm	5 - 8 tpi	15 mm	5 - 8	4 - 6	4 - 6	4 - 6	3 - 4	3 - 4
80 - 100 mm	4 tpi	50 - 100 mm	4 - 6 tpi	20 mm	-	4 - 6	4 - 6	4 - 5	4 - 5	4 - 5