OPTIMUM®
MASCHINEN - GERMANY

METAL-CUTTING BAND SAWS
METAL-CUTTING CIRCULAR SAWS



OPTIsaw® SQ-V10

NEW

quantum® MASCHINEN - GERMANY

DIY

VARIO

This **manual band saw** can either be installed on the optional work table with vice, as well as used free-hand guided

Facts that impress in terms of quality, performance and price

- Powerful 1.1 kW motor
- Ideally suited for sawing solid steel materials with low tensile strength, preferably for sawing off pipes, steel sections, aluminium and non-ferrous metals.
- Also suitable for cutting wood, plastics and other thin non-ferrous metals
- Strong bridge construction with aluminium frame
- Variable saw band speed for various materials
- Easy-to-operate saw blade clamps and adjusting screws ensure permanently precise band run
- The saw supports virtually spark-free sawing without coolant and is thus easy on the material
- LED work light illuminates dark work areas for precise cutting
- Reduced cutting noise
- Always the right working position thanks to the adjustable additional grip
- Transport case
- Removable from optional worktable for flexible use

Controller



› for variable speed adjustment between 42 and 144 m/min.





Work table
› Vice included
› Net weight 13 kg
Article no. 3184212

Scope of delivery
› Transport case
› Bi-metal saw band 10- 14 teeth per inch M42

Model	SQ-V10
Article no.	3184210
Electrical connection	230 V/1 Ph ~50 Hz
Motor power	1.1 kW
Saw band speed	42 - 144 m/min
Saw band dimensions	1 140 x 13 x 0.65 mm
Length x width x height	465 x 280 x 165 mm
Net weight	6.6 kg

Cutting areas

with optional work table			
0°	Ø 115 mm	105 mm	100 x 115 mm
45°	Ø 45 mm	40 mm	30 x 45 mm
without optional work table			
0°	Ø 127 mm	127 mm	127 x 127 mm
45°	Ø 40 mm	40 mm	40 x 120 mm

Saw bands HSS bi-metal M 42

Teeth per inch	Article no.
10 - 14 tpi	3357548

Important information on„Operation of machines with frequency converters“ on page 323
The manual band saw (frequency converter) complies with the DIN EN 55011 standard: class C2

NEW

OPTIMUM® MASCHINEN - GERMANY

Transportable mitre bandsaws with excellent cutting precision, extremely low-noise.

With continuously adjustable saw band speed

DIY VARIO GEARBOX

Facts that impress in terms of quality, performance and price

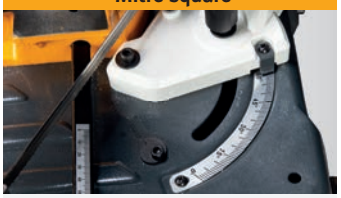
- Equipped as a factory standard with bi-metal saw blade
- Adjustable material stop for batch work
- Pushbutton on lever arm for saw band run, switches the saw band run on and off
- Base plate with anti-slip feet
- Swivelable saw bow from 0° to +60° to allow angled saw cuts





Optional accessories
Machine base MUG 1
› Stable, space-saving, folding, easy to transport
› Dimensions L x W x H: 500 x 470 x 780 mm
Article no. 3351490

Mitre square



› Easily legible scale for adjusting the angle

Saw band guide



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

Pushbutton



› Pushbutton on lever arm for saw band run
› Switches the saw band run on and off

Vario drive



› Continuously adjustable saw band speed from 30 to 80 m/min

Scope of delivery
› Material stop
› Bi-metal saw band

Model	SQ-V13
Article no.	3194013
Electrical connection	230 V/1 Ph ~50 Hz
Motor power	400 W
Saw band speed	30 - 80 m/min
Saw band dimensions	1 440 x 12.5 x 0.6 mm
Cutting angle	0° - 60°
Length of open/closed vice	795 / 670 mm
Width without/with material stop	382 / 613 mm
Height, lower / upper end position	640 / 420 mm
Net weight	23.3 kg

Cutting areas

			
0°	Ø 125 mm	125 mm	125 x 125 mm
45°	Ø 85 mm	85 mm	85 x 85 mm
60°	Ø 50 mm	50 mm	50 x 50 mm

The cutting area was determined for aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Saw bands HSS bi-metal M 42		
Teeth per inch	Tooth angle	Article no.
6 - 10 tpi	0°	3351546
10 - 14 tpi	0°	3351547

Saw band information see page 260

Important information on „Operation of machines with frequency converters“ on page 323
The machines comply with (frequency converter) the DIN EN 55011 standard: class C2

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

CRAFTSMEN VARIO GEARBOX

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 on lever arm 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

- Swivelable saw bow from 0° to +45° to allow angled saw cuts

SP 13V

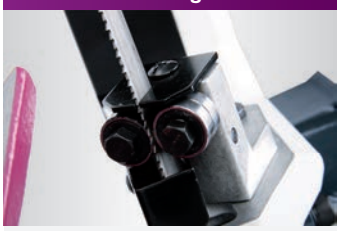
- Swivelable saw bow from 0° to +60° to allow angled saw cuts

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



› Saw band speed continuously adjustable from 30 to 80 m/min.



Fig.: SP13V

Scope of delivery

› Material stop
› Bi-metal saw band



Optional accessories
Machine base MUG 1
› Stable, space-saving, folding, easy to transport
› Dimensions L x W x H: 500 x 470 x 780 mm
Article no. 3351490

Cutting areas

				
SP 11V	0°	Ø 105 mm	100 mm	100 x 100 mm
SP 13V	0°	Ø 125 mm	125 mm	125 x 125 mm
SP 11V	45°	Ø 65 mm	60 mm	60 x 65 mm
SP 13V	45°	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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Model	SP 11V	SP 13V
Article no.	3300070	3300075
Electrical connection	230 V/1 Ph ~50 Hz	230 V/1 Ph ~50 Hz
Motor power	850 W	1 kW
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°
Length	650 mm	720 mm
Width without/with material stop	290 / 670 mm	300 / 650 mm
Height, lower / upper end position	450 / 630 mm	420 / 680 mm
Net weight	19 kg	19.5 kg

Saw bands HSS bi-metal M 42

	Teeth per inch	Tooth angle	Article no.
SP11V	**6 - 10 tpi**	0°	3351542
	10 - 14 tpi	0°	3351543
SP13V	**6 - 10 tpi**	0°	3351546
	10 - 14 tpi	0°	3351547

Saw band information see page 260

Important information on„Operation of machines with frequency converters“ on page 323
The machines comply with (frequency converter) the DIN EN 55011 standard: class C2

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

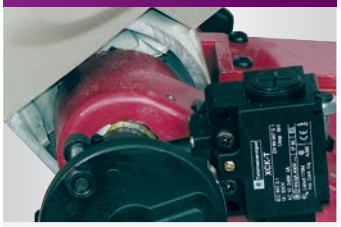
Facts that impress in terms of quality, performance and price

- Quick clamping vice for fast workpiece clamping
- Swivelable saw bow from 0° to 45° to allow angled saw cuts
- Easily legible scale for adjusting the angle
- Microswitch for automatic limit position cut-off
- Automatic lowering of the saw bow via three-stage adjustable saw bow lowering pressure
- Equipped as a factory standard with bi-metal saw blade
- Large, practical 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

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GEARBOX

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, convenient handle and light weight allow for trouble-free transport to the construction site





Optional accessories
Machine base MUG 1
› Stable, space-saving, folding, easy to transport
› Dimensions L x W x H: 500 x 470 x 780 mm
Article no. 3351490

Scope of delivery
› Material stop
› Operating tool
› Bi-metal saw band

Model	S 100G
Article no.	3300100
Electrical connection	230 V/1 Ph ~50 Hz
Motor power	370 W
Saw band speed	45 m/min
Saw band dimensions	1 470 x 13 x 0.65 mm
Cutting angle	0° to 45°
Length of vice open / closed	950 / 850 mm
Width without/with material stop	300 / 660 mm
Height, lower / upper end position	680 / 820 mm
Net weight	23 kg

Cutting areas

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

The cutting area was determined for aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
6 tpi	10°	3351109
10 - 14 tpi	0°	3351110
Saw **band set HSS** bi-metal M 42		
1 saw band 6 tpi; 10 ° 2 pcs. saw band 10 - 14 tpi; 0 °		3351100

Saw band information see page 260

Metal-cutting band saw ideal for light sawing work.

Mitre cutting from -45° to 60° via pivoting saw bow

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 pushbutton
- 24 V low voltage electronics
- Low-noise running action
- Three speeds 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



Scope of delivery

- Material stop
- Bi-metal saw band
- Machine base

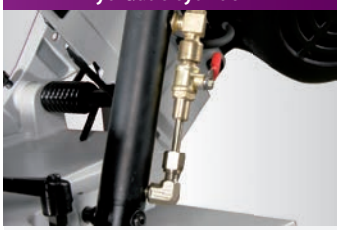
Model	S 131GH
Article no.	3300131
Electrical connection	230 V/1 Ph ~50 Hz
Motor power	1.1 kW
Lifting the saw bow	manual
Feed	continuously variable
Saw band speed	22 / 31 / 55 m/min
Saw band dimensions	1 638 x 13 x 0.65 mm
Cutting angle	-45° bis 60°
Dimensions L x W x H	1 085 x 498 x 978 mm
Net weight	78 kg

Mitre square



- Grey cast iron
- Cutting angle easily adjustable from -45° to +60° using scale

Hydraulic cylinder



- Precise, continuously adjustable lowering via hydraulic cylinder and choke valve

Saw band guide



- Ball-bearing borne

Cutting areas

0°	Ø 128 mm	100 x 145 mm
45°	Ø 90 mm	85 x 70 mm
60°	Ø 45 mm	55 x 45 mm
-45°	Ø 90 mm	85 x 70 mm

The cutting area was determined for aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
6 tpi	10°	3351511
6 - 10 tpi	0°	3351512
8 - 12 tpi	0°	3351517
10 - 14 tpi	0°	3351518
Saw **band set HSS** bi-metal M 42 1 saw band 6 tpi; 10 ° 1 saw band 6- 10 tpi; 0 ° 1 saw band 10- 14 tpi; 0 °		3351500

Saw band information see page 260

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

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Facts that impress in terms of quality, performance and price

- Low-noise running action
- Grey cast base plate and saw bow
- 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

Manual saw band run pushbutton
› Switches the saw band run on and off



Control unit



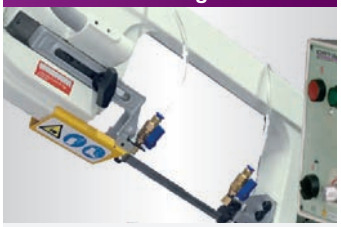
› Generously dimensioned
› Coolant pump switch
› Potentiometer

Vario drive



› Continuously variable saw band speed

Saw band guide



› Ball-bearing borne

Scope of delivery

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

Model	S 150G Vario
Article no.	3300150
Electrical connection	230 V/1 Ph ~50 Hz
Motor power	1.1 kW
Coolant pump motor	50 W
Lifting the saw bow	manual
Feed	manual
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°
Length of vice open / closed	1 120 / 930 mm
Width without/with material stop	510 / 720 mm
Height of saw bow, bottom / top limit position	1 240 / 1 590 mm
Net weight	100 kg

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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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 saw band 6 tpi; 10 ° 1 saw band 6- 10 tpi; 0 ° 1 saw band 10- 14 tpi; 0 °		3351501

Saw band information see page 260

Important information on „Operation of machines with frequency converters“ on page 323
The machines comply with (frequency converter) the DIN EN 55011 standard: class C3

The metal-cutting band saw for challenging sawing tasks.

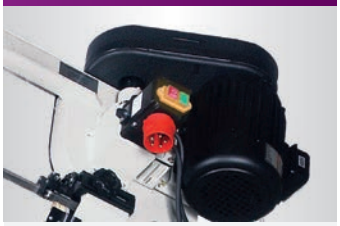
With V-belt and 4 saw band speeds

Facts that impress in terms of quality, performance and price

- Low-noise running action
- Rugged cast design
- Saw bow 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 mobile base with large wheels and practical 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



Belt



› Four speeds adjustable by shifting the belt

Quick clamping vice



› Adjustable clamping jaws from 0° to 45° for mitre cuts

Coolant tank



› Integrated in machine base
› Tank capacity 11 litres

Scope of delivery

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

Model	S 181
Article no.	3300181
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	750 W
Coolant pump motor	90 W
Lifting the saw bow	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°
Length	1 295 mm
Width without/with material stop	450 / 600 mm
Height of saw bow, bottom / top limit position	1 060 / 1 550 mm
Net weight	130 kg

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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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

Saw band information see page 260

The metal-cutting band saw for challenging sawing tasks.

With gearbox and 3 saw band speeds

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GEARBOX

Facts that impress in terms of quality, performance and price

- Low-noise running action
- Rugged cast design
- Saw bow 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 mobile base with large wheels and practical 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



Gearbox



› Three speeds
› Switchable via gearbox

Quick clamping vice



› Adjustable clamping jaws from 0° to 45° for mitre cuts

Coolant tank



› Integrated in machine base
› Tank capacity 11 litres

Scope of delivery

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

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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Model	S 181G
Article no.	3300182
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	750 W
Coolant pump motor	90 W
Lifting the saw bow	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°
Length	1 200 mm
Width without/with material stop	450 / 600 mm
Height of saw bow, bottom / top limit position	1 060 / 1 550 mm
Net weight	130 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°**	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 saw band 6- 10 tpi; 0 ° 1 saw band 5- 8 tpi; 0 ° 1 saw band 5- 8 tpi; 6 °		3357500

Saw band information see page 260

The metal-cutting gear band saw for challenging sawing tasks.

CRAFTSMEN

GEARBOX

Facts that impress in terms of quality, performance and price

- Low-noise running action
- Rugged cast design
- Saw bow 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 mobile base with large wheels and practical transport bar allows trouble-free relocation of the machine
- Adjustable material stop for batch work
- Easy-to-clean coolant parts
- Polished workpiece mounting surface
- Circuit breaker for belt cover
- Fully equipped; the user can immediately start productive work after commissioning

Saw band guide



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

Coolant tank



› Integrated in machine base
› Tank capacity 11 litres

Gearbox



› Powerful
› Two speed stages



Scope of delivery

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

Model	SD 200G
Article no.	3300200
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	550 W/750 W
Coolant pump motor	100 W
Lifting the saw bow	manual
Feed	continuously variable
Saw band speed	44 / 88 m/min
Saw band dimensions	2 360 x 19 x 0.9 mm
Cutting angle	0° to 45°
Length	1 295 mm
Width without material stop	535 mm
Height, lower / upper end position	790 mm / 1200
Net weight	130 kg

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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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

Saw band information see page 260

CRAFTSMEN

GEARBOX

Metal-cutting band saw with pivoting saw bow,
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 bow 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 mobile base
- Ball-bearing borne saw band guide
- 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

Panel



› Clearly-arranged and easy to use
› Speed selection switch
› Coolant pump

Quick clamping vice



› Adjustable via hand wheel
› Workpiece is clamped using a handy quick-clamping lever



Scope of delivery

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

Model	S 210G
Article no.	3300210
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	750 W
Coolant pump motor	90 W
Lifting the saw bow	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°
Length of closed/open vice	1 200 / 1 310 mm
Width without/with material stop	685 / 985 mm
Height, lower / upper end position	1 320 / 1 550 mm
Net weight	152 kg

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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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

Saw band information see page 260

Metal-cutting band saw with pivoting saw bow.

S 275NV with continuously variable saw band speed

CRAFTSMEN | VARIO | GEARBOX

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 bow 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 mobile base
- Ball-bearing borne saw band guide
- Easily legible scale for adjusting the angle
- Overload protection

S 275N

- Motor protection switch
- Two switchable speeds

S 275NV

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

Saw band tension



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

Quick clamping vice,



› adjustable via handwheel
› Workpiece is clamped using a handy quick-clamping lever

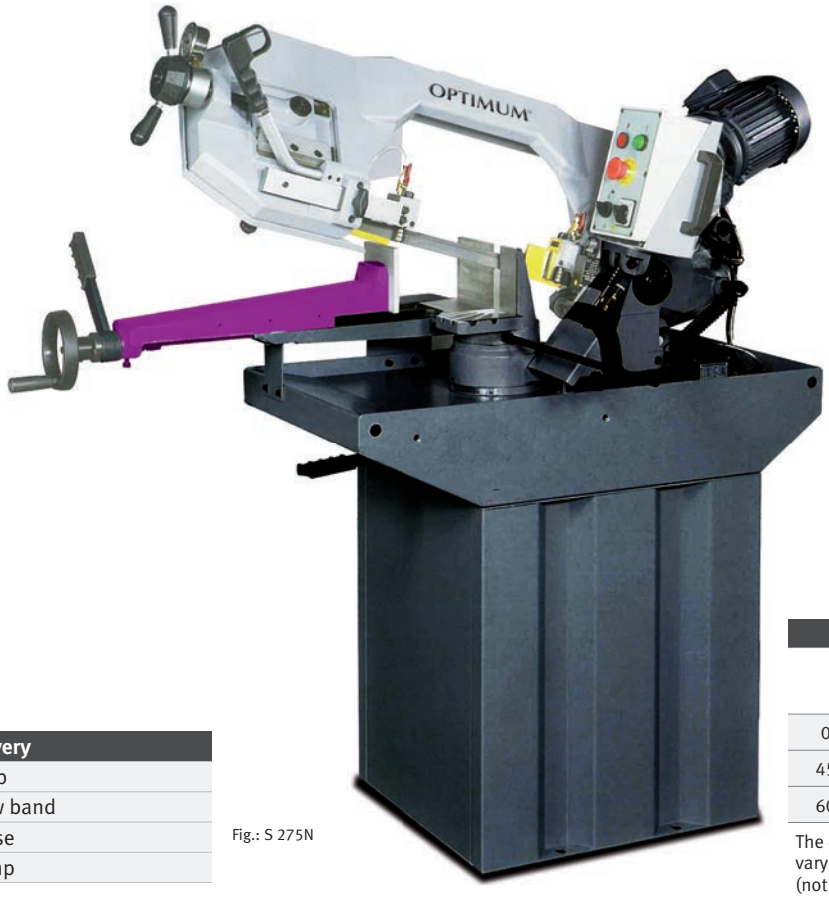


Fig.: S 275N

Scope of delivery

› Material stop
› Bi-metal saw band
› Machine base
› 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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Model	S 275N	S 275NV
Article no.	3300260	3300265
Electrical connection	400 V/3 Ph ~50 Hz	230 V/1 Ph ~50 Hz
Motor power	1.1 kW	1.5 kW
Coolant pump motor	90 W	
Lifting the saw bow	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°	
Length	1 400 mm	
Width without/with material stop	685 / 985 mm	
Height, lower / upper end position	1 235 / 1 700 mm	
Net 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 - 7 tpi	5-7°	3357512
6 - 10 tpi	0°	3357524
10 - 14 tpi	0°	3357525
Saw band set HSS bi-metal M 42 1 saw band 6- 10 tpi; 0 ° 1 saw band 5- 8 tpi; 0 ° 1 saw band 5- 7 tpi; 5-7 °		3357504

Saw band information see page 260

Important information on„Operation of machines with frequency converters“ on page 323
The machine (frequency converter) complies with the DIN EN 55011:2011- 04 standard: class C3

Metal-cutting band saw with SIEMENS Sinamics inverter for continuously variable saw band speed

CRAFTSMEN · VARIO · GEARBOX

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 bow lowering via hydraulic cylinder, continuously adjustable by throttle valve
- Powerful 100 Watt coolant system
- Carbide saw band guide
- Microswitch for automatic limit position cut-off
- Clearly-arranged control panel for easy use
- 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
- 2-channel safety chain with quick stop in case of emergency stop
- Adjustable material stop for batch work

Inverter

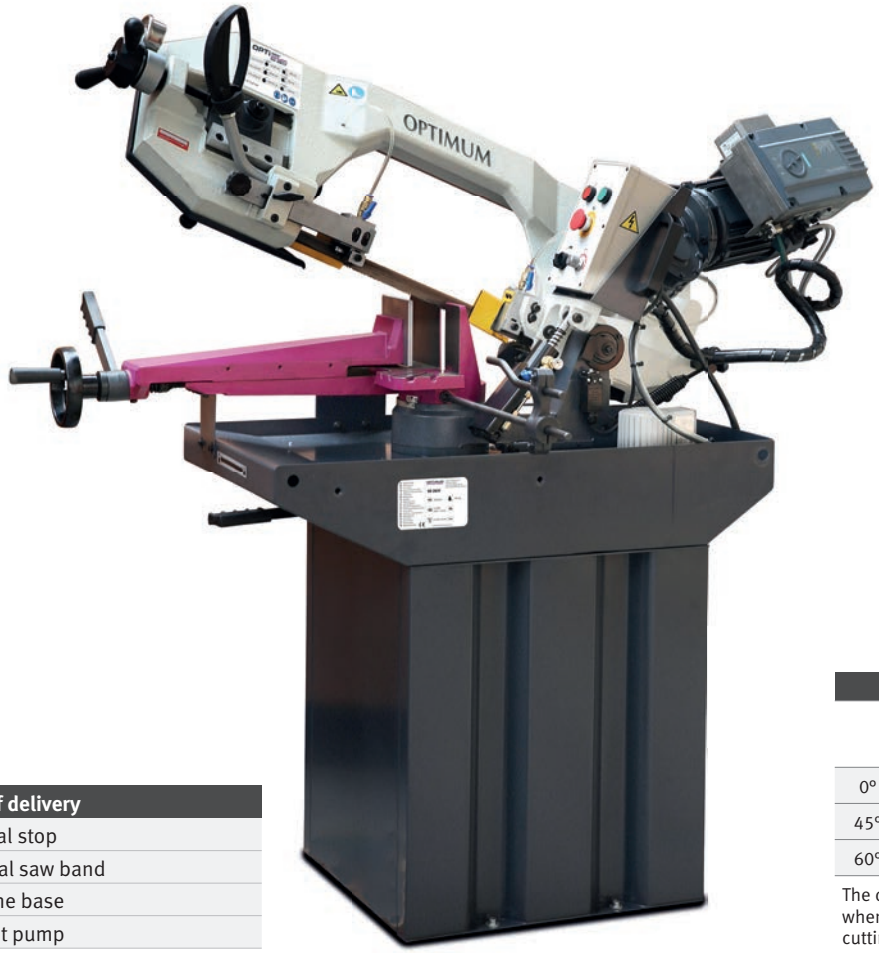


› SIEMENS Sinamics G110M
› A technically unique solution exclusively for OPTIMUM

Coolant pump



› Powerful
› 100 W motor



Scope of delivery

› Material stop
› Bi-metal saw band
› Machine base
› 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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Model	SD 281V
Article no.	3290250
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	1.5 kW
Coolant pump motor	100 W
Lifting the saw bow	manual
Feed	continuously variable
Saw band speed	15 - 100 m/min
Saw band dimensions	2 480 x 27 x 0.9 mm
Cutting angle	0° to 60°
Length	1 400 / 1 700 mm
Width without/with material stop	685 / 985 mm
Height, lower / upper end position	1 300 / 1 700 mm
Net 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 - 7 tpi	5-7°	3357512
6 - 10 tpi	0°	3357524
10 - 14 tpi	0°	3357525
Saw band set HSS bi-metal M 42		
1 saw band 6- 10 tpi; 0 ° 1 saw band 5- 8 tpi; 0 ° 1 saw band 5- 8 tpi; 6 °		3357504

Saw band information see page 260

Important information on„Operation of machines with frequency converters“ on page 323
The machines comply with (frequency converter) the DIN EN 55011 standard: class C2

Metal-cutting band saw with pivoting saw bow,
for economical and precise work

CRAFTSMEN | DOUBLE MITRE | GEARBOX

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 machine base
- 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
- Roller support for supporting long materials
- Fully equipped; the user can immediately start productive work after commissioning



Saw band tension



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

Coolant pump



› Powerful
› 100 W

Scope of delivery

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

Model	S 285DG
Article no.	3300285
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	1.1 kW
Coolant pump motor	100 W
Lifting the saw bow	manual
Feed	hydraulic via lowering cylinder
Saw band speed	45 / 90 m/min
Saw band dimensions	2 480 x 27 x 0.9 mm
Cutting angle	-45° bis 60°
Length	1 720 mm
Width without/with material stop	870 / 1 270 mm
Height lower / upper end position	1 280 / 1 800 mm
Net weight	295 kg

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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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 - 7 tpi	5-7°	3357512
6 - 10 tpi	0°	3357524
10 - 14 tpi	0°	3357525
Saw band set HSS bi-metal M 42 1 saw band 6- 10 tpi; 0 ° 1 saw band 5- 8 tpi; 0 ° 1 saw band 5- 7 tpi; 5-7 °		3357504

Saw band information see page 260

Band saw for metal working with pivoting saw bow.

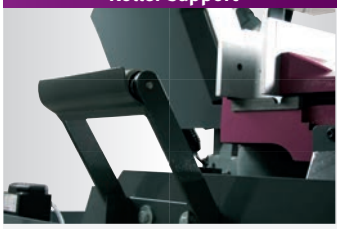
CRAFTSMEN | DOUBLE MITRE | GEARBOX

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 machine base
- End stops adjustable to degree accuracy



Roller support



› For supporting long materials

Saw band tension



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

Scope of delivery
› Material stop
› Bi-metal saw band
› Machine base
› Coolant pump

Model	S 300DG
Article no.	3290290
Technical data	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor power	1.5 kW
Coolant pump motor	100 W
General Information	
Lifting the saw bow	manual
Feed	continuously variable
Saw band speed	35/70 m/min.
Saw band dimensions	2 750 x 27 x 0.9 mm
Cutting angle	45° bis -60°
Dimensions	
Length	1 680 mm
Width without/with material stop	700 / 1 300 mm
Height, lower / upper end position	1 600 / 1 850 mm
Weight	335 kg

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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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

Saw band information see page 260

Band saw for metalworking with SIEMENS inverter Vario drive
for continuously adjustable saw band speed

INDUSTRY | DOUBLE MITRE | VARIO | GEARBOX

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
- EMC class C2
- Two-channel safety chain with quick stop for emergency stop
- Chip brush
- Pushbutton - manual saw band run - on the lever switches the saw band run on and off
- Powerful 100 Watt coolant system
- Microswitch for automatic limit position cut-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 machine base
- End stops adjustable to degree accuracy
- Saw band speed continuously adjustable from 15 to 90 m/min.



Saw band tension



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

Roller support



› For supporting long materials

Inverter



› SIEMENS Sinamics G110M
› A technically unique solution exclusively for OPTIMUM

Scope of delivery

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

Model	SD 300V
Article no.	3290310
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	1.5 kW
Coolant pump motor	100 W
Lifting the saw bow	manual
Feed	hydraulic via lowering cylinder
Saw band speed	15 - 90 m/min
Saw band dimensions	2 750 x 27 x 0.9 mm
Cutting angle	45° bis -60°
Length	1 680 mm
Width without/with material stop	700 / 1 330 mm
Height bottom/top limit position	1 600 / 1 850 mm
Net weight	335 kg

Cutting areas

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

The cutting area was determined for aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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

Saw band information see page 260

Important information on transport surcharge and „Operation of machines with frequency converters“ on page 323
The machines comply with (frequency converter) the DIN EN 55011 standard: class C2

Band saw for metalworking with rotary plate and Siemens inverter. Drive for infinitely adjustable saw band speed

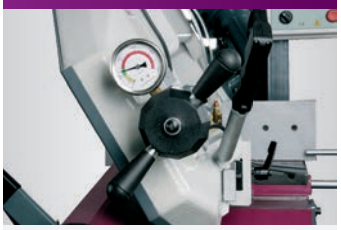
INDUSTRY | TURN TABLE | DOUBLE MITRE | VARIO | GEARBOX

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
- EMC class C2
- Two-channel safety chain with quick stop for emergency stop
- 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
- Powerful 100 Watt coolant system
- Quick clamping vice, adjustable via hand wheel. Workpiece is clamped using a handy quick-clamping lever
- Rugged machine machine base
- Control unit facilitates machine setup
- 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

Turntable



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

Inverter



› SIEMENS Sinamics G110M
› A technically unique solution exclusively for OPTIMUM

Scope of delivery

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

Cutting areas

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

The cutting area was determined for aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Model	SD 310V
Article no.	3290340
Electrical connection	400 V/3 Ph ~50 Hz
Motor power	1.5 kW
Coolant pump motor	100 W
Lifting the saw bow	manual
Feed	hydraulic via lowering cylinder
Saw band speed	15 - 100 m/min
Saw band dimensions	2 750 x 27 x 0.9 mm
Cutting angle	45° bis -60°
Length	1 850 mm
Width without/with material stop	700 / 1 300 mm
Height, lower / upper end position	1 600 / 2 000 mm
Net 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 saw band 5- 8 tpi; 0 ° 1 saw band 5- 8 tpi; 10 ° 1 saw band 6- 10 tpi; 0 °		3357700

Saw band information see page 260

Important information on„Operation of machines with frequency converters“ on page 323
The machine (frequency converter) complies with the DIN EN 55011:2011- 04 standard: class C2

Metal-cutting band saw with double mitre, heavy-duty design with a cutting capacity of up to 350 mm

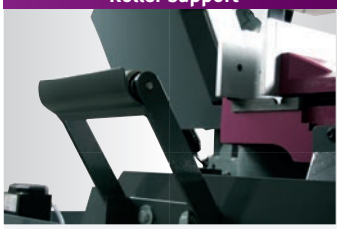
INDUSTRY · DOUBLE MITRE · GEARBOX

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 bow
- Generously dimensioned, rugged quick clamping vice, adjustable via handwheel Workpiece clamping with a practical quick-clamping lever, can be shifted for large materials
- Equipped as a factory standard with bi-metal saw blade
- End stops adjustable to degree accuracy
- Chip brush
- Combinable and individually adjustable carbide and ball bearing guides on the saw band
- Precise, continuously adjustable saw band movement via hydraulic cylinder
- Powerful 100 Watt coolant system
- Easy adjustment of the lowering speed via feed control valve in control panel
- Emergency stop button
- Rugged machine mobile base
- 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



Roller support



› For supporting long materials

Saw band tension



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

Scope of delivery

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

Model	S 350DG
Article no.	3290350
Electrical connection	400 V/3 Ph ~50 Hz
Total rated value	2.4 kW
Saw motor	2.2 kW
Coolant pump motor	50 W
Lifting the saw bow	manual
Feed	hydraulic via lowering cylinder
Saw band speed	36/72 m/min.
Saw band dimensions	2 925 x 27 x 0.9 mm
Cutting angle	-45° to 60°
Length	1 750 mm
Width without/with material stop	1 075 / 1 415 mm
Height, lower / upper end position	1 420 / 2 000 mm
Net weight	550 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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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 1 saw band 6- 10 tpi; 0 ° 1 saw band 5- 8 tpi; 0 ° 1 saw band 4- 6 tpi; 6 °		3357501

Saw band information see page 260

Semi-automatic double mitre metal-cutting band saw with SIEMENS inverter drive Professional and rugged saw with a cutting capacity of up to 350 mm

INDUSTRY | DOUBLE MITRE | VARIO | GEARBOX

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 bow
- 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
- Powerful 100 Watt coolant system
- 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
- 2-channel safety chain with quick stop in case of emergency stop
- EMC class C2

Function
Semi-automatic operation
- Vice closes and motor is activated
- Lower the saw bow to cut
- Motor stops and saw bow returns to the starting position

Inverter

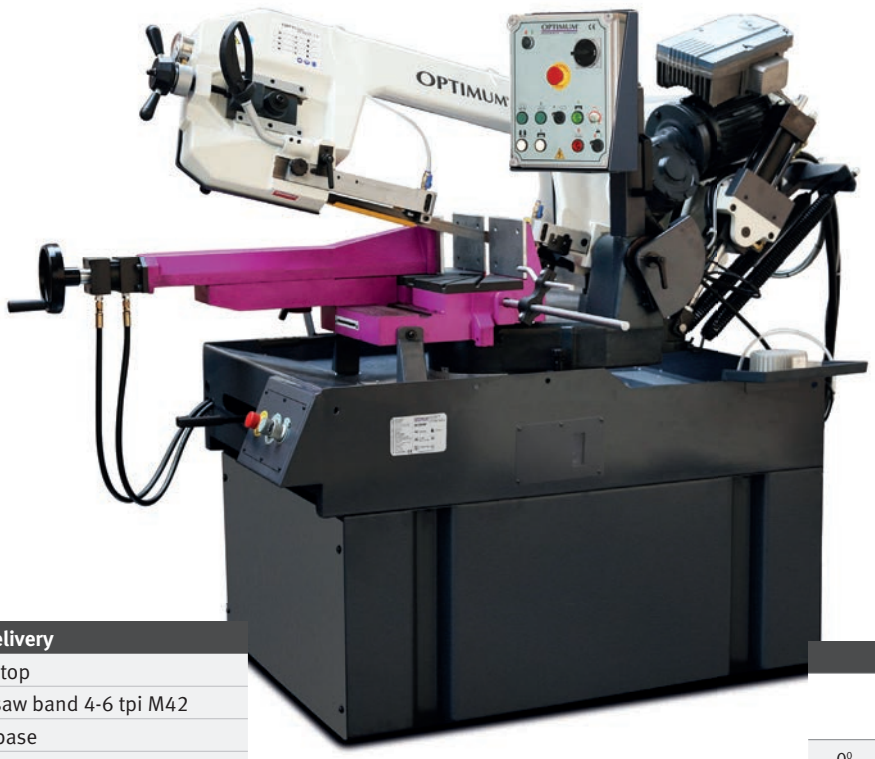


› SIEMENS Sinamics G110M
› A technically unique solution exclusively for OPTIMUM

Robust quick clamping vise



› Large dimensioned
› Hydraulic
› Self-closing
› Adjustable for large cross sections
› Roller support



Scope of delivery
› Material stop
› Bi-metal saw band 4-6 tpi M42
› Machine base
› Coolant pump

Model	SD 351AV
Article no.	3290360
Electrical connection	400 V/3 Ph ~50 Hz
Total rated value	3.8 kW
Saw motor	2.2 kW
Coolant pump motor	50 W
Motor-hydraulic pump	1.4 kW
Lifting the saw bow:	
Manual operation	Hydraulic via pushbutton
Semi-automatic operation	automatic
Saw band speed	15 - 100 m/min continuously variable
Saw band dimensions	2 925 x 27 x 0.9 mm
Cutting angle	-45° bis 60°
Length x width x height min.	1 935 x 1 425 x 1 626 mm
Net 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 aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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 1 saw band 6- 10 tpi; 0 ° 1 saw band 5- 8 tpi; 0 ° 1 saw band 4- 6 tpi; 6 °		3357501

Saw band information see page 260

Important information on„Operation of machines with frequency converters“ on page 323
The machine (frequency converter) complies with the DIN EN 55011:2011- 04 standard: class C2

OPTIsaw® SD 500

NEW

Double mitre metal-working band saw
with versatile application possibilities in trade and industry

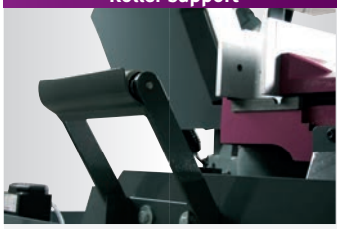
INDUSTRY | DOUBLE MITRE | GEARBOX

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
- Mitre adjustment -45° to 60° by pivoting the entire saw bow
- Equipped as a factory standard with bi-metal saw blade
- Microswitch for automatic limit position cut-off
- Powerful 100 Watt coolant system
- 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
- Clearly-arranged control panel

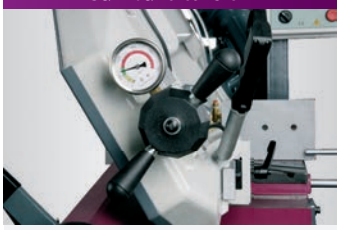


Roller support



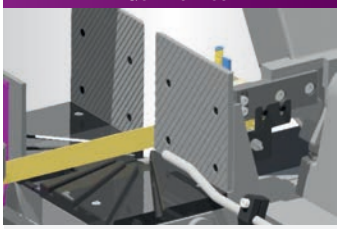
› For supporting long materials

Saw band tension



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

Machine vice



› Generously dimensioned quick clamping vice, laterally displaceable
› cutting gap

Model	SD 500
Article no.	3292380
Technical data	
Electrical connection	400 V/3 Ph ~50 Hz
Total rated value	3.8 kW
Saw motor	2.2 kW
Coolant pump motor	100 W
General Information	
Lifting the saw bow	manual
Feed	hydraulic via lowering cylinder
Saw band speed	35 / 70 m/min
Saw band dimensions	3 770 x 34 x 1.1 mm
Cutting angle	-45° bis 60°
Dimensions and weight	
Length x width x height min.	2 122 x 1 046 x 1 497 mm
Net weight	552 kg

Cutting areas

0°	Ø 355 mm	280 mm	280 x 490 mm
45°	Ø 355 mm	280 mm	280 x 340 mm
60°	Ø 230 mm	180 mm	180 x 220 mm
-45°	Ø 290 mm	250 mm	250 x 250 mm

The cutting area was determined for aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

Saw bands HSS bi-metal M 42

Teeth per inch	Tooth angle	Article no.
5 - 8 tpi	0°	3357590
6 - 10 tpi	0°	3357591

Scope of delivery

› Material stop
› Bi-metal saw band 4-6 tpi M42
› Machine base
› Coolant pump

Please note: Restrictions apply for attaching material stand MSR

Semi-automatic double mitre metal-cutting band saw with SIEMENS inverter drive Versatile application possibilities in trade and industry

INDUSTRY

DOUBLE MITRE | VARIO | GEARBOX

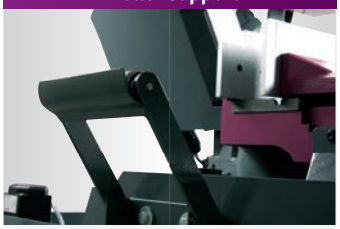
Facts that impress in terms of quality, performance and price

- 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 -45° to 60° by pivoting the entire saw bow
- Equipped as a factory standard with bi-metal saw blade
- Microswitch for automatic limit position cut-off
- Powerful 100 Watt coolant system
- 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 clamping vice, self-locking, laterally displaceable
- Pressure gauge for correct saw band tension
- Clearly-arranged control panel

Function
Semi-automatic operation
- Vice closes and motor is activated
- Lower the saw bow to cut
- Motor stops and saw bow returns to the starting position



Roller support



› For supporting long materials

Inverter



› SIEMENS Sinamics G110M
› A technically unique solution exclusively for OPTIMUM

Saw band tension



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

Scope of delivery
› Material stop
› Bi-metal saw band 4-6 tpi M42
› Machine base
› Coolant pump

Model	SD 500AV
Article no.	3292385
Electrical connection	400 V/3 Ph ~50 Hz
Total rated value	3.8 kW
Saw motor	3 kW
Coolant pump motor	100 W
Motor-hydraulic pump	1.4 kW
Lifting the saw bow:	
Manual operation	Hydraulic via pushbutton
Semi-automatic operation	automatic
Saw band speed	20 - 80 m/min
Saw band dimensions	3 770 x 34 x 1.1 mm
Cutting angle	45° bis -60°
Dimensions L x W x H min.	2 129 x 1 046 x 1 687 mm
Net weight	645 kg

Cutting areas

0°	Ø 355 mm	300 mm	300 x 490 mm
45°	Ø 350 mm	290 mm	290 x 340 mm
60°	Ø 230 mm	180 mm	180 x 220 mm
-45°	Ø 290 mm	250 mm	250 x 250 mm

The cutting area was determined for aluminium. It can vary when using different materials and may be smaller (not cutting capacity).

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°	3357590
6 - 10 tpi	0°	3357591

Important information on „Operation of machines with frequency converters“ on page 323
The machine (frequency converter) complies with the DIN EN 55011:2011- 04 standard: class C2

CRAFTSMEN

Manual metal circular saws for steel, iron, light metals, solid material and profiles

Facts that impress in terms of quality, performance and price

- Pivot range of ±45° on both sides
- Easily readable angle scale supports precise work
- Mitre adjustment within seconds
- Protected vice spindle
- Solid machine base 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
- Centrically clamping vice, 4x guided with individually adjustable clamping jaws Cut always occurs in optimal position relative to workpiece
- Solid machine base
- Protected vice spindle
- Machine base 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

	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

Scope of delivery

› Coolant system
› Machine base

Model	CS 275	CS 315
Article no.	3302275	3302300
Power		
Electrical connection	400 V/3 Ph ~50 Hz	400 V/3 Ph ~50 Hz
Motor power	1.4 / 2.0 kW	0.75 / 1.5 kW
Coolant pump motor	40 W	
General Information		
Cutting angle	-45°to +45°	
Cutting angle adjustment	via rotating bearing block	
Feed	manual	
Saw blade speed	41 / 82 rpm	19 / 38 rpm
Saw blade diameter	Ø 275 mm; Inside Ø 40 mm	Ø 315 mm; Inside Ø 40 mm
Vice clamping width	110 mm	135 mm
Dimensions and weight		
Length	460 mm	560 mm
Width	830 mm	902 mm
height	1 700 mm	1 765 mm
Net weight	175 kg	235 kg

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

Metal-cutting circular saw blade CS 275			
mm/per tooth	Teeth	Blade width	Article no.
4 mm/T	220 Z	2.5 mm	3357444
6 mm/T	140 Z	2.5 mm	3357446
8 mm/T	110 Z	2.5 mm	3357448

Metal-cutting circular saw blade CS 315			
4 mm/T	240 Z	2.5 mm	3357454
6 mm/T	150 Z	2.5 mm	3357456
8 mm/T	120 Z	2.5 mm	3357458

SAWING ACCESSORIES



Compatibility overview accessories for metal-cutting band saws

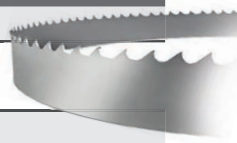
Saw accessories		SQ-V10	SQ-V13	SP 11V	SP 13V	S 100G	S 131GH	S 150G Vario	S 181	S 181G	SD 200G	S 210G	S 275N	S 275NV	SD 281V	S 285DG	S 300DG	SD 300V	SD 310V	S 350DG	S 350DG	SD 351AV	SD 500	SD 500AV
Material stand MSR 4 - 10	3357610-13							●				●	●	●	●	●								
Material stand MSR 4H - 10H	3357001-3																●	●	●	●	●	●	○	○
PVC rollers	3357609							●				●	●	●	●	●	●	●	●	●	●	●	○	○
Table extension MSR 1	3357006							●				●	●	●	●	●	●	●	●	●	●	●	○	○
Connecting plate	3357005							●				●	●	●	●	●	●	●	●	●	●	●		
Trimming and length measuring system LMS 10-40	3383851-4							●				●	●	●	●	●	●	●	●	●	●	●	○	○
Trimming and length measuring system LMS 1M	3383841							●				●	●	●	●	●	●	●	●	●	●	●	○	○
Trimming and length measuring system LMS 2M	3383842							●				●	●	●	●	●	●	●	●	●	●	●	○	○
AQUACUT C1	3530030							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Levelling platen SE 1	3381012							●				●												
Levelling platen SE 2	3381016												●	●	●	●	●	●	●	●	●	●	●	●

● Recommended ○ Recommended - restrictions apply

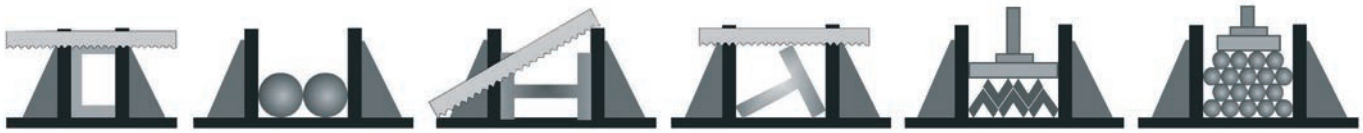
Saw bands HSS bi-metal M 42

for sections and pipes, as well as solid material

Band dimensions:		Tooth angle	Art. no.	Fits:
1 140 x 13 x 0.65 mm	10 - 14 tpi		3357548	Manual metal-cutting band saw SQ-V10
1 335 x 13 x 0.65 mm	6 - 10 tpi	0°	3351542	Metal-cutting band saw SP 11V
1 335 x 13 x 0.65 mm	10 - 14 tpi	0°	3351543	
1 440 x 13 x 0.65 mm	6 - 10 tpi	0°	3351546	Metal-cutting band saw SP 13V Metal-cutting band saw SQ-V13
1 440 x 13 x 0.65 mm	10 - 14 tpi	0°	3351547	
1 470 x 13 x 0.65 mm	6 tpi	10°	3351109	Metal-cutting band saw S100G
1 470 x 13 x 0.65 mm	10 - 14 tpi	0°	3351110	
1 638 x 13 x 0.65 mm	6 tpi	10°	3351511	Metal-cutting band saw S 131GH
1 638 x 13 x 0.65 mm	6 - 10 tpi	0°	3351512	
1 638 x 13 x 0.65 mm	8 - 12 tpi	0°	3351517	
1 638 x 13 x 0.65 mm	10 - 14 tpi	0°	3351518	
1 735 x 12.7 x 0.9 mm	6 tpi	10°	3351521	Metal-cutting band saw S 150G Vario
1 735 x 12.7 x 0.9 mm	6 - 10 tpi	0°	3351522	
1 735 x 12.7 x 0.9 mm	10 - 14 tpi	0°	3351538	
2 080 x 20 x 0.9 mm	5 - 8 tpi	0°	3357503	Metal-cutting band saw S 210G
2 080 x 20 x 0.9 mm	5 - 8 tpi	6°	3357505	
2 080 x 20 x 0.9 mm	6 - 10 tpi	0°	3357514	
2 080 x 20 x 0.9 mm	10 - 14 tpi	0°	3357515	
2 362 x 19 x 0.9 mm	5 - 8 tpi	0°	3357522	Metal-cutting band saw S 181 Metal-cutting band saw S 181G Metal-cutting band saw SD 200G
2 362 x 19 x 0.9 mm	5 - 8 tpi	6°	3357516	
2 362 x 19 x 0.9 mm	6 - 10 tpi	0°	3357521	
2 362 x 19 x 0.9 mm	10 - 14 tpi	0°	3357520	
2 480 x 27 x 0.9 mm	5 - 8 tpi	0°	3357511	Metal-cutting band saw S 275N Metal-cutting band saw S 275NV Metal-cutting band saw SD 281V Metal-cutting band saw S 285DG
2 480 x 27 x 0.9 mm	5 - 7 tpi	5-7°	3357512	
2 480 x 27 x 0.9 mm	6 - 10 tpi	0°	3357524	
2 480 x 27 x 0.9 mm	10 - 14 tpi	0°	3357525	
2 750 x 27 x 0.9 mm	5 - 8 tpi	0°	3357751	Metal-cutting band saw SD 300V Metal-cutting band saw S 300DG Metal-cutting band saw SD 310V
2 750 x 27 x 0.9 mm	5 - 8 tpi	10°	3357752	
2 750 x 27 x 0.9 mm	6 - 10 tpi	0°	3357753	
2 750 x 27 x 0.9 mm	10 - 14 tpi	0°	3357754	
2 925 x 27 x 0.9 mm	5 - 8 tpi	0°	3357541	Metal-cutting band saw S 350DG Metal-cutting band saw SD 351AV
2 925 x 27 x 0.9 mm	4 - 6 tpi	6°	3357540	
2 925 x 27 x 0.9 mm	6 - 10 tpi	0°	3357542	
2 925 x 27 x 0.9 mm	10 - 14 tpi	0°	3357543	
3 770 x 34 x 1.1 mm	5 - 8 tpi	0°	3357590	Metal-cutting band saw SD 500 Metal-cutting band saw SD 500AV
3 770 x 34 x 1.1 mm	6 - 10 tpi	0°	3357591	



Workpiece
The workpiece to be machined must be firmly clamped so that it cannot vibrate or rotate. 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
The tooth pitch refers to the number of teeth per inch (25.4 mm).
As a general rule:
The shorter the cutting length (e.g. profiles), the finer the toothing selected. 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. To 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.).
- Important is: 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 cm² 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 of tubes and profiles						
Profile cross section	Number of teeth per inch	Profile 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 (tpi)					
‹ 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

Teeth per inch 4 - 5 tpi not available from Optimum

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 10



Fig.: Example of use:
OPTIsaw S 275N, material stand MSR 4, measuring system LMS 1, digit. position display DRO 1; table extension MSR 1, connecting plates

! Since this is a universal stand, it may be necessary to adjust the connecting plate depending on the machine type.

Model	MSR 4	MSR 7	MSR 10
Article no.	3357610	3357611	3357613
Model	**MSR 4H**	**MSR 7H**	**MSR 10H**
Article no.	3357001	3357002	3357003
Idler roller diameter	Ø 60 mm	Ø 60 mm	Ø 60 mm
Idler roller width	360 mm	360 mm	360 mm
Static table load	500 kg	700 kg	700 kg
Dimensions and weight			
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
Net weight	29 kg	44,7 kg	65,8 kg
Net weight H version	30,2 kg	46,1 kg	68 kg

PVC rollers

Article no. 3357609



- Additionally attachable
- Made of non-slip PVC
- To avoid scratches
- Simply slot the rollers into the holder provided
- With practical wall-mount

Table extension MSR 1

Article no. 3357006



- for MSR roller conveyors
- Removable rollers
- Additionally attachable
- Can be fitted in both directions

Connecting plate

Article no. 3357005



- Additionally attachable
- With add-on parts right and left
- Slots

Scope of delivery

- Fastening material for extension

OPTIMUM® MASCHINEN - GERMANY

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
- Measurement accuracy: ±(0.025 + 0.02 x measuring length [m])



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

Linear guide

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

Slide

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

Digital display

› LCD

Switching functions:
› Metric / inch / angle
› absolute position or incremental position
› Zeroing
› ABS mode, fast calibration

Model	LMS 10	LMS 20	LMS 30	LMS 40
Article no.	3383851	3383852	3383853	3383854
Technical data				
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

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

For perfect length measurement and precise positioning

Facts that impress in terms of quality, performance and price

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



Trimming and length measuring systems	Art. no.
› Sliding carriage with stop	
LMS 1M guide rail 1 300 mm	3383841
› Includes 1 metre rule	
LMS 2M guide rail 2 300 mm	3383842
› Includes 2 metre rule	

Magnetic strip	Art. no.
Length 1 600 mm for LMS 1M	3383876
Length 2 600 mm for LMS 2M	3383877
Yard goods (price per metre)	3383878

Extension rail	Art. no.
› only in combination with DRO1	
Length 1 300 mm for LMS 1M/2M	3383843
Length 2 600 mm for LMS 1M/2M	3383844

Digital display DRO1	3383845
› With extension kit for LMS 1M / 2M	

- Radius/diameter mode
- Parameter memory
- Inch/metric adaptation
- Multifunctional LCD display
- Adjustable angular
- measurement
- Absolute/incremental
- 8-digit LCD display
- Coordinate conversion



AQUACUT C1	3530030
› 10 litre cannister	
› For mixing emulsions	
› Drilling and cooling emulsion	
› High-pressure resistant and containing mineral oil, for long tool life and clean surfaces	
› Emulsifiable with water, microbe-resistant and kind to the skin	



Levelling platen	
› The machines and equipment can be installed without anchors and precisely levelled using the height adjustment system.	
› non-slip rubberised	
SE 1	3381012
SE 2	3381016

