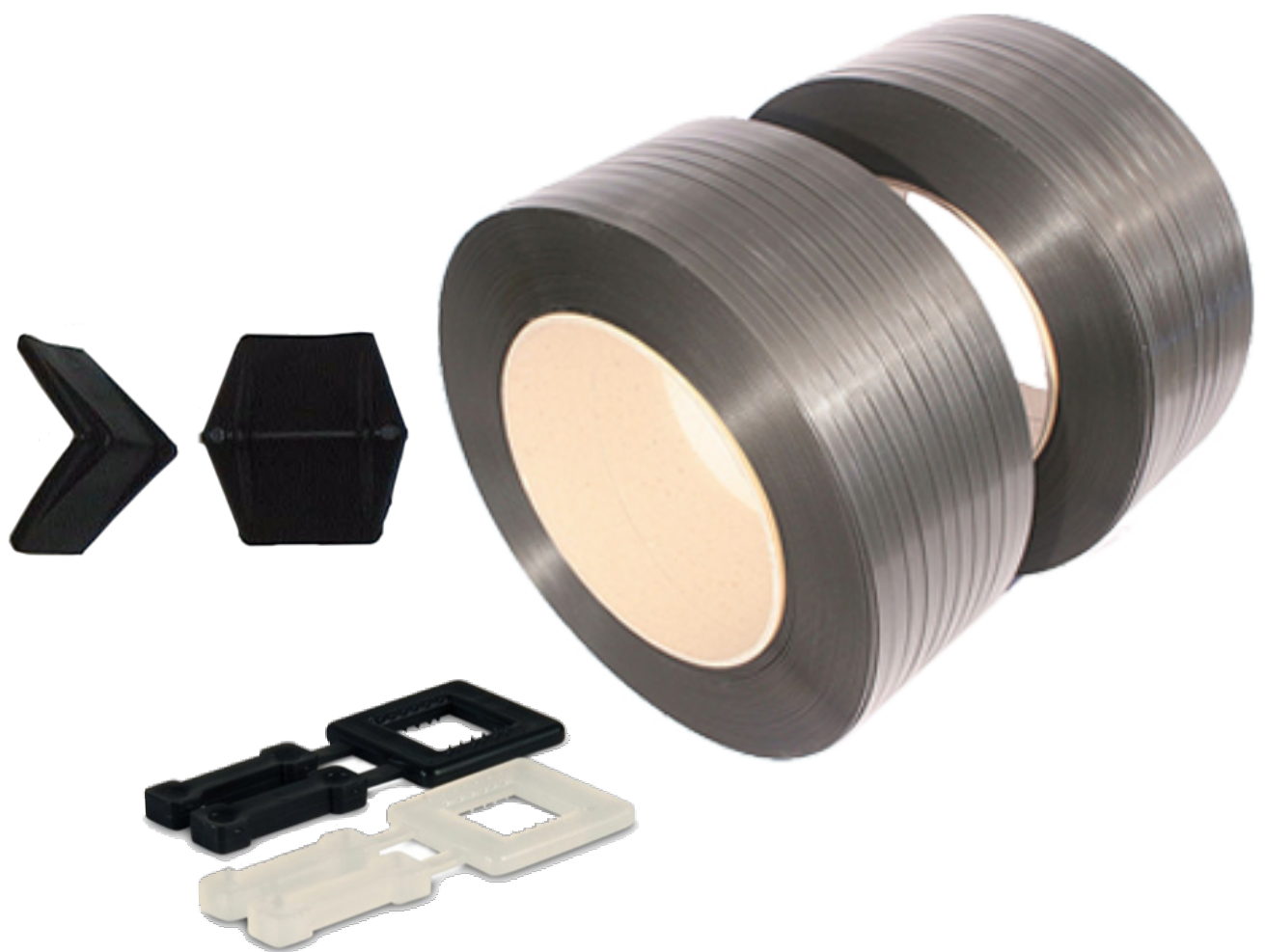


Sal-Tech Easy Packaging

Straps, Buckles and Protectors for Strapping



STEP Straps

The primary item used in strapping. Sal-Tech Easy Packaging offer you a variety of strapping bands used in wide variety of applications.

Steel Strap

The strongest strapping material. The use of metal as a strapping medium dates back to the ancient times. With the advent of steel, it becomes the material of choice for heavy duty strapping.

Choose between:

Strap Width: 13 – 16 – 19 - 25 - 38mm
 Thickness: 0,4 - 0,5 – 0,6 – 0,8 – 1,0mm
 Surface: Blank – Black – Blue – Zinc coated – Stainless Steel
 Coil Type: Singel ring – Continuos ring
 Tensile strength: Minimum 850Mpa
 Up to 900Mpa or 950Mpa on demand

Sold per kg as price basis.

Single ring weigh between 22 and 31 kgs
 Continuos/Oscillating rings weigh 50kg

Not all variations are on stock.



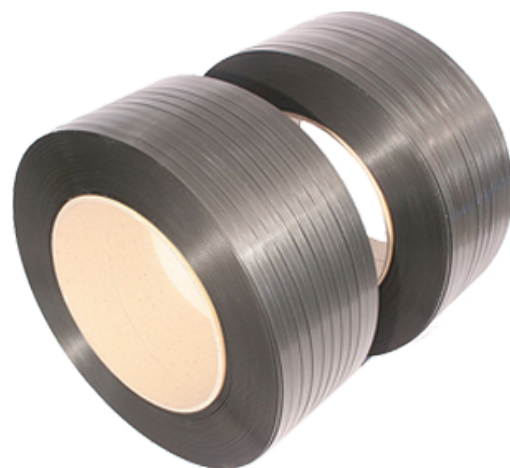
Steel Strap Specifications

Width	Thickness	Surface	Coil Type	Coil weight	Item No.
13	0.5	Blank	Single Ring	22kg	57135010
	0.5	Black			57135011
	0.5	Black	Continous Ring	50kg	57135111
16	0.5	Blank	Single Ring	26kg	57165010
	0.5	Black			57165011
	0.5	Black	Continous Ring	50kg	57165111
19	0.5	Blank	Single Ring	31kg	57195010
	0.8	Blank			57198010
	0.5	Black	Continous Ring	50kg	57195111
25	0.8	Blank	Single Ring	38kg	57258010
	0.8	Black			57258011
	0.8	Black	Continous Ring	50kg	57258111
38	0.8	Blank	Single Ring	50kg	57388010
	0.8	Black			57388011
	0.8	Black	Continous Ring	50kg	57388111

Polypropylene (PP) Strap

STEP Polypropylene (PP) Straps are good for single standing machines in your production space in direct contact with the operator, easy applications and cheap.

PP strap is widely used in packaging industry, it has good strength and welding capacities. PP straps can be manufactured in many different width, thickness and colors and can be wound on many different coil dimensions. We have many types on stock. Ask us for more available specifications.



Strap Specifications

Roll Distribution

Width	Thickness	Strength (N)	Color	Core Ø	Core width	Meters /roll	Rolls/ct	24/30 carton 1 pallet	Item No.
5	0,40	450	White	150	160	6000	2	Request price	51540330
	0,40	450	Black	200	190	8000	2		51540510
			White						51540560
	0,45	600	Black	200	190	7000	2		51545510
			White						51545560
6	0,55	750	Black	200	190	5000	2		51655510
			White						51655560
	0,65	1000	White	280	190	4200	2		51665660
9	0,55	1200	Black	200	190	3000	2		51955510
			Blue						51955520
			White						51955560
12	0,55	1350	Black	200	190	3000	2		51255510
			Blue						51255520
			White						51255560
	0,55	1350	Black	280	190	2500	2		51255610
			Blue						51255620
			White						51255660
	0,63	1500	Black	200	190	3000	2		51263510
	0,63	1500	White	280	190	2100	2		51263660
	0,63	1500	Black	406	150	3000	1		51263710
0,73	2700	Black	406	150	2000	1	51273710		
15,5	0,60	1900	Black	200	190	2000	2	51360510	
	0,65	1900	Black	280	190	1500	2	51365610	

PP Straps in Box Dispensers

12 x 0.45mm Black	51250910	Center and side delivery of strap	1000m
15.5 x 0.6mm Black	51360910		1000m



Woven Polyester/Polypropylen (WG) Strap

Also known as corded or woven strap. A type of strapping band that can be reusable to a certain degree. Commonly used together with a metal buckle which makes it adjustable.

WG Strap using metal buckles for tensioning and way of sealing



WG Strap Specifications								Item Number	
Strap Width	Name	Strength N	Col or	Core Ø	Coil Width	Meters/ Coil	Coils / Carton		
9	WG30	2750	Whit e	Ø76	150	250	8	53090250	
						1500	3	53091500	
13	WG40	3750				250	8	53130250	
						1100	3	53131100	
16	WG55	6000				850	3	53160850	
19	WG65	7500				500	3	53190500	
25	WG85	12500				400	3	53250400	

Not all types are permanently on stock

Polyester (PET) Strap

The strongest plastic composite used in strapping. A viable alternative to steel straps primarily due to its strength and cheaper prices.

It is ideal for pallet strapping.



PET Strap Specifications								Item Number
Width	Strap Thickness	Strength N	Color	Core Ø mm	Sp.bred mm	Meters/Coil	Coils / Carton	
12,0	0.70	3900	Green	406	150	2000	1	52270750
12,5	0.60	4000				2500		52E60750
15.5	0.70	5000				1800		52D70750
19,0	0,80	10000				1000		52480750

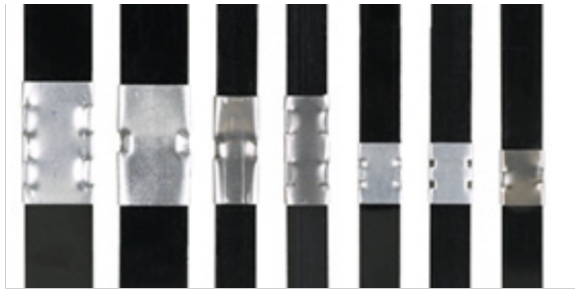
STEP Strapping Seals & Buckles

STEP offers a wide variety of strapping seals and buckles to accommodate your strapping needs. Strapping seals and buckles are crucial accessories for securing the polypropylene (PP) straps during the strapping process.

Three Main Types of Strapping Seals:

- Metal Seals
- Plastic Buckles
- Metal Buckles

These metal seals comes in different shapes and sizes to answer various strapping needs.



Plastic and Steel/Metal Buckles

Are used to secure and tension PP straps by pulling the strap through the buckle. A special type of manual or semi-automatic strapping tool is used to tension the straps

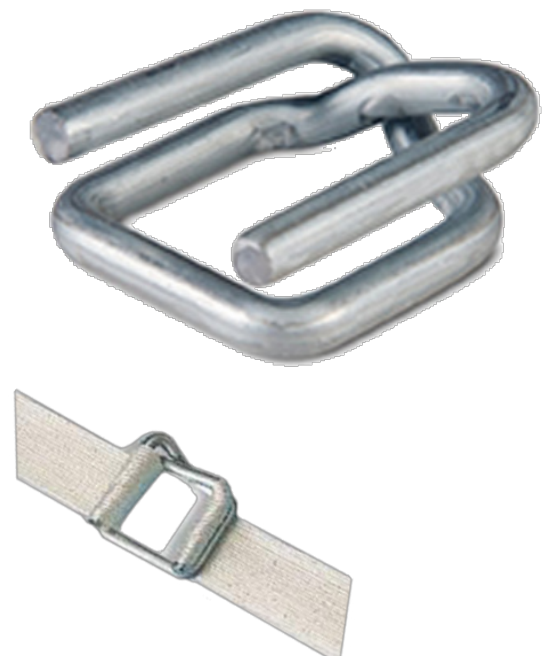
Plastic Buckles	
59511300	Plastic Buckle 13S Black 1000pcs/carton
59511301	Plastic Buckle 13H White 5x1000pcs/carton MOQ 5000
59511600	Plastic Buckle 16S Black 1000pcs/carton
59511601	Plastic Buckle 16H White 5x1000pcs/carton MOQ5000



Metal Buckles for WG strap

Are used to secure and tension WG straps by pulling the strap through the buckle. A special type of manual or semi-automatic strapping tool is used to tension the straps

Metal Buckles for WG Strap Specifications			
Strap Width	Design	Pieces/ Carton	Item Number
9	Blank	1000	59510907
13		1000	59511307
16		1000	59511607
19		1000	59511907
25		500	59512507
38		200	59513807



Semi Open Metal Seals – STEP H-34, H-35 sealer and H-21 tensioner

Allows the seal to be placed along the strap. The strapping is sealed securely using a strapping tensioner and sealer. For use with STEP H-34 and H-35 when tensioning with STEP H-21 on PP strap.

Common type names: VZ2654, VZ2754, S12, S16

Open Type Seal Steel – Standard Length	
59511302	Semi Open Type 13 x30x0,5mm 2000pcs/box
59511602	Semi Open Type 16 x30x0,5mm 2000pcs/box



Semi Open Metal Seals – STEP H42 combination tool

Allows the seal to be placed between the jaws of the combination tools due to its shorter length. The strapping is sealed securely using a strapping combination tool. For use with H42 tensioning and sealer in one tool when using PP strap.

Open Type Seal Steel – Short Length	
59511304	Semi Open Type 13 x25-28x0,5mm 2000pcs/box
59511604	Semi Open Type 16 x25-28x0,5mm 2000pcs/box



Semi Open Metal Seals – HEAVY DUTY with CUT CORNER

Allows the seal to be placed along the strap. The strapping is sealed securely using a strapping hand tool or combination tool. Extra thick seal to allow even better securing and higher breaking strength in the seal point. Can be used for PP and PET strap using Sealer H-34, H-35 and other tools.

Open Type Seal Steel – HEAVY DUTY CUT CORNER	
59511305	Seal AV406 heavy duty with cut corners 13x32x0,6mm open 2000pcs/box
59511605	Seal AV506 heavy duty with cut corners 16x32x0,6mm open 2000pcs/box

Serrated Metal Seals – STEP H44 combination tool and other.

Serrated Metal seals are for use with PET strap and have serrated teeth on the inside to grip onto the strap securely which helps to improve the breaking strain of the strapping seal. Type names: RG13, RG16, RG 19, VZ2774

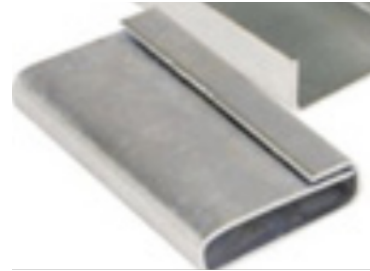
Serrated Metal Seals Heavy Duty			
Strap Width	Dimension	Pieces per Carton	Item Number
13	13x30x0,6	1000	59511309
16	16x30x0,6	1000	59511609
19	19x30x0,6	1000	59511909



Push type seals for PP and PET strapping

Closed push type seal

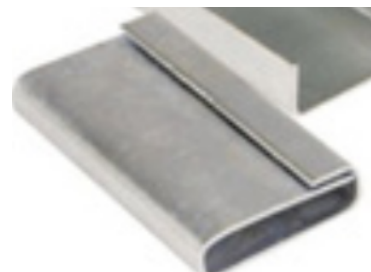
Push Type Seal BK series for PP and PET strap		
Strap Width	Description	Item Number
10	Push Type Seal 303BK 10x25x0.6mm	59511006
13	Push Type Seal 403BK 13x25x0.6mm	59511306
16	Push Type Seal 503BK 16x25x0,6mm	59511606
19	Push Type Seal 603BK 19x25x0.6mm	59511906



Push type seals for Steel Strapping

Closed push type seal

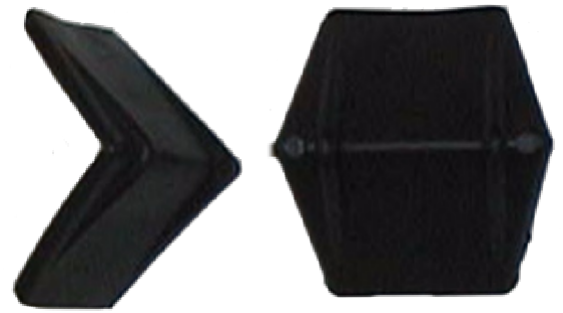
Push Type Seal VZseries for Steel strap		
Strap Width	Description	Item Number
10	Push Type Seal 2333VZ 10x22x0.6mm	59511010
13	Push Type Seal 2334VZ 13x22x0.6mm	59511310
16	Push Type Seal 2335VZ 16x22x0,6mm	59511610
19	Push Type Seal 2336VZ 19x22x0.6mm	59511910



STEP Edge and Corner Protectors

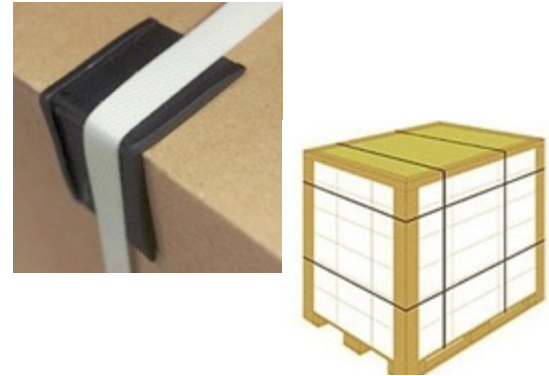
STEP Edge Protectors

Used to avoid edge damage in the bundling or strapping process. The high tension of the straps can damage or deform the outer form of a heavy box or a package. Edge protectors are placed in the way of the strap. Edge protectors are made of plastic and is hard enough to resist the strap tension but is very light as to not leave a mark on the box or the packaging.



Specifications:

Type	Item No.	Dimension	Pieces per Carton
3524	59523524	Angle 35 x 24mm	2000
4530	59524530	Angle 45 x 30mm	1700
5030	59525030	Angle 50 x 30mm	1200
5035UP	59525035	Angle 50 x 35mm without tap	2000
5035MP	59525135	Angle 50 x 35mm with tap	2000
6050	59526050	Angle 60 x 50mm	1000
7050	59527050	Angle 70 x 50mm	800



STEP Corner Protectors

Used primarily for protecting the fidelity of the packaging medium, more commonly used in box packaging. The hard plastic protectors are mostly placed at the box corners to maintain the packaging form.

Specifications:

Type	Item No.	Dimension	Pieces per Carton
4018	59534018	Angle 40 x 18mm	2700
4020	59534020	Angle 40 x 20mm	2500
4022	59534022	Angle 40 x 22mm	2200
5028	59535028	Angle 50 x 28mm	1000
7028	59537028	Angle 70 x 28mm open side	1000
10028	59531028	Angle 100x100x28	4000
10040	59531040	Angle 100x100x40	2900
10060	59531060	Angle 100x100x60	1800



Edge boards

Will be added shortly, make request.

STRAP

Strap Types:

Plastic Strap	Steel Strap	Woven Strap
PP strap – Polypropylen PET strap – Polyester PA strap – Polyamid	Blank steel strap Blue steel strap Black painted steel strap Stainless steel strap	WG strap – Woven basic string hotmelt glued Polyester EG strap – Woven basic string hotmelt glued polypropylen Woven strap – Polyester or Polypropylen

Delivery Forms: On ordering it is important to know how the strap is fitted onto your equipment. Typically strap is delivered on inside core diameter Ø60, Ø76, Ø150, Ø200, Ø230, Ø280 or Ø406 and again these in some standard width of 110, 150, 190mm. The number of meters per coil, ending method, geometrical lock or tape, option of reflector you need to know and decide on ordering.

Steel strap is delivered in single coils and multiple oscillating coils.

Strap width that is in production goes from 4 mm to 38 mm and wider if woven types.

Special applications – The normal and the odd:

PET the stiff strap that often is used to substitute steel strap because it is easy to push through openings and has high tensile strength.

PA strap that is hydroscopic making it able to work with the product it is holding, wet timber expand and subtract in being wet or dry.

WG strap has high tensile strength and is very flexible around corners and can work with the product.

PP strap is good for single standing machines in your production space in direct contact with the operator, easy applications and cheap.

Stainless steel strap when the application needs it.

Environmental Conditions: PP material has components are of special interest as they often are heat welded:

Polypropylene Homopolymere	approx. 97 %
Chalk	approx. 2-3 %
Color pigment non toxic	approx. 1-2 %

Toxic and Chemical Reactions: Polypropylene and Polyester are chemically and biologically inactive. Polypropylene and Polyester can be used in contact with food stuff.

Physical contact: No risk, except mechanical.

Welding of PP material: It is recommended to keep the working area well ventilated at all times. In welding with temperatures below 150°, smoke and damp will be minimal and harmless.

It cannot be recommended to heat weld PET – Polyester without having direct ventilation and it will be best suited for use where the operator is not close by.

Both PP and PET can be friction and ultra sonic welded, without the need to have ventilation. The welding fumes are kept within the welding zone.

Risk of Fire: When polypropylene is heated in air the material will melt at approx. 165 - 170° and decompose will start at 300° giving low molykule hydrocarbons. It will self ignite at 380°.

Burning: Controlled burning is recommended. If ignited, the material will continue to burn, even if the ignition source is removed. Decomposition products from burning are H₂O and CO₂. If burned with low presence of oxygen, then it will produce mono oxide, that is toxic.

Reuse: According to German law PP material for packaging must be black. We recommend this color is used. For PET strap the color is green. PET material is very easy to reuse.