

Sal-Tech Easy Packaging Packaging Solutions Strapping



WE KEEP THINGS TOGETHER



**Machines,
Tools and
Materials**

STRAPPING Basics

Get the best out of strapping.

What it can and what it can't typical equipment for strapping:

			
Manual H-34 Sealer H-21 Tensioner	Semi-Automatic STEP TP-202	Automatic STEP TP-601D	Full Automatic STEP TP-601A

Process: With strapping you place a strap around your product. This strap is welded, sealed with seal, with geometry lock, so it will hold around the product. With strapping you can have manual, semi-automatic, automatic and fully automatic equipment. Before strapping you have to position your product, either in strapping one unit or several items, the final position must be present before your perform the strapping and this position must be geometrical stable. (See article about geometrical stability in packaging) In order to perform a correct strapping the product must have enough flat surface towards the strapping machine area, that secures that the strap can be tightened and released and still be tight after released by the spacer. You can strap both hard and soft products, but with limitations towards both types of products. The general limitation is the touching surface length that has to be larger than 100mm and flat.

Equipment used for different levels of Strapping:

Manual:

General: Ring strapping is possible. There are no upper limits to package size.

- Plastic Buckles 13S and PP strap fro dispenser carton and handle P173 with knife or H-21 to do the tensioning. The strap is placed around the product.
- Seal, sealer H-34, tensioner H-23 and PP or PET strap from dispenser wagon. The strap is placed around the product.
- Electrical/Pneumatical tensioner and friction welder H-45 and PP or PET strap from dispenser wagon. The strap is placed around the product.

Semi-Automatic:

General: Ring strapping is possible. There are no upper limits to package size, except for what can be handled on the table top.

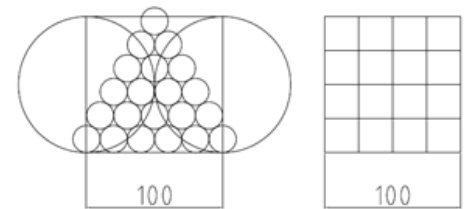
- Semi automatic strapping machine STEP TP-202, where you manually place the strap around the product, where after it is tensioned and welded using heat. The product is positioned manually in respect to the machine that stands still.
- Semi automatic pallet strapper STEP TP-202MV, where you manually place the PP/PET strap around the pallet, where after it is tensioned and welded using heat or friction welding. Typically you position the machine in towards the pallet that would be standing on the floor or being transported on a roller conveyor system.

Automatic:

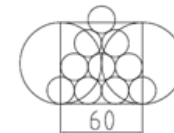
General: Ring strapping is not possible, but Sal-Tech Easy Packaging has possible solutions making arches that can open and close around the product so it can be done. Package size is limited to arch size and the products diagonal length if this is to be turned inside the arch.

- Automatic arch machine STEP TP-601D that feeds the strap around in the arch and retract it on starting the process, makes the tension and welds the strap. The strap will either be heat, friction and ultra sonic welded. The product must be positioned manually.

Geometry allows strapping as it has enough surface facing towards spacer.



Geometry can be strapped using special equipment.



Geometry does not allow strapping because the surface towards the spacer is too short.



Continued on page 11

Sal-Tech Easy Packaging

Semi-Automatic Strapping Machines



Semi-Automatic Strapping Machines are used for bundling together products and secure them during transport. They are ideal for strapping small to medium packages. Recommended for small production lines.

STEP TP-202CE

Semi-Automatic Strapping Machine

The STEP TP-202 is a very stable Semi-Automatic Strapping Machine that solves most needs for fast and simple bundling of items, securing boxes and giving them more stability.

Features:

- High engineering standard and simple design
- Easy operation, simple maintenance
- Hinged stainless steel top plate
- Mechanical outside tension control
- Rigid castors with brake
- Energy efficient, motor only runs as needed
- Reliable P.C. Board control
- Affordable for every budget
- Offer maximum total value among competing brands
- Proven quality

Options:

- Adjustable table height from 760 mm to 930 mm
- Adjustable table height electrical driven controlled via operator panel
- Retro fit scale 150kg
- Table rollers for easy moving of packages
- Core ø280

Item Number	Model
41000011	Standard
41000012	with adjustable legs



Specifications	
Strap Width	6mm - 15.5mm
Strap Tension	15kg - 45kg
Dimension	902mm x 586mm x 760mm
Net Weight	85kg
Power Requirements	Single Phase according to Local Standard

Retro Fit Scale

Additional option for STEP TP-202CE and STEP TP-202L Semi Automatic Strapping Machines or for the STEP TP-6000CE or STEP TP-601 standard machines.

Scale for placing under strapping machine making it easy to pack, strap and weigh in one place saving movements and your back. Making it easy to pack your box, close it and

strap it, then get the weight and mark the box right away. You can even follow the weight of the packed box while you are packing it, securing you don't overload each box.

- Using indicator LP 7510 from easycomponent.com having many functions and easy to use.
- Electrical connection 230V 50Hz. (Battery type is optional on request)
- Load up to 200kg.

The retro fit scale can even be used under other machines, tables or what ever fits on the given dimension limits.

Item Number	Model
25002010	Standard TP-202CE
25002060	Standard TP-6000CE/601CE
25002070	Special dimension adapted, max 1500x800mm size



Item No. 25002010

STEP TP-202L

Semi-Automatic Low Table Height

Semi-Automatic Strapping Machine for low strapping applications. Best suited for heavier products for minimal lifting. With a table height 390mm with the same specifications as the STEP TP-202CE

Item No. 41000020



STEP TP-203

Semi- Automatic Mini Strapping Machine

Features

- Mid-sized model
- Smoke exhaust system
- Designed specially for office, bank, post office, book and department stores, etc.

For other features and options, please refer to STEP TP-202CE



Specifications	
Strap Width	6mm - 15.5mm
Strap Tension	9kg - 30kg
Dimension	632mm x 422mm x 805mm
Net Weight	80kg
Power Requirements	Single Phase according to Local Standard
Item no.	41000030

STEP TP-502

Semi-Automatic Strapping Machine



The STEP TP-502CE Semi-Automatic Strapping Machine is a packaging and strapping table with Electrically Adjustable Tensioning. Has adjustable table height.

The STEP TP-502CE Semi-Automatic Strapping Machine gives you many advantages for simple and safe operation

Specifications:	
Strap Width	5mm - 15.5mm
Strap Tension	8kg - 45kg
Table Height	780mm - 950mm
Net Weight	70kg
Power Requirements	Single Phase according to Local Standard
Item Number	41000040

Features:

Compact Mechanical Strapping Head

With 30% less moving parts than conventional machines substantially reduces maintenance issues. There are no belts, chains or pulleys. Extremely low noise sealing head



Adjustable Table Height

The table height is adjustable to any height between 780 mm and 950 mm.



Electronic Tension Control

Adjustment for wider strap tension (8-45 kg) can be easily done on the front control panel.



E3Hallbrook Ergo Strap Table

Semi-Automatic Strapping Machine

Heavy Duty Electrical Height Adjustable Table with

Built-in Scale and Strapping Machine

NEW IMPROVED DESIGN 2020



GREAT VALUE FOR MONEY!



New High adjustment with 4 memory functions



Instrument of Scale unit

Features

- Lifts more than 150kg
- Static load up to 250kg
- Electronic tension between 5-55kgs
- Electronic scale with four (4) load cells for weighing up to 250kg.
- Heavy duty electrical table height adjustment between 700 and 1100mm
- White tableplate size 2000x800x32mm Strapping machine with electronic adjustable tensioning for 12mm PP strap,
- Ergonomic design, to secure good working conditions, correct means less use of hours and less back pain
- Save on space needed in your packaging zone, but at the same time gives great working space

Strapping machine operation panel



Item Number	Model
25001020	STEP E3 ERGO TABLE with Strap & Scale
25001030	STEP E3 ERGO TABLE with Scale
25001040	STEP E3 ERGO TABLE with Strap
25001050	STEP E3 ERGO TABLE only



STEP TP-201YS Semi-Automatic Vertical Strapping Machine

A Semi-Automatic Side Sealing Strapping Machine ideal for food and fishing industry. This machine offers reliability and high performance to accomplish difficult tasks. Built with stainless steel body for cleanliness and food quality.

For 6 to 15,5 mm but set for 12mm PP strap, Adjustable Table Height, ø200 core.

Item No. 41000060



STEP Retro fit Scale can be added to most semi Strapping machines – just ask!

Optional Add-on

The Retro Fit Scale to add weighing capability to your semi-automatic strapping machine.

(Item No. 25002020)

For more information, contact us.



STEP AS 50 Semi-Automatic Strapping Machine



The STEP Strap AS 50 is a basic semi-automatic strapping machine ideal for entry-level strapping process. Electronic tension adjustment



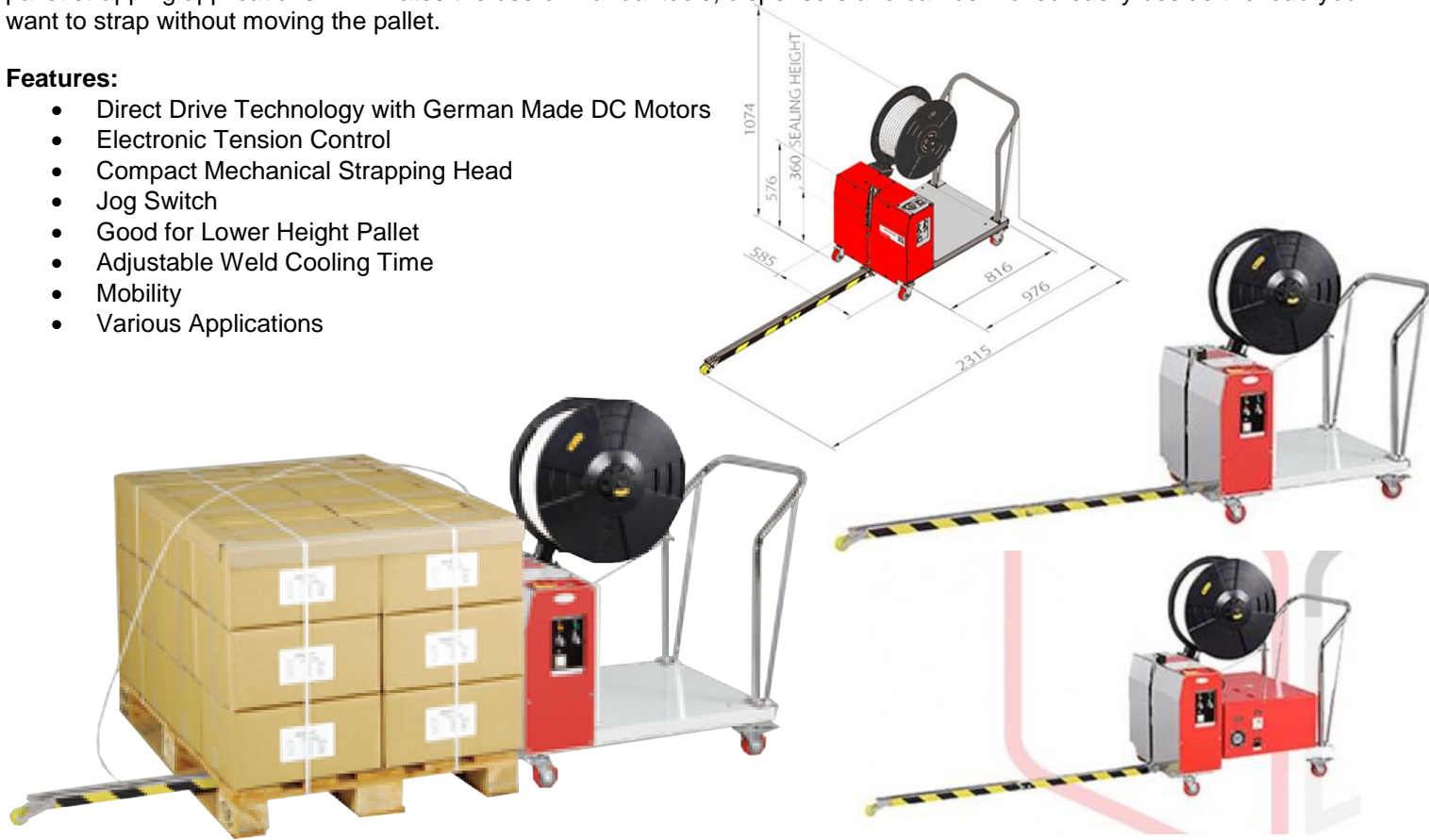
Specifications	
Strap Width	5 mm - 15 mm (12mm Standard)
Strapping Speed	<3 seconds per strap
Machine Dimensions	(LxWxH) 840x535x730 mm
Net Weight	65 kg
Power Consumption	0.4 KW
Electrical Requirements	Single Phase According to Local Standard
Item Numbers:	41000081 230V50Hz version 41000082 115V60Hz version

STEP TP-502MV & STEP TP-502MVB

A Semi – Automatic Pallet Strapping Machine, suitable for corrugated card boards, concrete blocks and loaded pallet with cardboard boxes holding any type of products. Provides ergonomic and cost – effective solution for low volume vertical pallet strapping applications. Eliminates the use of manual tools, dispensers and can be moved easily beside the load you want to strap without moving the pallet.

Features:

- Direct Drive Technology with German Made DC Motors
- Electronic Tension Control
- Compact Mechanical Strapping Head
- Jog Switch
- Good for Lower Height Pallet
- Adjustable Weld Cooling Time
- Mobility
- Various Applications



Specification		
Description	STEP TP-502MV	STEP TP-502MVB
Strap Type	PP Strap	PP Strap
Strap Width	9mm, 12mm, 15.5mm	9mm, 12mm, 15.5mm
Strap Thickness	0.6 – 0.8mm	0.6 – 0.8mm
Strapping Speed	18sec., 1 Strap (Package Size 1200L x 800W x 1000H mm)	18sec., 1 Strap (Package Size 1200L x 800W x 1000H mm)
Min. Package Height	380mm (Pallet is included)	380mm (Pallet is included)
Strap Core Inner Diameter	200mm (280mm is also available)	200mm (280mm is also available)
Tension Range	8 Kg – 70 Kg	8 Kg – 70 Kg
Length of the Sword	1250mm	1250mm
Net Weight	93 Kg	153 Kg
Machine Dimension	585W x 2315D x 1074H mm	585W x 2315D x 1074H mm
Power Consumption	0.33 Kw	0.33 Kw
Temperature of Working Environment	5 – 40°C	5 – 40°C
Electrical Requirements	110V, 220V, 230V, 240V 50/60Hz 1Ph	110V, 220V, 230V, 240V 50/60Hz 1Ph or Battery
Battery Spec	NA	VRLA Type, 12V, 50Ah (2 Pieces)
Battery Charge Time	NA	5-7 Hours (depends on the environment)
Battery Capacity	NA	Approx. 1000 – 1500 strapping cycles per charge (depends on package size and tension)
Battery Lifespan	NA	Approx. 300 Charges
STEP Item no.	41000150 for 230V 50Hz Version 41000151 for 115V 60 Hz version	41000160 for 230V 50Hz version 41000161 for 115V 60 Hz version

STEP TP-502MH Horizontal Semi Auto Strapping Machine NEW VERSION



STEP TP-502MH inherits all of the advantages from STEP TP-502, such as compact strapping head, direct drive technology with German-made DC motors, and electronic tension control. It can be moved easily beside the load you want to strap, no need to move the pallet. The STEP TP-502MH is quick, ergonomic, and economical solution for low volume horizontal pallet strapping applications.

Features

- Compact mechanical strapping head
- Adjustable strapping height
- Electronic tension control
- Jog switch
- Adjustable weld-cooling time
- Two moving direction

Item no.: 41000130



Options

- Battery power supply (TP-502MHB)
- Edge protector holder
- Handle on the rear for back/forth movement

Technical Data

Strap Type	PP strap
Strap Width	9 mm - 15.5 mm
Tension Range	8 - 70 kg
Net Weight	292 kg
Electrical Requirement	110V, 220V, 230V, 240V 50/60Hz 1PH

Continued from page 2

Full Automatic:

General: Ring strapping is not possible, but Sal-Tech Easy Packaging has possible solutions making arches that can open and close around the product so it can be done. Package size is limited to arch size and the products diagonal length if this is to be turned inside the arch.

- Automatic arch machine TP-601A that feeds the strap around in the arch and retracts it on starting the process, makes the tension and welds the strap. The strap will either be heat, friction and ultra sonic welded. Positioning the product is done fully automatic with roller conveyor TP-601A or belt conveyors TP-601B, corner pushers, straight pusher, free fall systems with collections and push out, all systems made in project by Sal-Tech easy Packaging according to set specification, based on each projects demands.

Project specified and Advanced Strapping Equipment:

			
STEP TP-702 Narrow strap up to 65 straps/minute	STEP TP-701CC	STEP TP-702NIL Inline Cross Strapping	STEP TP-601B x 2 stk. Corner pusher strapping project solution
Graphic industry, printed matters, brochures, newspapers etc.	Corrugated Industry	Graphic Industry, Newspapers, magazines etc.	Distribution hardware, boxes etc.

You can also find combined system with focus on ergonomic issues and time saving. An example is the STEP Ergo Strap Table and Platform scale for STEP TP-202.

Ergo Strap Table, Strapping, scale and electronic lift and lowering of table height.



Further information on strap, go to page 71.

Sal-Tech Easy Packaging

Automatic Strapping

Machines



STEP TP-6000CE1 Automatic Strapping Machine

Automatic Strapping Machine ideal for the laundry industry. With a standard arch width 850mm and height 600mm.

For 12mm PP strap and ø200 core.

With core adapter (Item No. TC-075), the machine can use ø280core strap

H	W	850	1050	1250	1450
400		41100332	41100432	41100532	41100632
600		41000342	41100442	41100542	41100642
800		41100352	41100452	41100552	41100652
1000		41100362	41100462	41100562	41100662
1200		41100372	41100472	41100572	41100672

Standard



STEP TP-6000CE

Contact us for Price

STEP TP-6000CE - For BIG Assignments - Call Us!

Price per 200mm on either width or height add on. Maximum shoot length must be under 6500mm, calculation formula: $(2 \times \text{width} + 2 \times \text{Height}) \leq 6500\text{mm}$

Special Price add on if machine is wider than 2250mm. Request price and delivery time. Ask for specification related your products.

In the
workshop



Price for base machine when arch add on is:



This machine is
2.650mm x 600mm
Center strap seal point.

Built in DK or carried from producer.
Delivery time:
approx. 4-14 weeks

STEP TP-601CE1

Automatic Strapping Machine

Enhanced Automatic Strapping Machine with arch width 850mm and height 600mm, table height mm. For 12mm PP strap and ø200 core.

Features

- Speed up to 27 straps per minute
- Equipped with all industry standard features
- Standard Arch size 850x600mm
- For 12 mm straps
- Compact strapping head
- Re shoot of Strap & Zero Loop Eject
- Short Feed Sensor
- Auto Strap Refeed
- Strap End Ejector

Options

- Optional 9 mm Straps
- Stainless Steel Frame
- Retro fit scale
- Wide range of arch size available
- Roller balls in table top for easy rotating of goods for cross strapping

Item No. 4100060

Contact Us for Price



Electronic Tension Control

Strap tension can be adjusted accurately by the simple turn of a dial. Easy operation



Main Features



Reliable and Robust Strapping Head

Robust mechanism design and high engineering standard ensure excellent durability of the products. Use two proximity switches to replace conventional limit switches.



Auto Strap Ejector

Loop-eject clears unwanted strap automatically if the machine is accidentally activated without a package. Eliminates downtime.



Auto Strap Feeding

Simply insert the strap into the feeding rollers from the coil side of the machine and then push the "reset" button. The machine will automatically feed itself without the need to access to the inside of the machine. Easy strap loading.

STEP TP-601DS

Automatic Stainless Steel Strapping Machine

Enhanced Automatic Strapping Machine designed for 8mm to 12mm straps.

Specifically designed for the food industry. Made with high quality stainless steel to meet strict hygiene standards.

SUS 304 Stainless Steel Frame
CE certified

Item No. 41000XXX



Specifications	
Strap Width	8mm – 12mm
Strap Thickness	0.55mm – 0.75mm
Strap Tension	7kg – 70kg
Speed per Minute	29 Straps
Table Height	810mm
Net Weight	220kg
Electrical Requirements	Single or Three Phase

H W	850	1050	1250	1450
400	•	•	•	•
600	Standard	•	•	•
800	•	•	•	•
1000	•	•	•	•
1200	•	•	•	•

Automatic Vertical Strapping Machines STEP TP-601Y Series

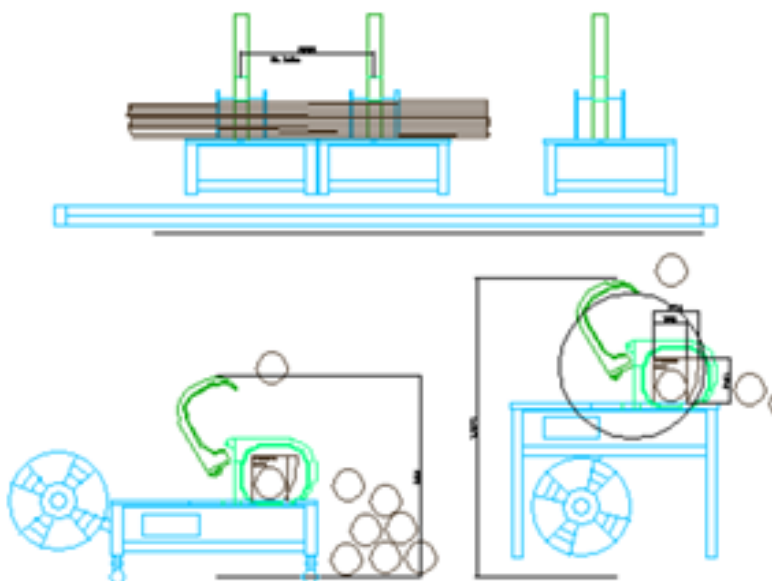


STEP TP-601Y	STEP TP-601YA
Item no.: 41131252	Item no.: 41132252
<p>Enhanced Automatic Vertical Strapping Machine with Arch width 600mm and height 850mm. Made for 12mm PP strap and \varnothing200 core.</p> <p>Features:</p> <ul style="list-style-type: none"> • Electronic Tension Control • Re shoot of Strap • Automatic Loading of Strap • Electrical Reset Button • Zero Loop Cast Out • Adjustable Table Height 	<p>Enhanced Automatic Vertical Strapping Machine with Arch width 600mm and height 850mm. Made for 12mm PP strap and \varnothing200 core.</p> <p>Features:</p> <ul style="list-style-type: none"> • Driven rollers with adjustable speed between 10-40m/min • Electronic Tension Control • Re shoot of Strap • Automatic Loading of Strap • Electrical Reset Button • Zero Loop Cast Out • Adjustable Table Height • Height minimum 480mm

STEP E3 Strap -22RB Series for PET

Semi Automatic Ring Binder Strapping Machine built on order in accordance with specification. F.exs. as wood bundles/steel tubes/strap with use of a number of machines. Design layout shown here. For long products, en handling 2 to 10 straps applied divided along the length of the product.

Item no. 41209020



STEP E3 Strap-6000RB Series Automatic Ring Binder Strapping Machine

Automatic Ring Binder Strapping Machine built on order in accordance with specification.

For more information:
Call us: +45 7027 2220
Skype: easy.packaging



STEP TP-601LCE

Low Table Automatic Strapping Machine for heavy packages. The machine comes with a stainless steel model made with high quality stainless steel specifically for the food industry.

Features

- Optional SUS 304 stainless Steel Frame
- CE certified
- Reliable robust strapping head
- Electronic tension control
- Auto strap feeding
- Electronic tension control
- Auto strap ejector (looper)
- Short feed sensor
- Auto strap refeed



41000310	Standard
41000320	Stainless Steel

Specifications	
Strap Width	8mm – 12mm
Strap Thickness	0.55mm – 0.75mm
Strap Tension	7kg – 70kg
Speed per Minute	29 Straps
Table Height	810mm
Net Weight	220kg
Electrical Requirements	Single or Three Phase

H	W	650	850	1050	1250
400		•	•	•	•
600		•	Standard	•	•
800			•	•	•
1000			•	•	•
1200			•	•	•

STEP TP6000 Ringbinder – Produceret og designet i ordre.

I forbindelse med Hydro Aluminium har vi leveret 1 stk. automatisk omsnøringsmaskine for coils af aluminiumsrør opspolet i ringe, hvor basismaskine er en TP6000 omsnøringsmaskine, med kerne Ø200/W190mm og tilslutning 1x230V-50Hz. Der er foretaget følgende specialopbygning:

Ramme mål tilpasset kundens ønske og ind bygningskrav/layout og de begrænsninger givet heri og med åbning pneumatisk efter hver omsnøring og styring af nyt indskud for PP omsnøringsbånd 12 x 0,55/0,63mm. For indsættelse i ny linie for omsnøring af opspolet Aluminiums rør, med særlig ramme mål, pool boks opbygning og RHS stativ. Hovedmål af udstyr udgør:

- Brede 500mm, omsnørings punkt i midt heraf.
- Dybde 600mm, omsnørings punkt i midt heraf.
- Højde 700mm

Opbygning på vort værksted samt montage og test. Opbygget med Siemens PLC samt TP 6000 standard styring. Signal udveksling:

- Hydro PLC sætter potential fri signal for strap.
- STEP styring sætter signal for afsluttet omsnøring (ramme åben)



Item no. 41209010

Main Features



Reliable and Robust Strapping Head

The STEP TP-702 uses the latest DC brushless motors technology to provide the highest level of accuracy and reliability on the market. All motors are German-made.

The strapping head has no belts, clutches or pulleys. It is designed with up-to-date technology with few moving parts. With 30% fewer parts, STEP TP-702 requires fewer adjustments, has fewer wear components, and requires less maintenance. The simple design of STEP TP-202 minimizes the maintenance cost.



Free Access to Strap Guides (Patents Registered)

Hinged top plate makes easy access to the strapping head for quick maintenance. Unblock the guides enabling free and quick access to the strap guides without use of any tools. The most maintenance-friendly design.



Waist-High Quick Coil Change (Patents Registered)

Innovative waist-high coil change without access to the bottom of the machine. Quick release lock eliminates downtime to change the coil. Ergonomic and quick change design makes coil change simpler than ever.



Waist-High Auto Strap Feeding

Friendly design to feed the strap automatically from the upper side of the coil without the need to access to the bottom of the machine.



Turnable Operating Control Panel

The operating control panel is located on upper side of the machine for easy access. User friendly. Power cord located at the top of arch makes the machine very safe to operate and avoid wire damage while moving the machine.



Auto Strap Ejector

Loop-eject clears unwanted strap automatically if the machine is accidentally operated without a package. Eliminates downtime.



Front Foot-Bar Switch

Ergonomic design and user friendly.

Adjustable Table Height

The table height is adjustable to any height between 820 mm and 920 mm



Model Number / Specifications	STEP TP-702-59 (5 mm, 6mm, 9mm Strap Width)	STEP TP-702-12 (12 mm Strap Width)
Speed Per Minute	65 Straps	60 Straps
Strap Tension	1 kg to 32 kg	1 kg to 45 kg
Net Weight	157 kg	166 kg
Electrical Requirements	Single Phase according to Local Standard	

STEP TP-702

Automatic Narrow Strap Strapping Machine

Automatic Narrow Strap Strapping Machine with arch width 550mm and height 400mm, table height 870-1020mm. It also come in a fully stainless steel specifically designed for the food industry. Made with high quality stainless steel to meet strict hygiene standards.

Standard for 5mm PP strap and ø200 core.

Features

- Speed up to 65 strap per minute
- Equipped with all industry standard features
- Wide range of standard arches
- Compact Strapping head
- Electronic Tension Control
- Automatic loading of strap
- Electrical reset knob
- For 5, 6, 9 and 12mm PP strap

Options

- SUS 304 stainless steel frame CE certified (STEP TP-702S)
- Photo-Eye Switch
- Rear Foot Bar Switch
- Max. tension up to 45 kg (for 9mm)



STEP TP-702-arch 550x400-5mm

Contact Us for further prices on needed size

Arch Sizes

(for 5mm/6mm/9mm Straps)

H	W	550	650	850	1050	1250	1650
400		41190125		•			
500			41192235	•		•	•
600				•			
800				41192345	41192455	•	
1000					•	•	

Arch Sizes

(for 12 Straps)

H	W	650	850	1050	1250	1650
400			41192312			
500		41192222				41192622
600			41192332	41192432	41192532	
800			41192342	41192442	41192542	
1000			41192352	41192452	41192552	

- **On Order Basis**

STEP TP-702P

Automatic Strapping Machine

The STEP TP-702P is equipped with dual pneumatic press which better stability to the product being strapped. It is ideal for the graphics industry such as newspaper and magazine bundling.

A specialized stainless steel model (STEP TP-702PS) is available food industry. Made with high quality stainless steel to meet strict standards

Features

- Dual Pneumatic Press
- Robust and Compact Mechanical Strapping Head
- Waist High Auto strap feeding
- Waist High Quick Coil Change
- Front Foot-Bar Switch

Options

- SUS 304 stainless steel frame CE certified
- Photo-Eye Switch
- Rear Foot Bar Switch
- Max. tension up to 45 kg (for 9mm)

Specifications:	
Strap Width	5mm, 6mm, 9mm, 12mm
Strap Tension	1kg to 32kg (5/6/9mm straps) 1kg to 45kg (12mm strap)
Speed per Minute	47 straps (5/6/9mm straps) 44 straps (12mm strap)
Net Weight	227 kg (5/6/9mm straps) 229 kg (12mm strap)
Electrical Requirements	Single Phase According to Local Standard



Item no.: 41193010

Arch Sizes

(for 5mm/6mm/9mm Strap)

H	W	650	850	1050	1250	1650
500	Standard				•	•
600			•			
800				•	•	

Arch Sizes

(for 5mm/6mm/9mm Strap)

H	W	650	850	1050	1250	1650
500	Standard					•
600			•			
800				•	•	

- On Order Basis

Main Features

Free Access to Strap Guides (Patents Registered) Unblock the guides enabling free and quick access to the strap guides without the use of any tools.

Dual Pneumatic Press

Offer better product stability and containment.

Waist-High Auto Strap Feeding

User friendly design. Easy strap loading.

Waist-High Quick Coil Change (Patents Registered) Ergonomic and quick change design makes coil change simpler than ever.

Front Foot-Bar Switch

Ergonomic design and user friendly.

Ergonomic Cycle Initiation Easy Access Operating Control Panel

Sal-Tech Easy Packaging

Fully Automatic Strapping Machines



STEP TP-601 Fully Automatic Series

More Features



Auto Strap Feeding

Simply insert the strap into the feeding rollers from the coil side of the machine and then push the "reset" button. The machine will automatically feed itself without the need to access to the inside of the machine. No need to remove it from the line for strap feeding. Designed for easy strap loading.



Auto Strap Ejector

Loop-eject clears unwanted strap automatically if the machine is accidentally activated without a package. Effectively eliminates downtime due to strap jamming and other similar issues.



Hinged Top Plates

The top plates opens wide for quick cleaning, inspection, and maintenance of strapping head, strap-feed and tensioning unit.



Belt Transmission

Instead of using roller chain, belt transmission system ensures long operational life and quiet operation.



Electronic Tension Control

Strap tension can be adjusted accurately by the simple turn of a dial. Easy operation.

Specifications	
Strap Width	8 mm-12 mm
Strap Tension	7 kg-70 kg
Conveyor Speed	30 meter/Minute
Table Height	825 mm
Net Weight	330 kg
Electrical Requirements	Three Phase According to Local Standard

STEP TP-601 Series Fully Automatic Strapping Machines



STEP TP-601A-CE	STEP TP-601B-CE
41180342	41181342
Table Rollers	Belts on Table

Enhanced Fully Automatic Strapping Machine with arch width 850mm and height 600mm, table height 820 mm, for 12mm PP Strap and ø200 core.

Features:

- Electronic Tension Control
- Re shoot of strap
- Automatic loading of strap
- Electrical reset bottom
- Zero loop cast out
- Transport speed 30m/min.
- Single strap, two or more or transit
- Capacity up to 18 parcels /minute

Options

- Siemens PLC control
- Variable conveyor speed: 18 to 42 meter/min
- Stainless steel frame SUS 304 (STEP TP-601AS)
- Safety Guards

Arch Sizes

H	W	850	1050	1250
400		•	•	•
600		Available	•	•
800		•	•	•
1000		•	•	•

- On Order basis

Line for Cross Strapping of large boxes, using 2 units of STEP TP-601B



For more information call us:

Telephone: +45-7027 2220

Skype: easy.packaging

STEP TP601BP-CE

Fully Automatic Transit with Press

The STEP TP-601BP is a Fully Automatic Strapping Machine with transit capability and features a Pneumatic Press. The machine has a belt-driven table with speeds up to 30 meters per minute. It is ideal for strapping printed products such as newspapers and magazines. It is also applicable for strapping corrugated boxes and other similar packaging. A Stainless Steel model also available.

Features

- Multiple strap function for single, double, continuous strapping or transit mode
- Up and down stream interlock with complete plug connector
- Easy bundle flow direction change
- Automatic end-strap detection and ejection
- Electronic Tension Control

Options

- Siemens PLC control
- Variable conveyor speed: 18 to 42 meter/minute
- Stainless Steel frame SUS 304 (STEP TP-601BPS)
- Safety Guards



Arch Sizes

H	W	850	1050	1250
400		•	•	•
600	Available		•	•
800		•	•	•
1000		•	•	•

- On Order basis

Specifications	
Strap Width	8 mm-12 mm
Strap Tension	7 kg-70 kg
Conveyor Speed	30 meter/Minute
Table Height	825 mm
Net Weight	330 kg
Electrical Requirements	Three Phase According to Local Standard

Main Features



Auto Strap Feeding

Simply insert the strap into the feeding rollers from the coil side of the machine and then push the "reset" button. The machine will automatically feed itself without the need to access to the inside of the machine. No need to remove it from the line for strap feeding. Designed for easy strap loading.



With Pneumatic Press

STEP TP-601BP is ideal to strap compressible material such as corrugated papers, paper sheets, plastic sheets, bags...etc



Auto Strap Ejector

Loop-eject clears unwanted strap automatically if the machine is accidentally activated without a package. Effectively eliminates downtime due to strap jamming and other similar issues.



Hinged Top Plates

Opens wide for quick cleaning, inspection, and maintenance of strapping head, strap-feed and tensioning unit.



Belt Transmission

Instead of using roller chain, belt transmission system ensures long operational life and quiet operation.

Product Overview:

STEP TP-702B

The STEP 702B is a fully automatic strapping machine is capable of strapping up to 65 straps per minute, with width ranges from 5mm, 6mm & 9mm strap. This machine is dedicated to use only PP strap due to its temperature requirement, and for a more reliable means of packaging. With its Dispenser Release Switch, this machine makes it easier to pull the strap from the strap dispenser for waist-high auto strap feeding.

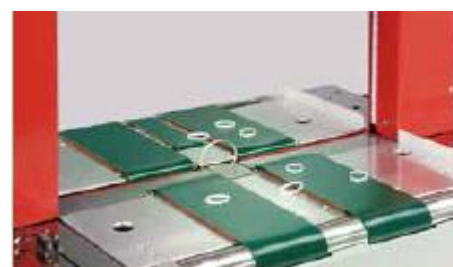
Features:

- Durable Strapping Head
- Compact Design
- Suitable for Small Package Strapping
- Automatic Strap Feeding
- Automatic Strap Ejection
- Modifiable Conveyor Speed
- Modifiable Table Height
- Several Strap Mode (single, double, continuous, or transit)
- Hinged Top Plates
- E-Tension Control
- Variable Bundle Flow Direction Change
- Up and Down Stream Interlock



Electronic Tension Control

The operating control panel with LCD display is located on upper side of the machine for easy access. Strap tension can be adjusted accurately by a simple turn of the dial.



Auto Strap Ejector

Loop-eject clears unwanted strap automatically if the machine is accidentally activated without a package.



Waist-High Auto Strap Feeding

Friendly design to feed the strap automatically from the upper side of the coil without the need to access to the bottom of the machine.

Specifications	
Strap Width	5mm, 6mm, 9mm or 12mm
Tension Range	1-32 Kg (for 5mm, 6mm, and 9mm) 1-55 Kg (for 12mm)
Speed	Up to 40 packages per min. (Cycle speed up to 65 straps per min.)
Net Weight	225 Kg
Electrical Requirements	110V, 220V, 230V, 240V 50/60Hz 1 PH 220V, 380V, 400V, 415V 50/60Hz 3PH

STEP TP-702BP

The other version of this STEP-TP 702B comes with a dual Pneumatic press for a more secured packaging solution for your goods is the STEP-TP 702BP. This machine incorporates the latest technology that provides ultimate reliability in packaging solution. Just like the previous version, this machine comes with standard front foot bar switch makes machine operation in a very easy way. Ergonomic cycle initiation design and user friendly.

Features:

- Reliable Strapping Head
- Compact Design
- Installed Pneumatic Press
- Free Access to Strap Guides (Registered Patent)
- Hinged Top Plates
- Variable Bundle Flow Direction Change
- Up and Down Stream Interlock
- Modifiable Conveyor Speed
- Modifiable Table Height
- Automatic Strap Feeding
- Automatic Strap Ejection
- E-Tension Control
- Several Strap Mode (single, double, continuous, or transit)



With Pneumatic Press

This machine is ideal to strap compressible material such as corrugated papers, paper sheets, plastics sheets, bags etc.

Free Access to Strap Guides (patents registered)

Unlocking the guides enables free and quick access to the strap guides without use of any tools. The Most maintenance friendly design.



Specifications	
Strap Width	5mm, 6mm, 9mm or 12mm
Tension Range	1-32 Kg (for 5mm, 6mm, and 9mm) 1-55 Kg (for 12mm)
Speed	Up to 36 packages per min. (Cycle speed up to 65 straps per min.)
Net Weight	250 Kg
Pneumatic Bar	6 bar
Electrical Requirements	110V, 220V, 230V, 240V 50/60Hz 1 PH 220V, 380V, 400V, 415V 50/60Hz 3PH

Fully Automatic Strapping Machines – STEP TP-702N Series

STEP TP-702N is an upgraded fully automatic strapping machine, designed specifically for the printed media industry. It is particularly suitable for newspaper, magazine, commercial and mail order strapping.

STEP TP-702NS

High Speed Strapping Machine for Single and Parallel Strapping



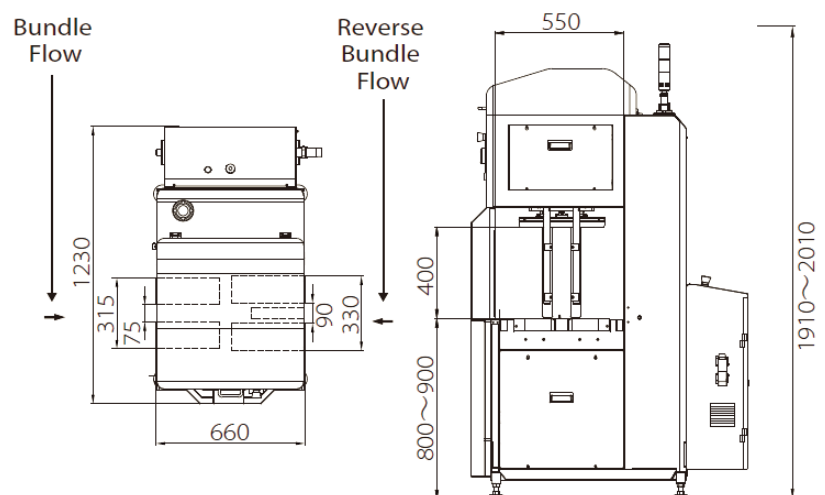
The STEP TP-702NS is a Fully Automatic Strapping Machine. With its High Speed Strapping, it can be integrated into most production lines and be utilized with various applications.

Main Features

- Robust & Compact Mechanical Strapping Head
- Patented Automatic Tension Control for various bundle dimensions
- Dual Pneumatic Press
- Up and Down Stream Interlock with complete plug connection
- Fully Automatic Operation with Variable Conveyor Speed
- Siemens PLC Control and Touch Panel
- Light Tree Alarm (Dual Lamp)
- Free Access to Strap Guides (Patents Registered)
- Easy Access to Strapping Head (Patents Registered)
- Quick Coil Change
- Automatic End-Strap Detection and Ejection
- Adjustable Table Height between 800 mm and 900 mm
- Automatic Strap Loop Ejection

Options

- Energy Saving Transit with Auto Sleep Mode
- Operator Friendly Low Strap Sensor (Triple Lamp)
- Soft Press for Convex Bundle
- Lower Adjustable Table Height (730 mm - 800 mm)
- Automatic Side Squaring
- Reverse Bundle Flow
- Low Volume Bundle Bypass
- Movable Caster



Specifically modified for Magazine Strapping (STEP TP-702MGZ)

STEP TP-702NL

Fully Automatic Longitudinal Strapping Machine for Bundle Strapping in Transport Direction

The STEP TP-702NL is a Fully Automatic Longitudinal Strapping Machine. The bundle is strapped in the transport direction.

Main Features

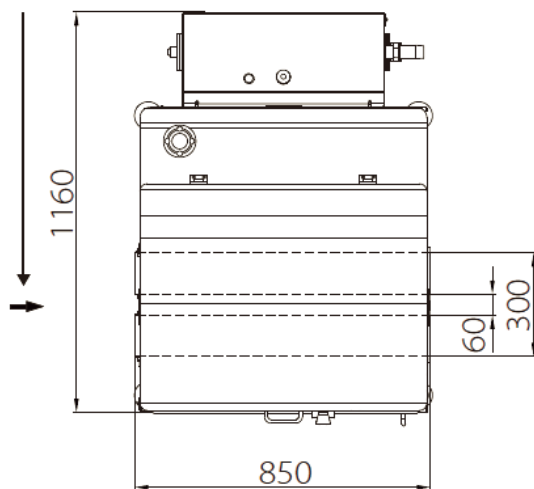
- Robust & Compact Mechanical Strapping Head
- Patented Automatic Self-Adjusting Strap Chute (Patents Registered)
- Patented Automatic Tension Control for various bundle dimensions
- Up and Down Stream Interlock with Complete Plug Connection
- Fully Automatic Operation with Variable Conveyor Speed
- Siemens PLC Control and Touch Panel
- Light Tree Alarm (Dual Lamp)
- Free Access to Strap Guides (Patents Registered)
- Easy Access to Strapping Head (Patents Registered)
- Quick Coil Change
- Automatic End-Strap Detection and Ejection
- Adjustable Table Height between 800 mm and 900 mm
- Automatic Strap Loop Ejection

Options

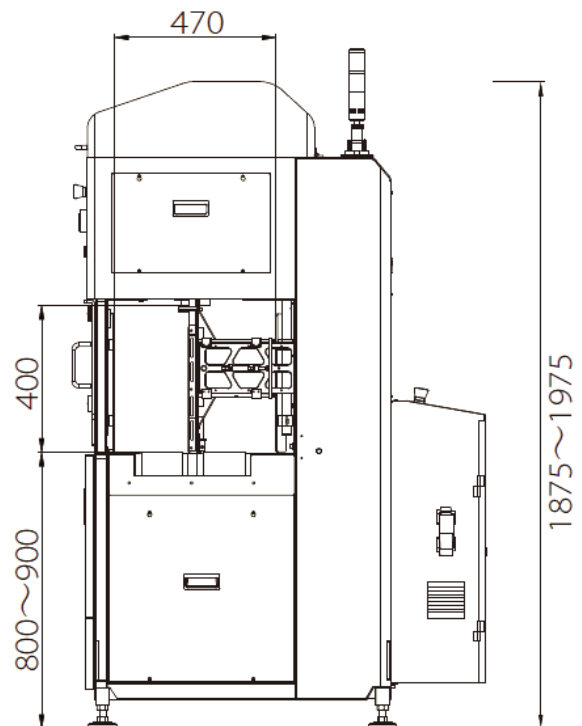
- Energy Saving Transit with Auto Sleep Mode
- Operator Friendly Low Strap Sensor (Triple Lamp)
- Lower Adjustable Table Height (730 mm - 800 mm)
- Automatic Side Squaring
- Reverse Bundle Flow
- Low Volume Bundle Bypass
- Movable Caster



Bundle
Flow



Reverse
Bundle
Flow



STEP TP-702NIL

In-Line Cross Strapping System without Bundle Turning

The STEP TP-702NIL is a Fully Automatic Strapping System for In-Line Cross Strapping. The design without bundle turning can secure the integrity of the bundle for cross strapping.

Main Features

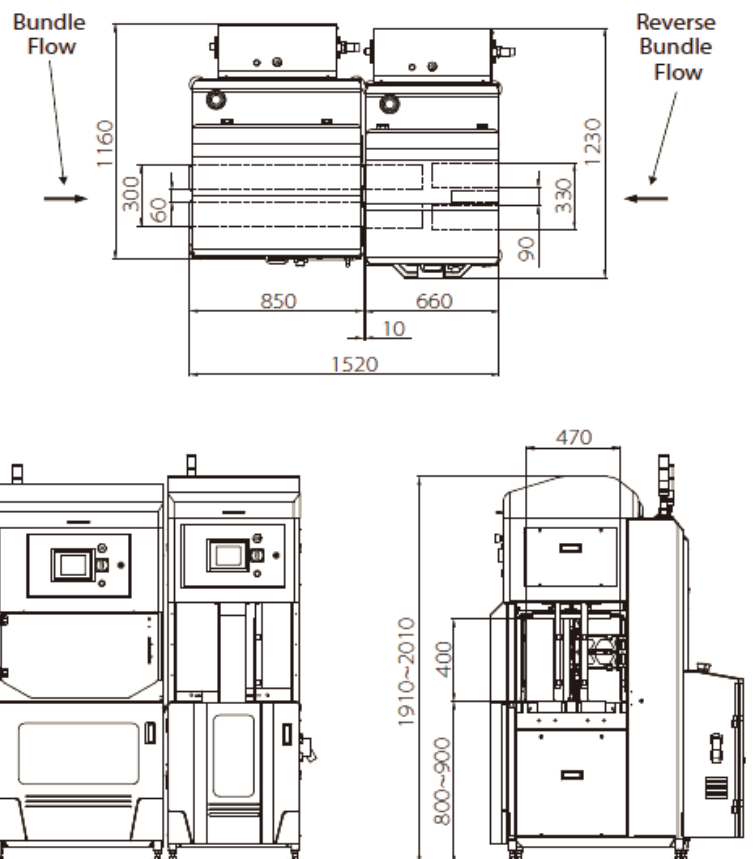
- Light Tree Alarm (Dual Lamp)
- Waist-High Auto Strap Feeding
- Up and Down Stream Interlock with Complete Plug Connection
- Fully Automatic Operation with Variable Conveyor Speed
- Patented Automatic Tension Control for Various Bundle Dimensions
- Siemens PLC Control and Touch Panel
- Dual Pneumatic Press
- Adjustable Compression System
- Automatic End-Strap Detection and Ejection
- Automatic Strap Loop Ejection
- Adjustable Table Height between 800 mm and 900 mm
- Quick Coil Change

(STEP TP-702NIL consists of STEP TP-702NL Longitudinal Strapping Machine and STEP TP-702NS Strapping Machine)



Options

- Energy Saving Transit with Auto Sleep Mode
- Operator Friendly Low Strap Sensor (Triple Lamp)
- Lower Adjustable Table Height (730 mm - 800 mm)
- Automatic Side Squaring
- Reverse Bundle Flow
- Low Volume Bundle Bypass
- Movable Caster



STEP TP-702NAD

Cross Strapping System with Multi-Angle Diverter for Transport Direction Change

The STEP TP-702NAD is a Fully Automatic Strapping System with Multi-Angle Diverter for Cross Strapping requirements. STEP TP-702NAD consists of two (2) STEP TP-702NS Strapping Machine and one (1) N1-AD Angle Diverter.

Main Features

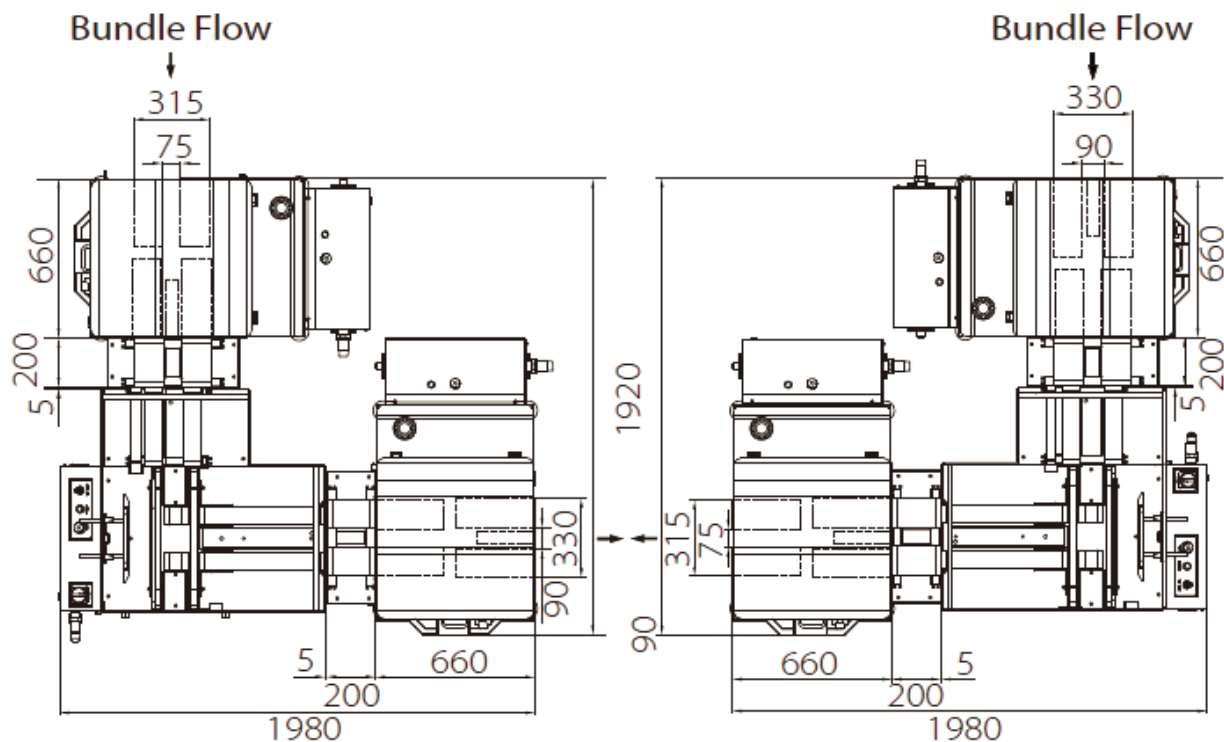
- Robust & Compact Mechanical Strapping Head
- Patented Automatic Tension Control for Various Bundle Dimensions
- Dual Pneumatic Press
- Up and Down Stream Interlock with Complete Plug Connection
- Waist-High Auto Strap Feeding
- Fully Automatic Operation with Variable Conveyor Speed
- Siemens PLC Control and Touch Panel
- Light Tree Alarm (Dual Lamp)
- Free Access to Strap Guides (Patents Registered)
- Easy Access to Strapping Head (Patents Registered)
- Quick Coil Change
- Automatic End-Strap Detection and Ejection
- Automatic Strap Loop Ejection
- Multiple Infeed and Delivery Directions
- Adjustable Table Height between 820 mm and 900 mm

Options

- Energy Saving Transit with Auto Sleep Mode
- Operator Friendly Low Strap Sensor (Triple Lamp)
- Soft Press for Convex Bundle
- Automatic Side Squaring
- Low Volume Bundle Bypass
- Movable Caster



N1-AD Angle Diverter



Step Item no.:

More Features for the STEP TP-702N Series



Robust & Compact Mechanical Strapping Head

The STEP TP-702N Series uses the latest DC Brushless Motor Technology to provide the highest level of accuracy and reliability on the market. All motors are German-made. The strapping head has no belts, clutches or pulleys. It is designed with up-to-date technology with few moving parts. With 30% fewer parts, STEP TP-702N requires fewer adjustments, has fewer wear components, and requires less maintenance. The simple design of the STEP TP-702N minimizes the maintenance cost.



Automatic Self-adjusting Strap Chute (Patents Registered)

The strap chute can detect the incoming bundle height and stop at the accurate position. This intelligent design can streamline your strapping line and increase the speed of the strapping cycle.



Siemens Touch Panel

Provides easy adjustments, operating instructions and troubleshooting guides. Easy TEACH-IN programming without the need to adjust the setting when changing to different bundle size.



Easy Access to Strapping Head (Patents Registered)

The whole strapping head can be completely pulled out during production. With this most user friendly design, operators can perform maintenance directly without pulling out the machine from the production line.



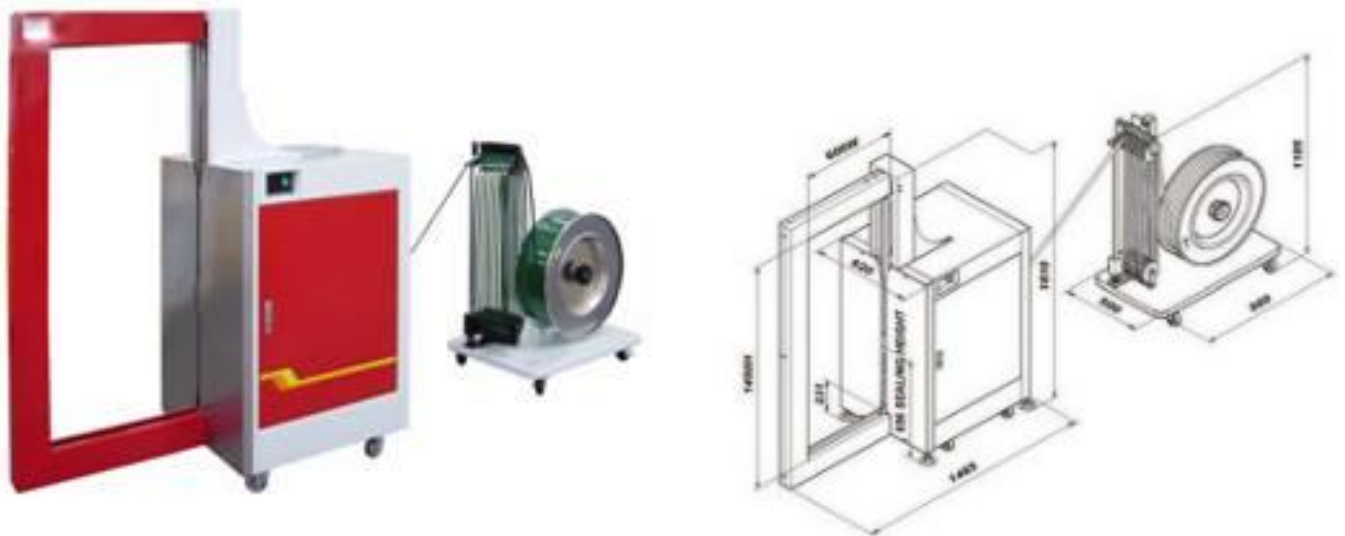
Free Access to Strap Guides (Patents Registered)

Unblock the guides enabling free and quick access to strap guides without the use of any tools. The most maintenance friendly design.

Model		STEP TP-702NS	STEP TP-702NL	STEP TP-702NIL	STEP TP-702NAD
Capacity (bundle/min)		42(single) 24(double)	up to 31 bundle/minute		25 bundle/min (single or double)
Bundle Sizes (mm)	Length	-	500 (max) 210 (min)		-
	Width	500 (max) 120 (min)	450 (max) 120 (min)		500(max) 210(min)
	Height	400 (max) 10 (min)	400 (max) 10 (min)		400(max) 10(min)
Bundle Weight		25 kg (max)			
Strap Width		5mm/6mm/9 mm P.P. Strap			
Strap Tension		1-32 kg			
Strap Coil		200mm (150mm Optional)			
Electrical Requirements		3 Phase According to Local Standard			
Net Weight		420 kg	460 kg	880 kg	1045 kg

STEP TP-601YPT

Automatic Side Seal Strapping Machine for PET and PP Strapping applications



The STEP TP-601YPT strapping machine is ideal for building into automatic lines and applications where the strap goes around the large product or pallet. It uses either PET or PP strap and friction welding. The machine has all modern features according to industrial demands such as electronic tension control, re-shoot, auto strap feed, auto strap ejector, operated by Siemens PLC.

Options:

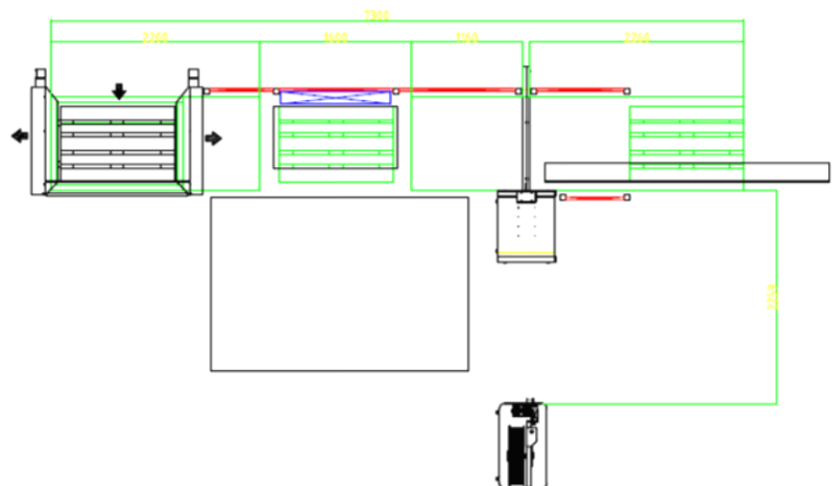
- Project applications
- Rollor conveyor built in.

Specifications	
Strap Width	12mm opt. 9 mm or 15.5 mm
Strap types	PET or PP
Core diameter	Ø406mm (option ø280/200)
Strap Tension	20kg-150kg
Standard arch size	D600mm x H1450mm
Speed	11 straps per minut
Minimum package size	W200mm x H200mm
Net Weight	355 kg
Electrical Requirements	3x380V 50Hz
Item no.:	41120300



STEP TP-601YPT-T version with conveyor

Item no.: 41120310



STEP TP-702Y and STEP TP-702YA

Side-Seal Strapping Machine

STEP TP-702Y and STEP TP-702YA are high speed side-seal strapping machines. With all the standard features this series processes, STEP TP-702Y and STEP TP-702YA offer high reliability and performance. They can be integrated into most production lines and be utilized with various applications.



STEP TP-702Y automatic side-seal machine
Item no.: 41199680



STEP TP-702YA Fully automatic side-seal machine
Item no.: 41199690

Main features

High Strapping Speed

Cycle speed is up to 60 straps per minute.

Robust & Compact Mechanical Strapping Head

Use the latest DC brushless motor technology to provide the highest level of accuracy and reliability on the market.

Free Access to Strap Guides

(patents registered)

Unblock the guides enabling free and quick access to the strap guides without the use of any tools. The most maintenance-friendly design.



Strap Dispenser with Ergonomic Design

The position of strap dispenser is inside the machine frame. It's convenient and energy-saving to change the coil of strap.



Options:

- Without adjustable roller Table (STEP TP-702Y-XT)
- End of cycle and strapping error signals
- (STEP TP-702Y / STEP TP-702Y-XT)
- Siemens PLC control (STEP TP-702YA)
- Operator friendly low strap sensor (triple lamp) (STEP TP-702YA)
- Energy saving transit with auto sleep mode (STEP TP-702YA)
- Press bar (STEP TP-702YA)
- Side pusher (STEP TP-702YA)

Specification:

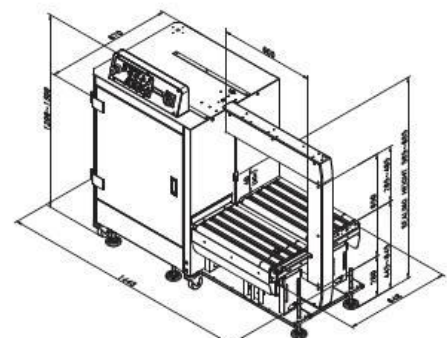
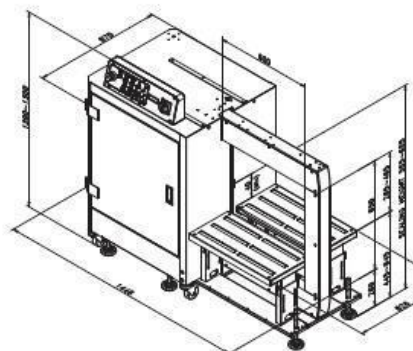
Strap width: 5, 6, 9 or 12mm

Strap Tension:

- 320N for 5mm or 6mm strap
- 500N for 9mm strap
- 550N for 12mm strap

Speed:

- 60 straps/minute for STEP TP-702Y
- 35 packages /minute for STEP TP-702YA



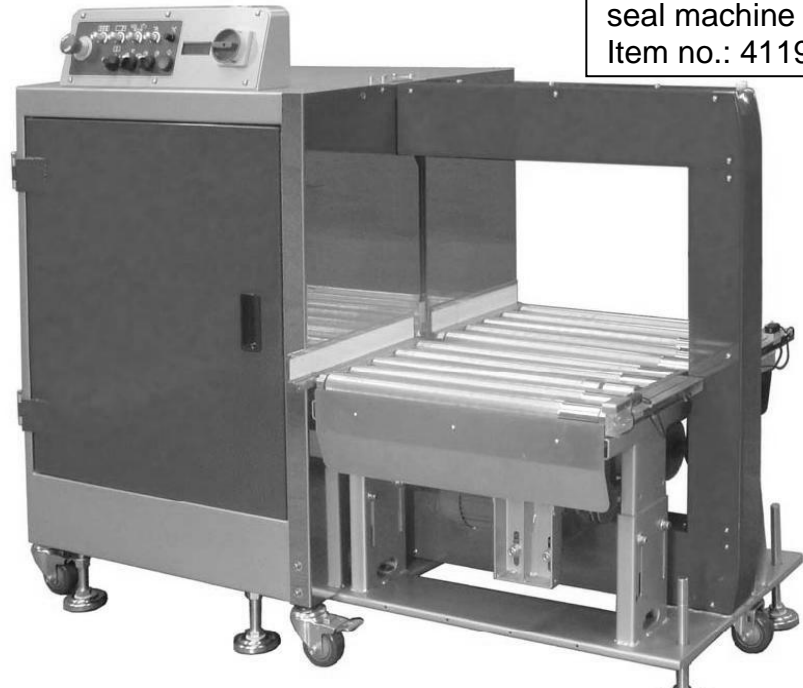
STEP TP-702YM and STEP TP-702YAM

Side-Seal Strapping Machine Wash down Stainless steel

STEP TP-702YM and STEP TP-702YAM are high speed side-seal strapping machines. With all the standard features this series processes, STEP TP-702YM and STEP TP-702YAM offer high reliability and performance. They can be integrated into most production lines and be utilized with various applications.



STEP TP-702YM automatic side-seal machine
Item no.: 41199700



STEP TP-702YAM
Fully automatic side-seal machine
Item no.: 41199710

Main features

High Strapping Speed

Cycle speed is up to 60 straps per minute.

Wash Down for wet environment

Suited for fishing and similar high demand industry.

Robust & Compact Mechanical Strapping Head

Use the latest DC brushless motor technology to provide the highest level of accuracy and reliability on the market.

Free Access to Strap Guides

(patents registered)

Unblock the guides enabling free and quick access to the strap guides without the use of any tools. The most maintenance-friendly design.

Strap Dispenser with Ergonomic Design

The position of strap dispenser is inside the machine frame. It's convenient and energy-saving to change the coil of strap.



Options:

- Without adjustable roller Table (STEP TP-702YM-XT)
- End of cycle and strapping error signals
- (STEP TP-702YM / STEP TP-702YM-XT)
- Siemens PLC control (STEP TP-702YAM)
- Operator friendly low strap sensor (triple lamp) (STEP TP-702YAM)
- Energy saving transit with auto sleep mode (STEP TP-702YAM)
- Press bar (STEP TP-702YAM)
- Side pusher (STEP TP-702YAM)

Specification:

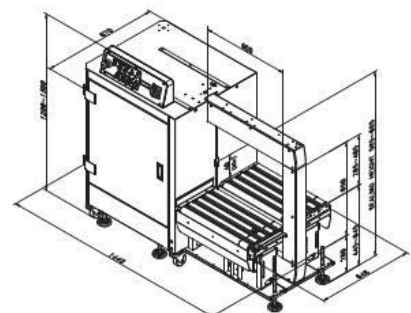
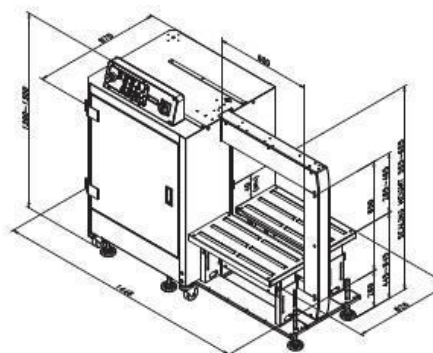
Strap width: 5, 6, 9 or 12mm

Strap Tension:

- 320N for 5mm or 6mm strap
- 500N for 9mm strap
- 550N for 12mm strap

Speed:

- 60 straps/minute for STEP TP-702YM
- 35 packages /minute for STEP TP-702YAM



Sal-Tech Easy Packaging

Fully Automatic Pallet Strapping Machines



Full range of machine for fully automated pallet strapping

STEP TP-733V Series (VM, VLM) POLLUX

Fully Automatic Strapping Machine for Vertical Applications

The STEP TP-733V Series is a fully automatic pallet strapping machine designed for packaging applications that require vertical strapping. It secures palletized package by vertical strapping with P.P. or PET straps. The STEP TP-733V Series can accommodate a wide variety of products and can be easily integrated with new or existing production lines. With the user friendly and state-of-the-art design, STEP TP-733V Series provides excellent package performance, greater production efficiency and lower packaging cost.

Options

- Floating Head
- Top press
- Failure indicator
- Free standing operation desk
- HMI on the opposite side
- Strap Dispenser in transport direction
- Lower tension 200 – 1200 N (20 – 120 kg)



Features

Available in Different Models:

- STEP TP-733V closed strap track, fixed strapping head
 - Item no.: 41203120
- STEP TP-733VM closed strap track, index strapping head
 - Item no.: 41203130
- STEP TP-733VLM with movable lance, index strapping head
 - Item no.: 41203140



Strapping Head

Robust mechanism design and high engineering standard strapping head.

It comes with a variety of features that make it simple to operate and easy to maintain.

Friction Weld and Adjustable Sealing and Cooling Time

Guaranteed reliable joint and high sealing efficiency, tension up to 3000N (300 kg). No fumes and odours. The sealing time and cooling time are adjustable. Guaranteed high sealing efficiency.



Siemens PLC Control and HMI

The Siemens PLC control and HMI (touch panel) provide easy adjustments, operating instructions and troubleshooting guides. Easy TEACH-IN programming. User friendly.



Modular Arch

Modular arch design for easy arch size change.

Open arch with lance



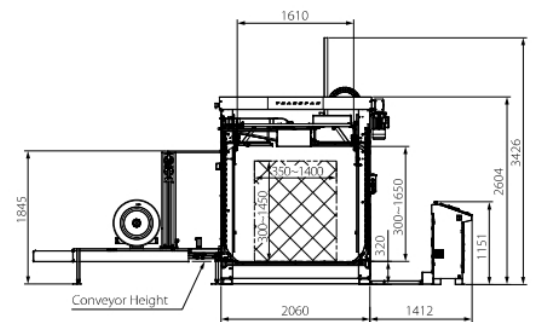
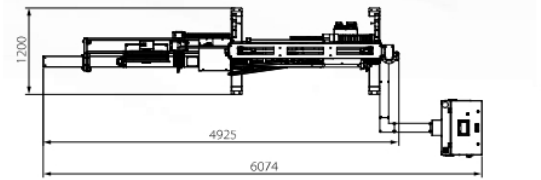
Specifications	
Strap Type	P.P. or PET straps
Strap Width	9mm, 12mm, 15.5mm
Strap Core Size	406mm
Strap Tension	1100-3000N (Standard)
	200-1200N (optional)
Speed	11 seconds per cycle (depends on package dimension and arch size)
Net Weight	737kg (Standard Size)
Electrical Requirements	3 Phase According to Local Standard
Arch Standard	W1400xH2450

STEP TP-733VTS ZELOS

STEP TP-733 VTS Fully Automatic Vertical Pallet Strapping Machine with top seal

The STEP TP-733 VTS Fully Automatic Vertical Pallet Strapping Machine with top seal over many advantages in environments that are dusty or moist, also an advantage of stabilizing the load on the pallet before strapping it to the pallet. Suitable for low pallet heights as well as higher pallets within the machine maximum limits

- Standard size W1600xH1650
- Capacity up to 63 pallets/hour with double parallel strap
- For PP or PET strap 9, 12, 15.5 or 19mm
- Tension 1.100-3.200N option 200-1.200N
- Core Ø406
- Min pallet W350xH300
- Electrical 220-415V as per demand 50-60Hz 3phase
- Conveyor shown not included in standard machine
- STEP Item no.: 41203110



Arch Sizes

H	W	1600	2000	2400
1650	Standard	•	•	•
2050		•	•	•
2450		•	•	•
2850		•	•	•

- On Order basis



JC 109040

STEP TP-733H CASTOR

Fully-Auto Pallet Strapping

Machine for Horizontal Strapping Applications

TP-733H is a fully automatic pallet strapping machine designed for packaging applications that require horizontal strapping. It secures pallet loads and stacked boxes by horizontal strapping with P.P. or PET straps. The TP-733H can accommodate

a wide variety of products and be easily integrated with new or existing production lines. With the user friendly and state-of-the-art design, TP-733H helps maximize uptime for greater production efficiency and lower packaging cost.



Features

- STEP ARES TP-733-SH strapping head
- Index strapping head
- Strap guide arm
- Safety rack
- Friction weld sealing technology
- Siemens PLC and HMI
- Free access to strap guides
- Swivel dispenser set
- Adjustable sealing and cooling time
- Strap end ejector
- Preprogram setting
- Easy to retrofit

The enhanced **STEP TP-733H** provides accurate strapping output on all natural-sized loads with consistent performance. It maximizes the productivity and minimizes the production cost for users. Designed for simple and quick connection to the master control system, STEP TP-733H can easily fit in various end-of-line packaging sectors. It is your best choice for fully automatic operation in various applications, including palletized products, home appliance, bricks & blocks, etc.

Arch sizes standard: 1400W x 1450L

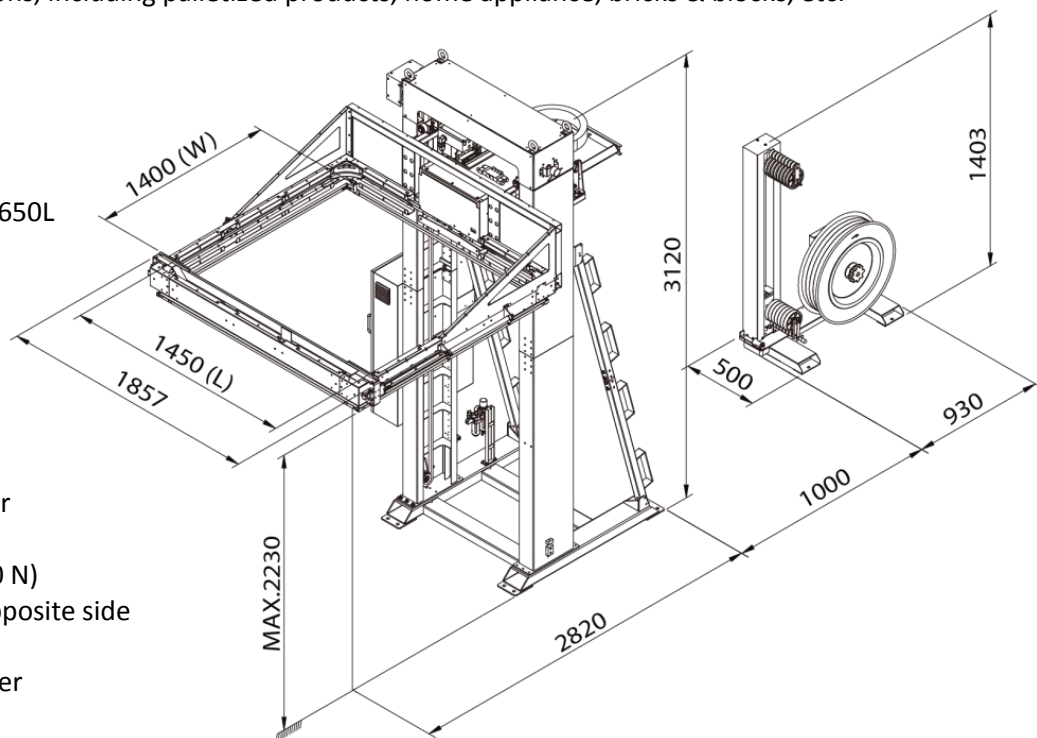
Optional arch sizes:

1600Wx1450L, 1600Wx1650L, 1400Wx1650L

Special on demand.

Options

- Floating Head
- Free standing operation desk
- Light tower with low strap sensor
- Dual channel E-Stop
- Lower tension range (200 – 1200 N)
- HMI and PLC mounted on the opposite side
- No safety rack
- 200 mm / 280 mm strap dispenser
- Uplifted support
- Maximum package height up to 2700 mm
- Strap program selecting by remote control (4-bit binary input)



Technical Data

Capacity	Up to 60 pallets/hour (3 parallel straps)
Strap Type	PP or PET strapping
Strap Width	12 mm, 15.5 mm, or 19 mm
Tension Range	1100 – 3200 N (standard) 200 – 1200 N (optional)
Minimum Strapping Height	(a) With conveyor: 160 mm above conveyor surface (b) Without conveyor: 240 mm above floor
Maximum Package Height	2200 mm
Strap Core Size	406 mm
Pneumatic Source & Air Consumption	6 bar 7.1 liter/cycle
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH
STEP Item no.	41203150

**Index Strapping Head**

During the strapping cycle, the strapping head is movable towards the package with stroke of max. 300 mm for maximum strap containment efficiency.

**Strap Guide Arm**

To ensure precise strap position to the load.

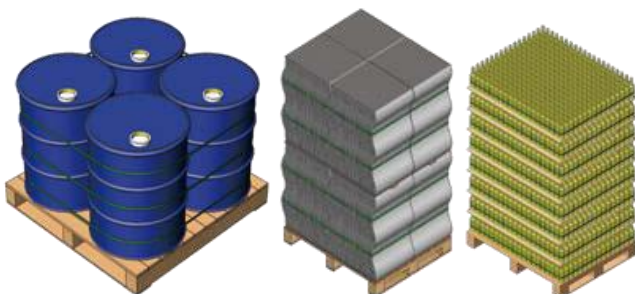
**Safety Rack**

Underneath the arch to ensure the highest

**PLC Control and HMI**

The PLC control and HMI (touch panel) provide easy adjustments, operating instructions and troubleshooting guides. Easy TEACH-IN programming. User friendly.

It has 10 strapping patterns with up to 10 different strapping positions. There is no need to adjust the setting when changing to different package sizes. Reduce downtime and save cost.



STEP ARES TP-733-SH Strapping Head



STEP TP-733-SH Strapping Head

STEP ARES TP-733-SH blends the latest DC brushless motor technology with human-centered design. All the transmission is driven directly by motors or through gears. The robust and compact design with advanced production process, fulfilling the need in a higher standard while keeping consistent Transpak quality. It offers the maximum value but costs the least.

Features

- Reliable robust mechanism design and high engineering standard
- Friction weld sealing technology, no fumes and odours
- Tension force up to **3,200 N (320 kg)**
- Suitable for **PP and PET** strapping, width 9mm, 12 mm, 15.5 mm, or 19 mm
- Easy to change to different strap width
- Free access to strap guides
- Easy to retrofit into new and existing pallet strapping machines

STEP TP-601YPT-SH Medium Duty Strapping Head

STEP TP-601YPT-SH is the strapping head designed for both PP and PET strapping. It is ideal for medium duty pallet strapping machines.



Features

- Reliable robust mechanism design and high engineering standard
- Friction weld sealing technology, no fumes and odours
- Tension force up to **1,500 N (150 kg)**
- Suitable for **PP and PET** strapping, width 9 mm, 12 mm, or 15.5 mm

STEP Item no.: 41201120

STEP TP-601YPT-SH Medium Duty Strapping Head

STEP TP-601D-SH is the strapping head designed for PP strapping. It is ideal for light duty pallet strapping machines.



Features

- Reliable mechanism design and high engineering standard
- Heat sealing
- Tension force up to **700 N (70 kg)**
- Suitable for **PP** strapping, width 9 mm or 12 mm

STEP Item no.: 41201130

Sal-Tech Easy Packaging

Fully Automatic Strapping Machines for Currogated Industry

Single Strapper	Strapping & Squaring System			Strapping & Squaring System		Specialty Strapping Solution
TP-702C High Speed Corrugated Strapper	TP-702CCQ Corrugated 3-Side Bundle Squaring & Strapping System	TP-702CQ3-S High Speed Corrugated Strapper with Integrated Squaring System	TP-702CQ3-T High Speed Corrugated Strapper with Integrated Squaring System	TP-702CQ Corrugated 4-Side Bundle Squaring & Strapping System	TP-CIL <u>TransCorrLiner</u> Inline Squaring & Strapping System	TP-702CTRS High Speed Strapper for Specialty Folder Gluer Boxes
						

Full range of machines with all the special demands in focus for this industry.



STEP TP-702C

Strapping Machine for the Corrugated industry segment



STEP TP-702C corrugated strapper is built with Mercury strapping head and DC brushless motor direct drive technology. It's also equipped with the state-of-the-art Siemens PLC, electronic controls, proximity sensors, etc. High strapping speed, low maintenance requirement, and proven reliability make it particularly suitable for the sheet plants.

STEP TP-702C-L Item no.: 41202120

STEP TP-702C-M Item no.: 41202110



Features:

- Robust & compact mechanical strapping head
- Siemens PLC control
- Free access to strap guides (*patents registered*)
- Hinged roller table
- Auto strap ejector
- Patented jammed-strap ejection device
- Full-width pneumatic press
- Multiple strap function
- Variable conveyor speed
- Strap end ejector
- Adjustable table height between 700mm and 1000 mm

Technical Data

Arch Size	STEP TP-702C-L 1650 mm(W) x 450 mm(H) Item no.: 41202120 STEP TP-702C-M 1250 mm(W) x 450 mm(H) Item no.: 41202110
Strap Width	5 mm, 6 mm, or 9 mm
Tension Range	1 - 32 kg
Capacity	Up to 33 bundles/minute (single strap) Up to 20 bundles/minute (double straps) (Model: TP-702C-L)
Minimum Bundle Size	200 mm(W) x 20 mm(H) x 300 mm(L)
Bundle Weight	max 40 kg
Transport Speed	15 – 60 M/minute
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH

Options

- Siemens HMI (touch panel)
- Light tree alarm with low strap sensor (triple lamp)
- Adjustable backstop
- Foot pedal switch
- Strapping cycle counter

STEP TP-702CQ

Strapping Machine for the Corrugated industry segment



STEP TP-702CQ is built with STEP TP-702C corrugated strapper combined with the 4-side squaring station C1-BQ. The backstop, pusher, and side squaring provide the precise bundle control and assure the bundle integrity during the strapping process. Easy bundle size setup eliminates the downtime and makes the production more efficient. A truly user friendly machine for connecting with your casemaking line.

STEP TP-702CQ-M Item no.: 41202130

STEP TP-702CQ-L Item no.: 41202140

Features:

- Robust & compact mechanical strapping head
- 4-side squaring bundle control
- Siemens PLC control and HMI
- Free access to strap guides (*patents registered*)
- Hinged roller table
- Auto strap ejector
- Patented jammed-strap ejection device
- Full-width pneumatic press
- Multiple strap function
- Variable conveyor speed
- Strap end ejector
- Adjustable pressure on press and squaring



Technical Data

Arch Size	STEP TP-702CQ-L 1650 mm(W) x 450 mm(H) Item no. 41202140 STEP TP-702CQ-M 1250 mm(W) x 450 mm(H) Item no. 41202130
Strap Width	5 mm, 6 mm, or 9 mm
Tension Range	1 - 32 kg
Capacity	Up to 17 bundles/minute (single strap) Up to 13 bundles/minute (double straps) (Model: STEP TP-702CQ-L)
Minimum Bundle Size	200 mm(W) x 50 mm(H) x 350 mm(L)
Bundle Weight	max 35 kg
Transport Speed	15 – 60 m/minute
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH

Options

- Light tree alarm with low strap sensor (triple lamp)
- LCD display for squaring position setup
- Foot pedal switch

STEP TP-702CCQ

Strapping Machine for the Corrugated industry segment



STEP TP-702CCQ is built with STEP TP-702C corrugated strapper combined with the 3-side squaring station CC-BSS. It offers high strapping productivity with the most cost-effective bundle squaring solution for the corrugated industry.

Features:

- Robust & compact mechanical strapping head
- 3-side squaring bundle control
- Siemens PLC control
- Free access to strap guides (*patents registered*)
- Hinged roller table
- Auto strap ejector
- Patented jammed-strap ejection device
- Full-width pneumatic press
- Multiple strap function
- Variable conveyor speed
- Strap end ejector
- Adjustable pressure on press and squaring

STEP TP-702CCQ-M Item no.: 41202150

STEP TP-702CCQ-L Item no.: 41202160

Technical Data

Arch Size	STEP TP-702CCQ-L 1650 mm(W) x 450 mm(H) Item no.: 41202160 STEP TP-702CCQ-M 1250 mm(W) x 450 mm(H) Item no.: 41212150
Strap Width	5 mm, 6 mm, or 9 mm PP strap
Tension Range	1 - 32 kg
Capacity	Up to 26 bundles/minute (single strap) Up to 20 bundles/minute (double straps) (Model: TP-702CCQ-L)
Minimum Bundle Size	200 mm(W) x 20 mm(H) x 300 mm(L)
Bundle Weight	max 40 kg
Transport Speed	15 – 60 M/minute
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH

Options

- Siemens HMI (touch panel)
- Light tree alarm with low strap sensor (triple lamp)
- Foot pedal switch
- Strapping cycle counter

STEP TP-702CQ3-S

STEP TP-702CQ3 High Speed Strapping Machine for the Corrugated industry with integrated Squaring Unit.



Features:

- Compact & robust strapping head
- 3-side squaring bundle control
- Automatic bundle size setup system
- Motorized full-width press bar
- Siemens PLC and HMI (touch panel)
- Good for small bundle
- Free access to strap guides
- Hinged roller table

Options:

- Dual dispensers with auto coil change
- Light tower with low strap sensor
- Energy saving transit with auto sleep mode
- Floor rails
- Foot pedal switch
- Bus interface for bundle size data transfer from upstream equipment

Technical Data

Arch Size	1650 mm (W) x 450 mm(H)
Capacity	Up to 26 bundles/minute (single strap) Up to 13 bundles/minute (double straps)
Strap Width	5 mm, 6 mm, or 9 mm
Tension Range	1 - 32 kg
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH
STEP Item no.:	41202170



STEP TP-702CQ3-T Tandem High Speed Corrugated Strapper with Integrated Squaring System

STEP TP-702CQ3-T is an all-electric TANDEM system of high speed corrugated strapper with integrated 3-side squaring design. Built on the quality proven Transpak TP-702C corrugated strapper, it carries all the innovative features of the TP-702C. Motorized squaring and backstop devices provide precise bundle handling and positioning for forming perfect bundles. The TANDEM design with the built-in program enables the system to process up to 28 bundles per minutes - one of the fastest system designed specially for high capacity Flexo Folder Gluer and Casemaker in the industry.



Features

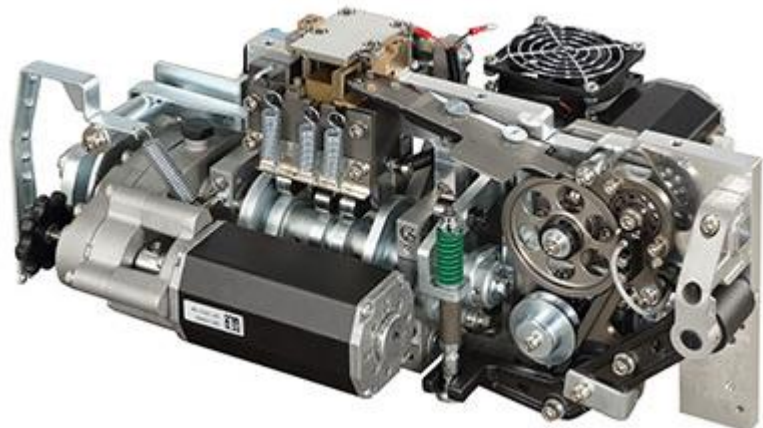
- Compact & robust strapping head
- 3-side squaring bundle control
- Automatic bundle size setup system
- Up to 32 bundles per minute
- Motorized full-width press bar
- Multiple operation modes
- Siemens PLC and HMI (touch panel)
- Good for small bundle
- Free access to strap guides
- Hinged roller table

Options

- Dual dispensers with auto coil change
- Light tower with low strap sensor
- Energy saving transit with auto sleep mode
- Floor rails
- Press roller on accumulating conveyor
- Bus interface for bundle size data transfer from upstream equipment

Technical Data

Arch Size	1650 mm (W) x 450 mm(H)
Capacity	Up to 32 bundles/minute (single strap) Up to 26 bundles/minute (double straps)
Strap Width	5 mm, 6 mm, or 9 mm
Tension Range	1 - 32 kg
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH
STEP Item no.:	41202180



STEP TP CIL Transcorrliner

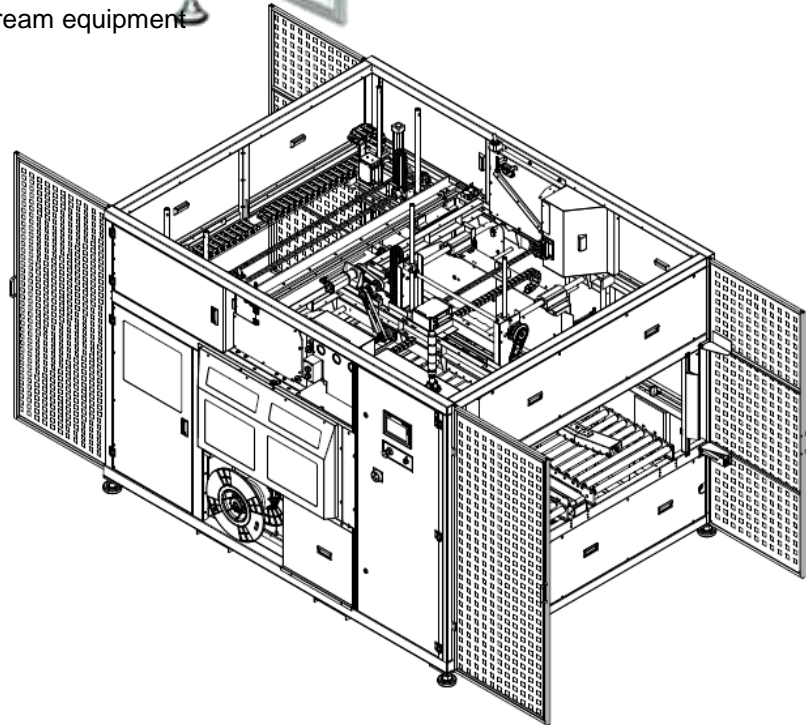
STEP TP – CIL is designed that allows its drape – strap feeding to use economical PP Strap with good performance. Available in Single and Twin Strapping Heads, fast and easy job change within 15 seconds for different bundle dimensions also greatly minimize costly downtime. Both make STEP TP – CIL the most cost – effective strapping solution in the corrugated industry.

Features:

- Compact & Robust Strapping Head
- Intelligent Pusher Optimizes Speed
- Strapping in the Flute Direction
- Independent Controlled Conveyor
- Automatic Bundle Size Setup System
- SIEMENS PLC and
- Off – center Strapping
- Good for Inexpensive Narrow Strap

Options:

- Powered Alignment Device
- Air Conditioner for Control Box
- Belt Driven conveyor for the last bundle
- Sleep Mode (transmission stop)
- Uplifted support
- Bus Interface for bundle size data transfer from upstream equipment
- Auto splicer
- Auxiliary equipment: C – AC upstream accumulating conveyor for strapping line integration



Specifications	
Capacity	Up to 30 bundles/min.
Strap Width	5mm, 6mm, 8mm or 9mm PP strap
Tension Range	1-20 Kg
Bundle Weight	Max. 30 Kg
Conveyor Height	750 – 1050mm
Transport Speed	30 – 80 m/min.
Electrical Requirements	220V, 380V, 400V 50/60Hz 3PH
STEP Item No.	41202200

Stack Sizes							
Machine Model	Item no.	Width A (mm)		Length B (mm)		Height C (mm)	
		Min.	Max.	Min.	Max.	Min.	Max.
STEP TP CIL -13S	41212200-13S	180	1300	180	1300	50	350
STEP TP CIL-13T	41212200-13T	450	1300	180	1300	50	350
STEP TP CIL-16S	41212200-16S	180	1600	180	1600	50	350
STEP TP CIL-16T	41212200-16T	450	1600	180	1600	50	350

***TP-CIL-13S Single head for single strapping**

***TP-CIL-13T Twin head for single or parallel strapping**

***TP-CIL-16S Single head for single strapping**

***TP-CIL-16T Twin head for single or parallel strapping**

STEP TP 702CTRS



STEP TP-702CTRS is designed to strap specialty boxes, including crash lock boxes, four corner tray and other folded type boxes from shingled-stream folder gluer output. Inheriting the merits of the reputable STEP TP-702 Mercury, it carries all the innovative features and offers high production speed. The clever side-pusher and backstop designs ensure of the best stack condition after strapping, and protect delicate boxes from damage without sacrificing its high speed. STEP TP-702CTRS is an efficient squaring and strapping solution for specialty folder gluer products.

Features

- Compact & robust strapping head
- Ascending backstop with sensor
- Quick and effortless changeover
- Easy maintenance
- Siemens PLC and HMI (touch panel)
- Free access to strap guides

Options

- Light tower with low strap sensor
- Foot pedal switch
- Powered top conveyor
- Additional backstop



Technical Data

Maximum Bundle Size	<u>arch width</u>	<u>width</u>	<u>height</u>	<u>length</u>
	1000 mm	950 mm x 400 mm x 1300 mm - Item 41202190-1000		
	1300 mm	1250 mm x 400 mm x 1300 mm - Item 41202190-1300		
	1600 mm	1550 mm x 400 mm x 1300 mm - Item 41202190-1600		
Capacity	Up to 23 bundles/minute (single strap)			
Strap Width	5 mm, 6 mm, 9 mm, or 12 mm			
Strap Tension	1 - 32 kg (for 5 mm, 6 mm, 9 mm) 1 - 55 kg (for 12mm)			
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH			
STEP Item no.:	41202190-NNNN see above			

STEP C-AT Accumulating Conveyor



STEP C-AC is an accumulating conveyor with press roller designed specially for corrugated industry. It functions as an accumulation/ buffer zone between strapping machine and upstream equipment, which allows one bundle to enter strapping machine at a time. Table height is adjustable from 780 mm to 1080 mm

Technical Data

Conveyor Speed	10 – 60 m/minute
Minimum Bundle Size	180 mm(W) x 50 mm(H) x 180 mm(L)
Bundle Weight	max 35 kg
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH
STEP Item no.:	41202310

STEP C-BT Bundle Turner for Currogated Carton



STEP C-BT Bundle Turner is designed for turning the bundle for downstream strapping operation. It is an ideal device for connecting the casemaking line to strap in the carton flute direction.

- Suitable for various bundle dimensions
- Table height is adjustable from 700 mm to 1000 mm
- Up and down stream interlock with complete plug connection
- Robust and sturdy frame

Conveyor Speed	Infeed: 15 – 65 m/minute Exit: 18 – 75 m/minute
Table Size	C-BT-L 1662 mm(W) x 2400 mm(D) Item no.: 41202320-16.24 C-BT-M 1662 mm(W) x 1880 mm(D) Item no.: 41202320-16.18
Minimum Bundle Size	200 mm(W) x 20 mm(H) x 300 mm(L)
Bundle Weight	max 35 kg
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH
STEP Item no.:	41202320-16.24 or 41203220-16.18

STEP C-CV Accumulating Conveyor



STEP C-CV is an accumulating conveyor designed specially for corrugated industry. It functions as an accumulation/buffer zone between strapping machine and upstream equipment, which allows one bundle to enter strapping machine at a time. Table height is adjustable from 700 mm to 1000 mm

Conveyor Speed	10 – 60 m/minute
Minimum Bundle Size	250 mm(W) x 50 mm(H) x 200 mm(L)
Bundle Weight	max 35 kg
Electrical Requirements	220V, 380V, 400V, 415V 50/60Hz 3PH
STEP Item no.:	41202330

Sal-Tech Easy Packaging

Hand Strapping Tools and Strap Wagons



Steel Strapping Tools

Steel Strapping is the one of the oldest methods of strapping. Due to the strength and reliability of steel, it is widely used for heavy duty strapping, where high strength and minimal stretching of the strap is required. With the advancement of steel strapping tools and techniques, steel strapping has become more accessible and more reliable than before you the cost.

Sal-Tech Easy Packaging offers a wide variety of steel strapping hand tools and cutters to help you to effectively secure your packages.



Sealless Steel Joint

Most of our tools features sealless joint strapping. The Sealless Steel Joint reduces overall strapping costs by approximately 10% through the elimination of seals.



STEP A Series

Suitable for Any of Your Strapping Needs

Handy and Light Weight Combination Tool to strap flat and even round products and pallets. Permits a very easy and efficient operation and outperforms other strapping tools by its ruggedness and its high reliability

Specifications	STEP A333 Tensioner and Sealless Steel Strapper
Strap Type	Steel Strap
Strapping Qualities	Uniflex Regular Duty max. 850 N/mm2
Strap Width	12mm – 16 – 19mmmm
Strap Thickness	0.38mm – 0.58mm
Joint Type	Sealless, see above
Joint Efficiency	Approximately 80%
Net Weight	3.9 kg
Item no.:	41272010 Universal 13-16-19mm 41272012 Set for 13 mm steel strap 41272016 Set for 16mm steel strap 41272019 Set for 19mm steel strap

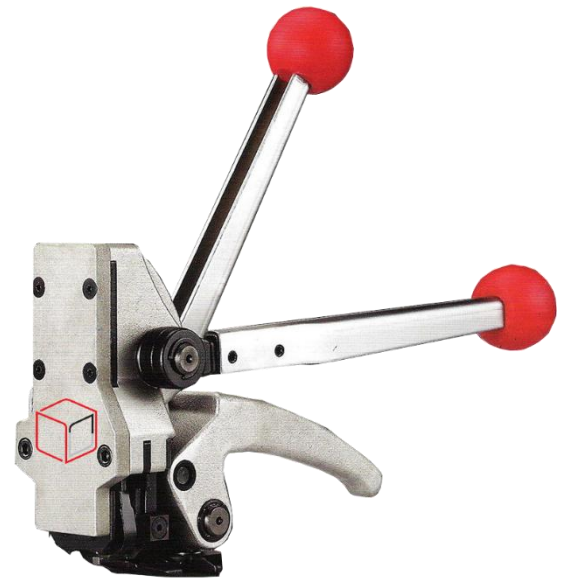


STEP MR36 Manual Pusher Tool

Handy and light weight seamless combination tool to strap flat and even round packages. Permits a very easy and efficient operation and outperforms other strapping tools by its ruggedness and its high reliability. Ideal for small bundles, choice between Regular or High Tensile Steel, Single notch seal.

Features:

- Adjustment genius-tension mode.
- Light weight and operation easy.
- Die easy and efficient.
- Strong structure and durable life.
- Use for all type packing.



Specifications	
Model	MR36
Strap Width	13, 16 & 19 mm
Joint Type	Single Notch (reverse)
Strapping Thickness	0.4mm – 0.6mm
Sealing Strength	50 – 60 %
Weight	3.5 Kg
Steel Strapping	Regular Duty & High Tensile
Dimension	40 x 10 x 33 cm (L x W x H)
STEP Item No. for 13mm	41270090
STEP Item No. for 16mm	41270091
STEP Item No. for 19mm	41270092

STEP Steel Strap Tool Series

The STEP Steel Strap Tool series is a variety of steel sealers, tensioners and cutters. The cutters are made from high quality SAE 4140 high carbon steel drop forged. They are very reliable and resistant to wear. Ideal for heavy duty use.

STEP Steel Tensioner ST03

Heavy Duty
Strap width 9 to 19 mm
Item No. 41271020



STEP Steel Strap Tensioner ST02
Item no.: 41271010

STEP H-54 Tensioner

Strap tensioners are used for tightening or loosening of the strap tension to properly secure the packaged product.

Item No. 41270100



STEP H-65 Sealer

Item Numbers	Strap Width
41270210	9mm
41270220	12mm
41270230	16mm
41270240	19mm



STEP H-65 uses
Push Type Seals
Size: 9 mm-19 mm



STEP H-16 Cutter

"SAE 4140" high carbon steel drop forged
Size: up to 30 mm
Item No. 41243220

STEP H-17 Cutter

"SAE 4140" high carbon steel drop forged
Heavy Duty
Size: up to 50 mm
Item No. 41243220

H-16

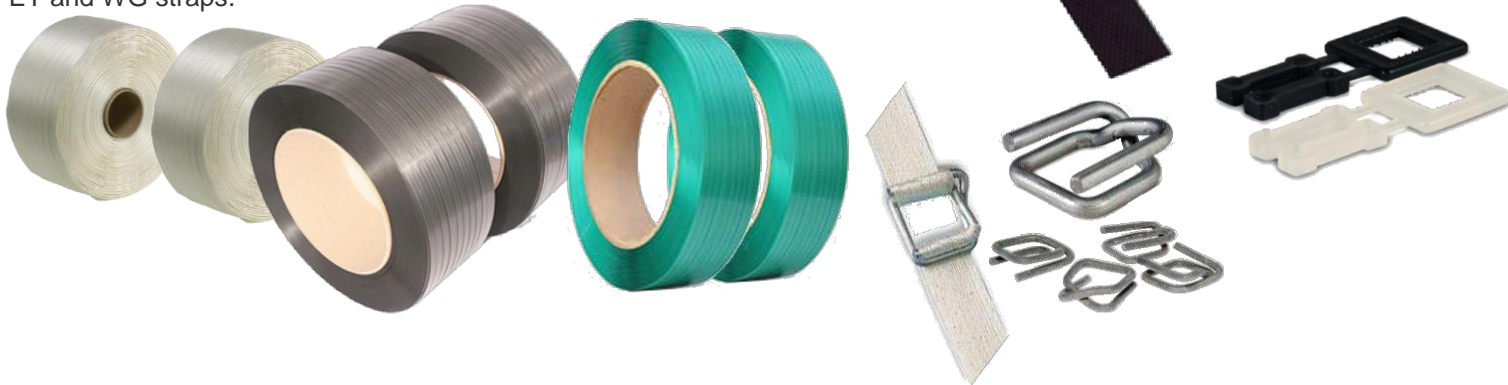
H-17



Hand Strapping Tools for PP/PET/WG Straps

Strapping using plastic composite straps has revolutionized strapping worldwide. Designed for light to medium duty strapping, these straps are very reliable and economical.

Sal-Tech Easy Packaging offers a wide variety of manual and battery-powered hand strapping hand tools. We offer Combination Tools, Tensioners and Sealers compatible for PP, PET and WG straps.



Available for a wide variety of strap seals and buckles

STEP H Series

The STEP H Series of Strapping Tools for PP/PET/WG is a variety of combinations tools, sealers and tensioners. We offer manual hand tools and battery-powered hand tools.

Combination Tools For Strap Tensioning and Sealing



STEP H-42



STEP H-44

STEP H-42-12 (12mm strap width)
Item No. 41212000

STEP H-42-16 (16mm strap width)
Item No. 41213000

STEP H-44-12 (12mm strap width)
Item No. 41212010

STEP H-44-16 (16mm strap width)
Item No. 41213010

STEP OR4300 Tensioner /Sealer

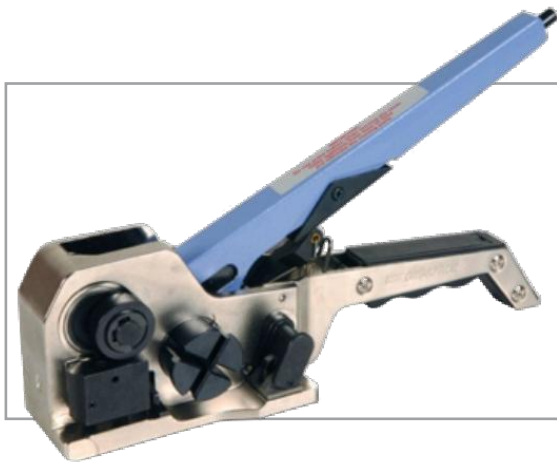
Compatible for use with PP and PET straps. It is lightweight and robust for maximum portability. It uses metal seals for sealing.

Item Numbers

41212020 - OR4300-13 (13mm strap width)

41213020 - OR4300-16 (16mm strap width)

Contact Us for Prices.



Tensioning Tools for PP/PET/WG Straps



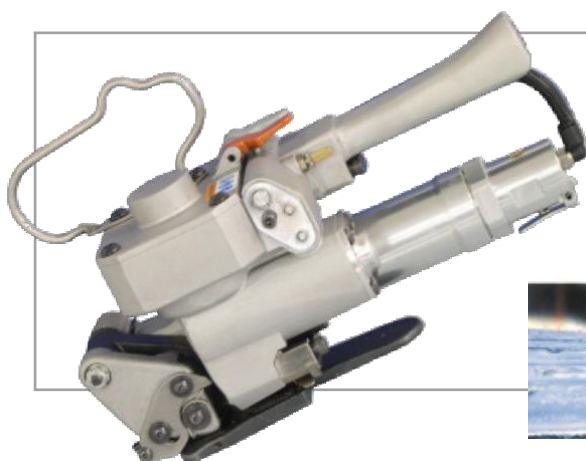
STEP H-21	STEP H-22	STEP H-23	STEP H-25	STEP H-26
41220000	41220010	41220020	41220040	41220050
PP Strap	WG Strap	PET Strap	WG Strap	WG Strap
The STEP H-21 Tensioner is for Polypropylene (PP) strap for light to mid- range of pallet strapping.	The STEP H-22 Tensioner is for Woven polyester (WG) strap for 9-19mm straps.	The STEP H-23 Tensioner is for Polyester (PET) strap for the demanding pallet strapping of heavy goods	The STEP H-25 Tensioner is for Woven polyester (WG) strap for 9-25mm straps.	The STEP H-26 Tensioner is for Woven polyester (WG) strap for 25-40mm straps. It is ideal for heavy-duty strapping applications.

Sealers for PP/PET Strap



STEP P173
Strap Tensioner with Knife
Item Number: 41240173

Item No.	Description
41242000	STEP H-34-12 Sealer 460mm handle
41242010	STEP H 35-12 Sealer 390mm handle
41242020	STEP H 36-12 Sealer Offset
41243000	STEP H 34-16 Sealer 460 mm handle
41243010	STEP H 35-16 Sealer 390 mm handle
41243020	STEP H 36-16 Sealer Offset



STEP SPST 19-1 Pneumatic Strapping Tool
 STEP Pneumatic PET Strap Tool for heavy duty tensioning type

Tension Strength: 2600N
 Weight: 3,8kg PN Pressure: 7bar

Item No. 41211810



STEP Battery Powered Hand Strapping Tools

STEP Helios H-45L Battery Operated Hand Strapping Tool

The STEP Helios H-45L Battery Operated Hand Strapping Tool is part of the STEP H Series of Manual Hand Strapping Tools. It is independent of wired power supply which enables it to be ultra-portable. With friction weld sealing technology, it is also independent of using third party seals

Features

- High Speed
- Portable and very Easy to Use
- Ergonomic and Rugged Design
- Easy Strap Threading
- Flexible Tensioning Mode
- Wireless Battery Operated
- Friction Weld Sealing

Options

- Suspension Bracket (Stiff or Turnable)
- Bottom Base Wearing Protection Plate

Main Features



For All Kinds of Flat Packages

It is suitable for a wide range of vertical and horizontal strapping applications in all industrial sectors (pallet, construction materials, wood/panel board, paper...etc.)



Adjustable Sealing Time and Strap Tension

Adjustable sealing time allows individual setting for different strap types and quality to guarantee the high efficiency. Strap tension adjustment can be easily done by the simple turn of a dial. Appropriate tension ensures ideal load security



Easy Single-Handed Operation

One single thumb pressing operates the tool. Tensioning, sealing and cutting are done at the touch of the start button. It is the most user-friendly tool.



Friction Weld Sealing

The advanced friction weld sealing technology guarantees reliable joint and high seal efficiency.



Battery Powered

Battery operation makes the STEP H-45 independent of any power supply. Ready to use anywhere. High battery capacity provides up to 400 (for PP) and 220 (for PET) strapping cycles per charge. Rechargeable battery with long battery life up to 1,000 charges.

STEP Helios H45L -Battery Tool for PP & PET Strap

41211010	H-45-12 battery tool with 1 battery charger excluded
41211030	H-45-16 battery tool with 1 battery charger excluded

Options for Battery Tool H-45L

41211120	Charger Bosch AL15FC 2498 for H45
41211100	H-45 Turnable suspension bracket
41211110	H-45 Stiff suspension bracket
41211140	Extra battery L H45 2,6AH

Specifications

Strap Type	PP and PET Straps
Strap Width	12mm (H-45-12) 16mm (H-45-16)
Strap Thickness	PET: 0.5mm – 1.05mm P.P.: 0.55mm – 1.05mm
Maximum Strap Tension	220 kg / 2200 N
Joint Efficiency	75% - 80%
Maximum Tension Speed	270 mm / second
Net Weight	4.26 kg (including battery)
Battery	14.4VDC 2.60Ah Li-Ion (One Battery included)
Battery Charger	Single Phase According to Local Standard
Battery and Charger Manufacturer	BOSCH

STEP Kronos H-46 Battery powered Tensioner and Sealer

ideal for a wide range application in all industries and sectors. STEP Kronos H-46A & STEP Kronos H-46B delivers the highest productivity and performance to meet the customers' packaging needs. STEP Kronos H-46A is suitable for Light & Universal application while STEP Kronos H-46B is suitable for Heavy industry application both products are handy to use in iron, textile, foodstuff, merchandise and other related products for strapping.



Features:

- Easy operation
- Digital touch panel
- Wide tension force range
- Friction weld sealing
- Bosch battery and charger
- Brushless motor technology
- Robust housing
- Perfect balance and ergonomic design
- No adjustment required for different strap thickness
- Energy saving mode

Options:

- Suspension bracket
- Bottom base wearing protection plate

Specifications		
Model No.	H-46A	H-46B
Product Name	STEP Kronos H-46A	STEP Kronos H-46B
Tension Range	40-250 Kg	60-400 Kg
Strap Width	11 – 13 mm 15 – 16 mm	15 – 16 mm 19 mm
Strap Thickness	PP 0.55-1.05 mm PET 0.50-1.05 mm	PP 0.75-1.30 mm PET 0.60-1.30 mm
Net Weight	4.3 Kg	4.4 Kg
Battery	Bosch Li-Ion 18V, 4.0 Ah	Bosch Li-Ion 18V, 4.0 Ah
Battery Charger	Bosch 115 V (110-120V), 230V (220-240V) 50/60 Hz, 1 Ph	Bosch 115 V (110-120V), 230V (220-240V) 50/60 Hz, 1 Ph
STEP Item No.	41211210 (for 11-13mm Strap) 41211211 with 2 battery	41211230 (for 15-16mm Strap) 41211231 with 2 battery
STEP Item No.	41211220 (for 15-16mm Strap) 41211221 with 2 battery	41211240 (for 19mm Strap) 41211241 with 2 battery
Battery Item No.	41211280	41211280
Charger Item No.	41211290	41211290

STEP Heimdall H43-13 and STEP H43-16

STEP Battery Tensioner and Sealer



Product Overview:

STEP Heimdall H13/16 is a battery powered plastic strapping equipment for a broad array of application in a pool of industry. This is specifically fitting for PP and/or PET straps measuring 13mm in width.

Description:

A portable handheld strapping tool that aids in strapping variety of products without the use of fasteners rather friction welding for a more durable seal that ensures security of goods upon distribution or transportation. This equipment meets the requirement of straps with width of 13mm or 16mm.

Taking you to the next level with its:

1. Lightweight Mass: Its body is designed using high quality alloy materials and plastics promoting durability
2. Friction and Welding Seal: It uses friction weld sealing for a more durable lock
3. Safe to Use: A handheld device that cultivates high safety performance
4. Battery Powered: A battery powered tool for compactness whenever needed, with 100-220 loops strapped when charged 90 minutes
5. Portable: Materials being lightweight makes it simple to move and operate without exerting much effort from user/operator
6. Suitable for 13/16mm strap width depending of choosen version.

SPECIFICATIONS:

Model:	STEP Heimdall H43-13	STEP Heimdall H43-16
Color:	Blackish Green	
Strap Size Requirement:	Width: 13mm	Width 16mm
	Thickness: 0.5mm – 1.0mm	Thickness: 0.5mm – 1.2mm
Strap Requirement:	PP or PET Straps are applicable	
Tension Force:	2800N (Maximum)	
Machine Weight:	3.16kg	
Dimension:	340mm x 130mm x 120mm	
Battery:	Lithium battery 3.0A/h12VCD	
Charger:	100V, 245CAC, 50-60Hz DC12.6V = 4.0A	
Charging Time:	90 minutes of charging can strap 100 – 220 loops	
Item no.:	41211613	41211616



STEP ZP Series Battery Operated Hand Strapping Tool

**High Tension
Low Weight!**



High Quality Battery Powered Hand Strapping Tool. Equipped with the latest innovations in strapping technology, it has the **Brushless motor-ZAPAK** patented single motor design provides extremely long service life. It utilizes a **Li-Ion Battery-18V 3000mAh** high capacity rechargeable battery and **Bosch** 30 minutes charger.

Safety Features

- One-handed operation conforms to CE safety directive and meets RoHS requirements.
- Li-Ion battery complies with UN38.3 safety requirements

More Information

- Bosch charger A/C voltage 100V, 115V, 230V, 240V available for different markets demand
- Sealing time adjustment: 0.4 ~ 2.0 seconds
- Li-Ion battery life is up to 2000 charges with proper charging and discharging habits.
- Fully charged Li-Ion battery supports up to max. 600 cycles (PP) dependent on straps quality, tension setting and sealing time setting.

41211310	STEP ZP 93A
41211340	STEP ZP 96A
41211390	Li Battery Zapak ZP92/96A

Model No.	Strap	StrapWidth	Strap Thickness	Tension Range	Sealing Efficiency	Dimension & Weight
STEP ZP 92A	PP	9-16mm	0.55-1.35mm	10- 250kgs	85+-5%	Approx. 33 x 15x 125 mm
	PET					Tool Weight
STEP ZP 96A	PP	16-19mm	0.75-1.35mm	40-400kgs		Approx. 2.80kg
	PET		0.65-1.35mm			Battery Weight

STEP H49 ODIN Automatic Battery Powered Sealer



Battery powered strapping tool suited for use in the paper, aluminium, textile, steel, logistics, farm, chemical and metal industries giving an easy to operate tool, light weight and a wide scope of uses.

Mode of operation, Automatic, Semi Automatic, Manual.

The tools is made with energy saving features and environmental protection thought into the design.

The no handle version makes it even easier to feed strap.

Handle version shown above

Specification:

- Strap Types PP or PET
- Strap width 10-16mm
- Strap thickness 0,6-1,2mm
- Tension 4000N adjustable
- Tightening Speed: 11m/min
- Welding time: 1,1-1,4 seconds
- Cooling time 2.5 seconds
- Rechargeable Lithium batteri 18V 4.0AH
- Charging time: Arprox 90min that can do 550 seals
- Charger electrical connection 110V or 230V
- Battery weight: 0,6kg
- Tool weight operational: 4,0kgs
- Tool dimension: 330x150x140mm



STEP Item no.:

- 41211720 STEP H49 without handle
- 41211730 STEP H49 with handle

Without handle version shown below:



STEP H48A Battery Sealer & Tensioner 19mm PET

Features:

- Lightweight body and easy to use.
- Without fasteners, using friction hot melt, the interface is beautiful and strong.
- High degree of automation, simple operation and easy to understand.
- Easy to move, for a variety of venues, the various size of the package can be applied.
- The body and components are made of high-strength alloy materials and engineering plastics, which is durable in use.
- If there is external power supply, plug in to get power supply; when switch off the relay, then the battery provides power supply.



Product Overview:

A battery-operated strapping tool appropriate for PET straps with width 16mm up to 19mm. A robust strapping tool commonly used in industries such as, textile, aluminum, steel, paper, logistics, etc.



SPECIFICATIONS:	
Suitable Strap	PET strap
Strap Size Width	16mm – 19mm
Strap Size Thickness	0.5mm – 1.2mm
Battery	Two batteries per set 14.8V – 4000mAh 59.2Wh
Charger	110v – 240V, 50 – 60Hz
Charge Time	Charge 90 minutes
Age	Can charge up to 2000 times
Maximum Stretch Force	Force: 400 – 3500N Maximum depends on quality of strap
Seals Straps Form	Friction and welding
Maximum Tension Force	400 – 5000N
Weight	4.3kg
Dimension	L345 x W110 x H155mm
STEP Item no.:	41211710

STEP B19 Pneumatic PET Tool

Features:

- High-power pneumatic design, lightweight body and easy to use.
- Without fasteners, using friction hot melt, the interface is beautiful and strong.
- High degree of automation, taut and strong welding shell controllability.
- Large tightening force and special structure design to achieve tightening and packaging easily. Such as the materials of steel, aluminum ingots, heavy packaging.
- The tool is durable, adopting high-strength alloy materials for the body and components, high reliability design, and advanced manufacturing technology.
- Patented design, safe for use, fatigue-free design.



Product Overview:

A Pneumatic plastic strapping tool suitable for PET and PP strap width 13mm to 19mm. A strapping tool commonly used in industries such as, aluminum, steel, tobacco, wood, paper, etc.



SPECIFICATIONS:	
Suitable Strap	PP / PET
Strap Size Width	13mm – 19mm
Strap Size Thickness	0.5mm – 1.2mm
Forward Mode	Free separate strap
Air Pressure	0.5 – 0.8MPa
Seals Straps Form	Friction and hot welding
Maximum Tension Force	3500N
Weight	3.8kg
Dimension	L280 x W160 x H180mm
STEP Item no.:	41211810

STEP Strap Wagons and Dispensers

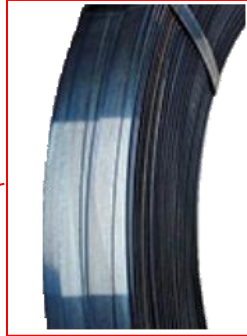
Designed for easy transporting of strapping coils and other strapping tools. Wagons can also be used as dispensers when using hand strapping tools like the STEP H Series

STEP H-84 Strap Wagon

The STEP H-84 Strap Wagon is ideal for transporting oscillating PET and Steel straps. It has a carrying basket for other strapping tools and seals.

Item No. 41280010

Price: 265 Euro/1975 DKK



Oscillating Coils are coils arranged in an alternating pattern to maximize space used of the overall width of a coil, making it easier to transport, store and manage.



STEP H-83 Strap Wagon

The STEP H-83 is designed towards transporting and dispensing PP straps. It is compatible with Ø200 oscillating straps or Ø280 mm (optional).

Item No. 41280060



STEP H-91 Strap Holder/Dispenser

The STEP H-91 is designed for dispensing WG straps. It is compatible with Ø75/w140. A basket is located on its rear ideal for carrying tensioners, sealers, seals and buckles.

Item No. 41280080



STEP H-95 Steel Strap Wagon

The STEP H-95 is designed for transporting single ring coils steel straps. It has a basket which can be used to hold tools, seals and buckles. Available in two model types designed to carry particular steel strap widths



41280090	Model Type A for 10-22mm steel strap
41280095	Model Type B for 22-32mm steel strap

STEP Long lancing rod 130cm LR100



- 130cm Long lancing rod.
- Item no.: 41282100



STEP Lancing Probe head LR300

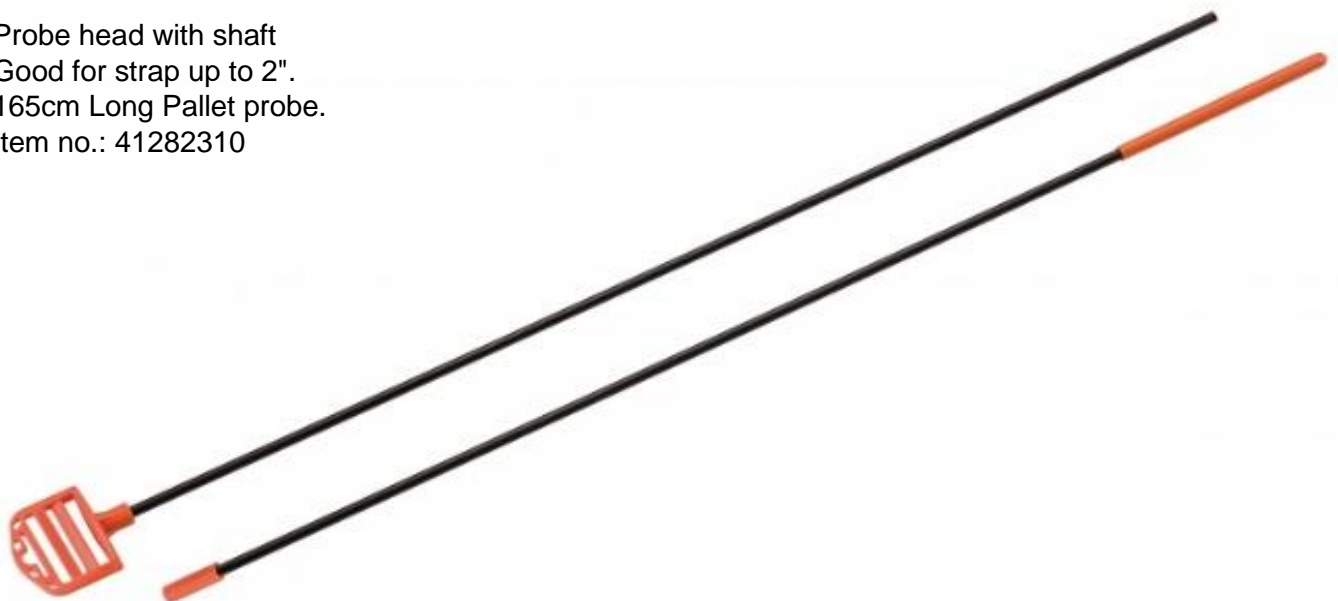


- A probe head that works for any standard 3/4" broom handle.
- Broom shaft not included.
- Good for strap up to 2".
- Item no.: 41282300



STEP Long Pallet Probe 165cm LR310

- Probe head with shaft
- Good for strap up to 2".
- 165cm Long Pallet probe.
- Item no.: 41282310



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 – Continuous 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/crt	24/30 carton 1 pallet	Item No.
5	0,40	450	White	150	160	6000	2	Request price	51540330
			Black	200	190	8000	2		51540510
	0,45	600	White	200	190	7000	2		51540560
			Black	200	190	7000	2		51545510
6	0,55	750	White	200	190	5000	2		51545560
			Black	200	190	5000	2		51655510
9	0,55	1200	White	280	190	4200	2		51655560
			Black	200	190	3000	2		51665660
12	0,55	1350	White	200	190	3000	2		51955510
			Blue	200	190	3000	2		51955520
			Black	200	190	3000	2		51955560
	0,55	1350	White	280	190	2500	2		51255510
			Blue	280	190	2500	2		51255520
			Black	200	190	3000	2		51255560
			White	280	190	2500	2		51255610
	0,63	1500	Black	406	150	3000	1		51255620
			White	406	150	2000	1	51255660	
			Black	200	190	3000	2	51263510	
15,5	0,60	1900	White	280	190	2100	2	51263660	
			Black	406	150	3000	1	51263710	
	0,65	1900	Black	406	150	2000	1	51273710	
			Black	200	190	2000	2	51273710	
Black	280	190	1500	2	51360510				
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



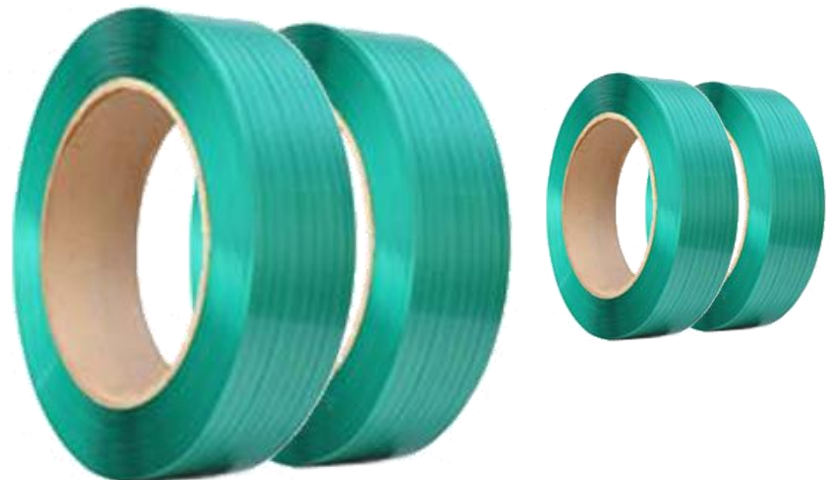
WG Strap Specifications								Item Number
Strap Width	Name	Strength N	Color	Core Ø	Coil Width	Meters/Coil	Coils / Carton	
9	WG30	2750	White	Ø76	150	250	8	53090250
						1500	3	53091500
13	WG40	3750				250	8	53130250
						1100	3	53131100
16	WG55	6000				850	3	53160850
19	WG65	7500				500	3	53190500
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	Ø406	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

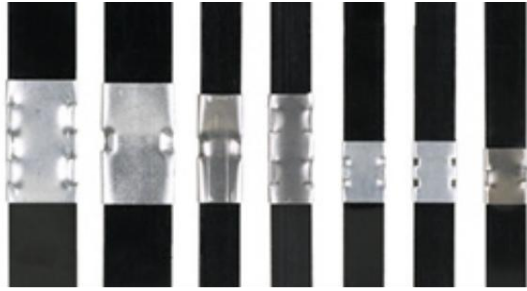
STEP Strapping Seals & Buckles

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

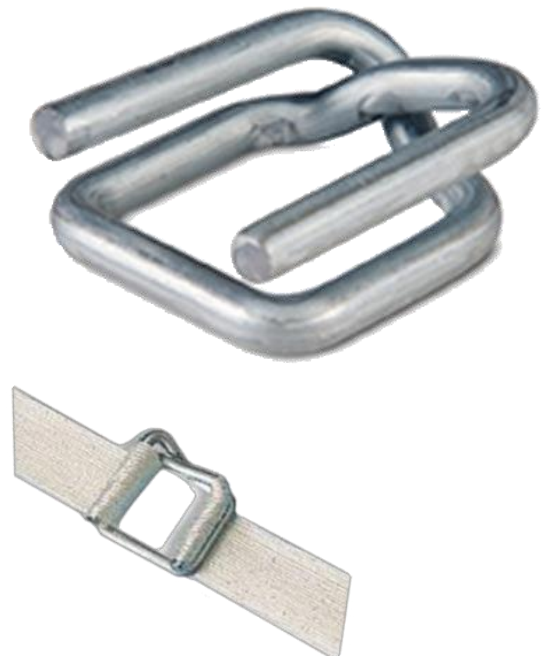
Plastic Buckles	
59511300	Plastic Buckle 13S Black 1000pcs/carton
59511301	Plastic Buckle 13H White 5x1000pcs/carton MOQ 5000
59511600	Plastic Buckle 16S Black 1000pcs/carton
59511601	Plastic Buckle 16H White 5x1000pcs/carton MOQ5000



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 2333VZ10x22x0.6mm	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

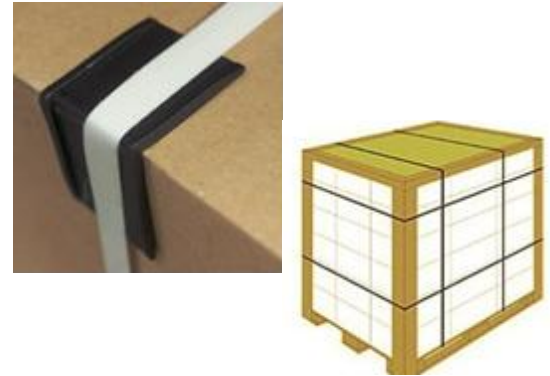
STEP Edge Protectors

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 contract 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.