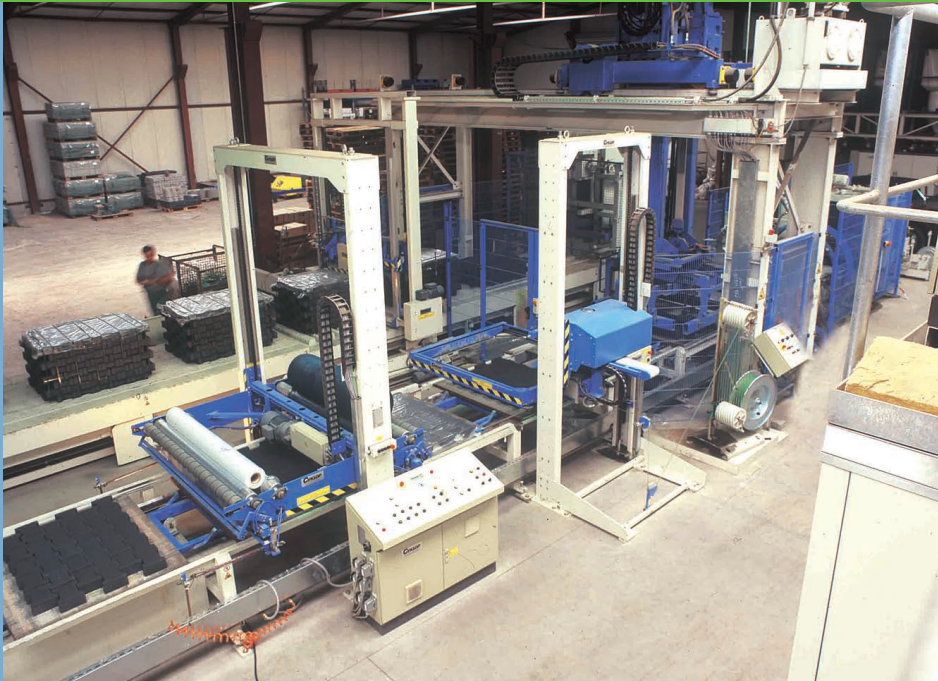


UNIVERSAL RANGE OF MACHINES
STRAPPING LINES IN MODULE STRUCTURE



VERTICAL AND HORIZONTAL STRAPPING SYSTEMS MODULAR STRUCTURE



Advantages:

- Established and proven technology over a 1,000 times.
- Optimal strapping results through high tensioning and holding power up to 5,500 N.
- High compression of the package, if necessary.
- Modular construction and thus reproducible results.
- Easily integrated into existing conveyor systems.
- Strapping chute frame is adapted to customer requirements.
- Equipped with the leading strapping technology, the Cyklop CFH-1 strapping head including multi-stage tensioning.

With three fundamentally different types we offer alternatives for selecting the optimal strapping for each individual requirement. The modules are manufactured in series, each under the same specifications and with the same precision. The results are reliability and low service requirements.

The basic version of all machines consists of a base frame, tensioning and sealing head CFH-1, a strap chute and strap dispenser KA-5, all as standard modules.

The strap chute will, depending on the load measurements, be assembled on the principle of raster technology. All machine functions are electronically controlled and shown on a display of 5.7" touch panel.

The machines will be built in one of the two following versions:

- As XF-model: The strap chute is permanently closed
- As XP-model: The so-called lance of the strap chute – can be withdrawn per motor.

This version is required if the straps are to be guided between the skids of the pallet.

All machines comply with machine regulations 2006/42/EG.

Depending on the type of application, further standard modules may be integrated:

➤ **Strapping head driving device**

The load doesn't have to be positioned close to the strapping head as the head moves automatically to the load.

➤ **Strap tensioning equaliser**

The strap tension is distributed evenly around the load. The holding power is increased.

➤ **Strap dispenser KA-5 Tandem**

The dual strap storage and the space-saving arrangement of the coils next to each other offer unique advantages for the fully automatic strapping machines with high capacity.

THE XF / XP 112-M SERIES

VERTICAL STRAPPING – STRAPPING HEAD ON THE SIDE



Advantages:

- Compact, very little space required.
- Easy access to all mechanical components, to facilitate service and maintenance.
- Quick and economical to produce.
- Optimal operation per 5.7" touch panel.

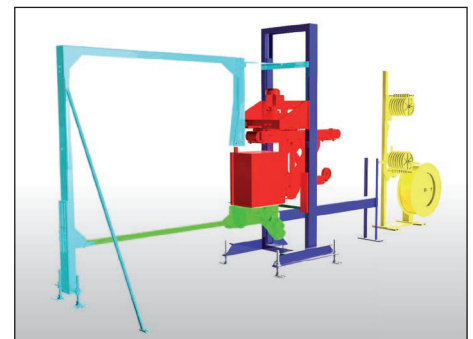


Function

The load is conveyed into the required strapping position and the strapping cycle is automatically activated. The strap in the strapping chute moves around the load, is optimally tensioned, sealed and cut off. The process is repeated depending on the number of cycles per load.

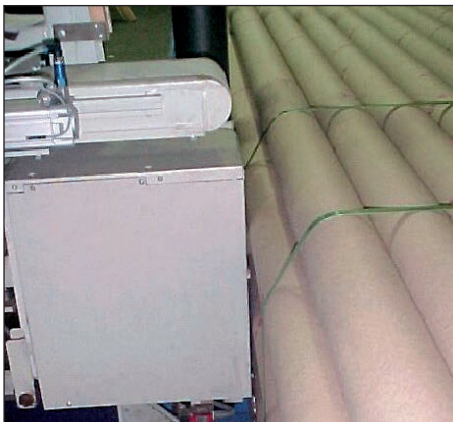
Main specification

- Adaptable to conveyor heights from 150 to 950 mm
- Strap chute frame according to the principle of the raster technique, suitable for:
 - Load widths: 300 to 2,000 mm
 - Load heights: 300 to 3,000 mm
- Strapping head movement: 500 mm
- Fully electrically driven. No pneumatics required



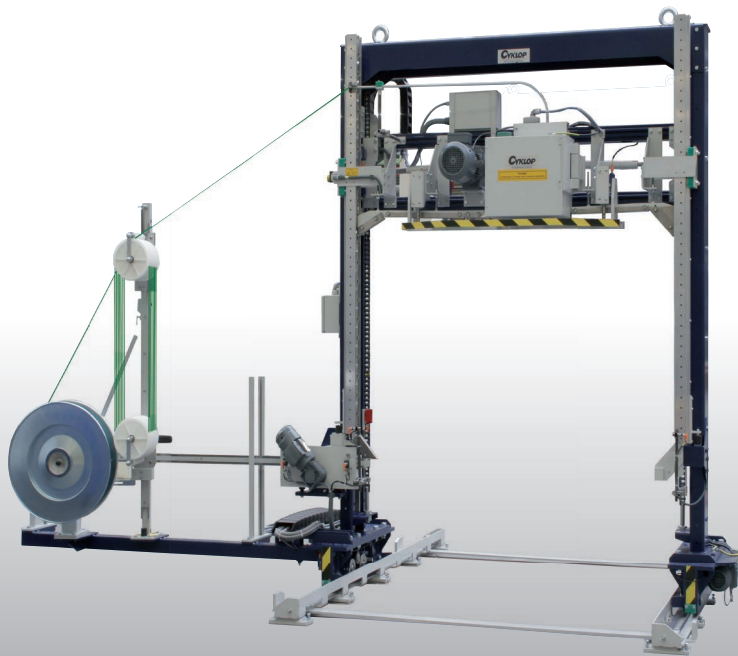
XP 112 MVB

- Basic frame
- Strapping head with driving device
- Strap chute, variable
- Strap dispenser with strap storage
- Driven strap lance



THE XF / XP 111-M SERIES

VERTICAL STRAPPING – STRAPPING HEAD, FROM TOP



Advantages:

- Strapping head, strap chute and strap tensioning equaliser are standard. The strap tension on the load is always optimal.
- The strapping head is protected against dirt and dust with the result, that it is always fully functional.
- If the pallet loads are positioned in the middle of the conveyor, different-sized loads can be strapped without difficulty.

Function

XF/XP 111 MVB:

Only the strapping head moves down to the top of package surface. The height difference between the highest and lowest load may not exceed 550 mm.

XF/XP 111 MKB:

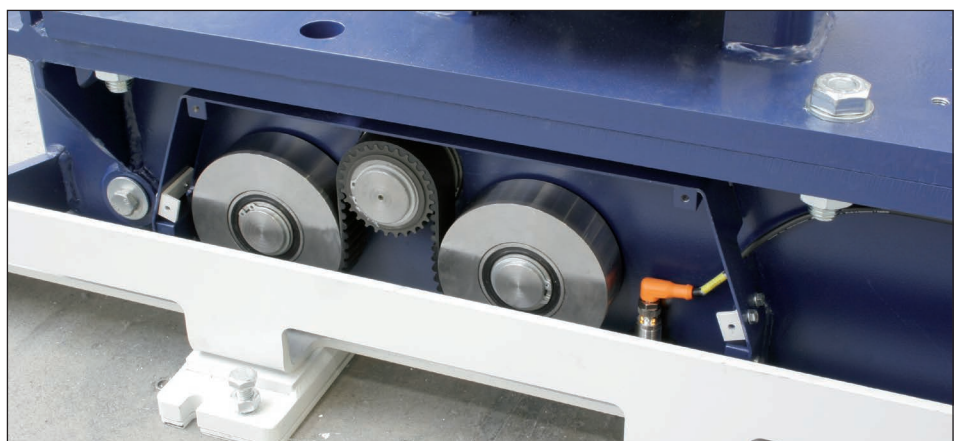
Not only the strapping head, but the entire strap chute moves down onto the pallet load. The pallet load can be strapped even if it is only 210 mm high.

Main specification

- Conveyor heights from 110 to 1,000 mm
- Strap chute adapted to the width of the load from 500 to 2,100 mm and heights from 210 to 2,000 mm
- Fully electrically driven.
No pneumatics required

The machine drive XPV is available as option.

With this process different, freely definable strapping positions can be started without having to use the conveyor. This is necessary, e. g. in the building industry. The conveying system often has tightly pre-selected strokes.



Drive of XPV 111-MVB

THE XF 172-M SERIES

HORIZONTAL STRAPPING – STRAPPING HEAD ON THE SIDE



Advantages:

- The strapping head driving device (500 mm) and the strap tensioning equaliser are standard. The strap tension on the load is always optimal.
- The strap holding device across from the strapping head ensures that even with greater distances, the strap will always be fitted precisely around the load.
- The exact strapping height can be achieved with the „teach-in“ software.

Function

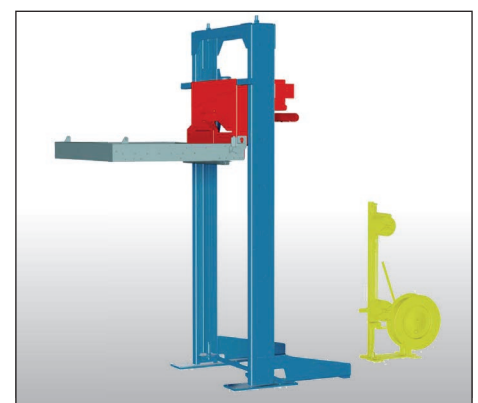
The load is conveyed into the required strapping position and the strapping cycle is automatically activated.

The lifting device with the strap chute and strapping head moves into the pre-selected position (teach-in).





The strapping head moves onto the package and the strap in the chute is horizontally guided with optimal tension around the load, welded and cut off. The process is repeated depending on the number of straps per load.

Main Specifications

- Conveyor height: Min. 300 mm
- Strap chute according to the principle of the raster technique, suitable for:
Loads (L x W): 800 x 900 mm up to 1,400 x 1,400 mm
- Machine height: 3,700 mm
- Through-put height: Max. 2,320 mm
- Package height: Min. 60 mm
- Strapping height: Min. 45 mm (345 mm incl. Conveyor)
- Fully electrically driven. No pneumatics required

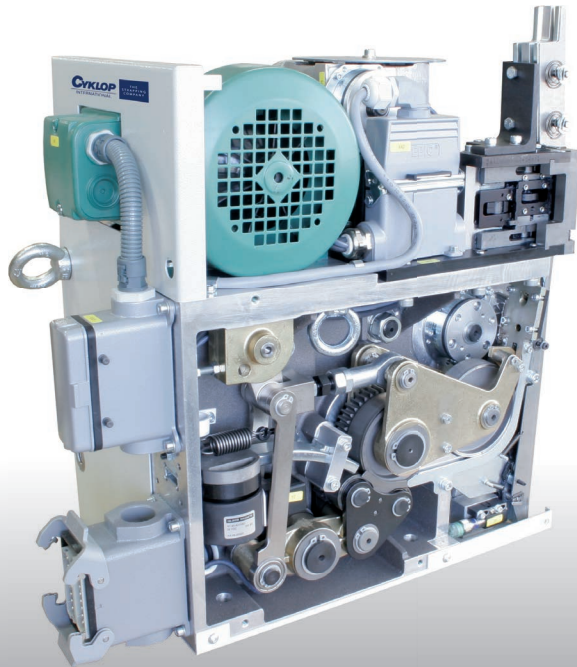


XF 172-M, modular assembly

-  Basic frame
-  Strapping head with driving device
-  Strap chute, variable
-  Strap dispenser with storage

STRAPPING HEAD CFH-1

THE HEART OF EVERY STRAPPING MACHINE IS THE STRAPPING HEAD



Advantages:

- Long life due to an innovative lubricating system.
- Friction weld seal – no fumes thus no unpleasant odours.
- Service and maintenance friendly.
- Quickly and easily replaceable sealer within minutes.
- Some wear and tear parts can be easily replaced without disassembling the strapping head.
- Two different, innovative Cyklop sealers available – ideally adapted to the package.

It depends crucially on its performance and its specification, how safe a load is during transport. Cyklop has, amongst other things, equipped its strapping heads with multi-stage-tensioning technology.

Unique: The strap isn't pulled around the product in one go, but in finely-tuned intervals. The result is an equalised tension around the package. This innovative technology always ensures an optimum holding force and optimises the technical advantages of Cyklop modern PET straps to the full – with up to 5,500 Newton.

Technical data:

Strap feed / retraction: 2.9 m/s
 Strap tensioning: Up to 5,500 N (variable tension setting possible, depending on strap width and thickness)

Electric:
 Operating voltage: 3/N/PE, 230 – 415 V, 50 - 60 Hz
 Total connection: 1.0 kW
 Control voltage: 24 V DC

Strapping

Sealer

	V 80 Q-S3	V 94 Q-S3
Strap widths	9 - 12,5 mm	12 - 19 mm
Strap thickness*	0.4 - 1.12 mm	0.58 - 1.12 mm
Strap quality (machine grade)	PP and PET	PP and PET

* Depending on strap widths

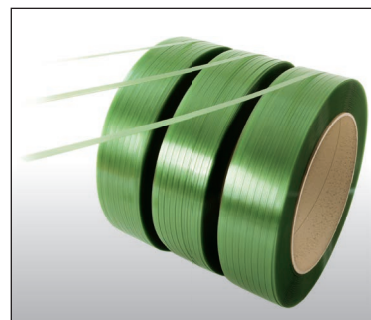
CYKLOP PET STRAPPING

STRENGTH IS NOT EVERYTHING. IT'S THE HOLDING POWER THAT MATTERS

Cyklop International is one of the pioneers of modern PET strap technology. Very early on the company realised the enormous advantages of PET compared with steel strapping and has, from the very beginning, been a major participant in design and development. Today Cyklop is one of the leading manufacturers of polyester (PET) straps for securing loads, with production facilities in Germany and many other international locations.

PET IS SUPERIOR TO STEEL STRAP

- Higher shock reserve and better holding force (= more transport security)
- Less risk of injury (= more work safety)
- Low weight, easy handling (= less working costs)
- Less transport costs and storage (= less cost)
- Gentle package handling, weatherproof and corrosion-free (= less complaints)
- Economic
- Cyklop PET straps are environment-friendly due to 100% recyclability



PET - strap

Two types of strap

Cyklop PET strap comes in two different types and a variety of practical specifications.

Cyklop Classic

Has a tensile strength of 450 N/mm².

The classic is suitable e.g. for the strapping of corrugated cardboard, cans and packages with sharp edges.

Cyklop PREMIUM

Has a tensile strength of 550 N/mm².

Due to a low strap cross section this strap is even better to stretch, thus achieving a higher holding force.

Cyklop PREMIUM is ideal for heavy-duty strapping jobs and is at the same time economical.

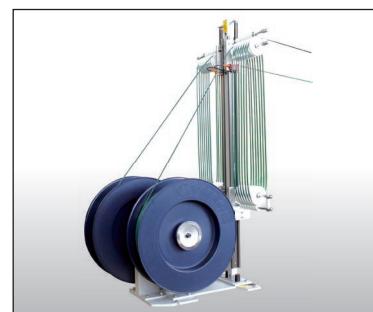
CYKLOP STRAP DISPENSER FOR PLASTIC STRAP KA-3 Jumbo, KA-3 Jumbo DT, KA-5 und KA-5 Tandem

- Easy strap feed
- Large strap storage
- Abrasion-free strap feed
- Ideal for the Cyklop strapping head technology

Dispenser	KA-3 Jumbo	KA-3 Jumbo DT	KA-5 (Tandem)
Strap	PET	PET	PP / PET
Width	9 - 19 mm	12 - 18,5 mm	9 - 19 mm
Coil dimension			
Core inner diameter	406 mm	406 mm	406 mm
Outer diameter	800 mm (max.)	770 mm	600 mm
Width	200 mm	200 mm	150 mm
No. of strap loops	8	9	7
Static storage	21 m (max.)	15,3 m	15/13 m
Strap feeding force	7 - 8 N	ca. 5 N	ca. 5 N



Strap dispenser KA-3 Jumbo DT

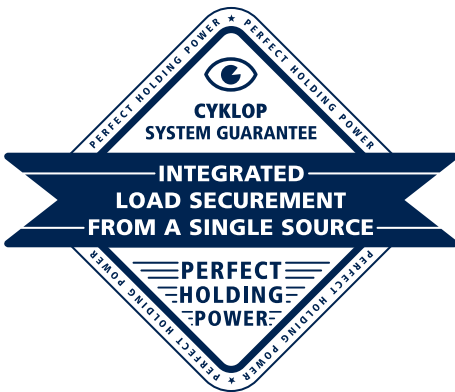


Strap dispenser KA-5 Tandem for plastic strap



CYKLOP RING WRAPPER CSR

- Fully automatic stretch wrapper with Power Roller Stretch
- No electrical components on the wrapping ring (world-wide patent)
- Film pre-stretch is adjustable up to 250 %
- Compact design – convenient transportation and simple assembly
- Automatic belt tension monitoring (drive belt)
- High capacity
- Low maintenance



CYKLOP GMBH – YOUR SYSTEM SUPPLIER

As a leading supplier in the field of load securement, Cyklop offers you system solutions specially tailored to your company's requirements. This is ensured by our Cyklop system guarantee.

As a result, you benefit from maximum reliability and maximum economy. We are represented in over 50 countries with our worldwide network and have our own production plants in Germany, Brazil, India, Italy, the Netherlands, Russia, Thailand, Sweden and Spain. The strapping systems, machines and materials developed at our Cologne plant are subject to the strict guidelines of the international quality standard ISO 9001 and the Machinery Directive 2006/42/EC .



TRAINING AND SERVICE IN TOP FORM

Our experts at Cyklop headquarters in Cologne can often help with advice and instructions per telephone. Cyklop has a supply quota of 96% for spare parts, so that from the start delays don't even occur. All service technicians are trained in Cyklop's own training centre, which is also available for intensive user training. Whether an installation of a complete packaging line is required, regular maintenance or the immediate repair of a malfunction – we are always on the spot for advice, help and service. Cyklop has a very dense customer service network in Germany which guarantees a quick response in case of trouble.