

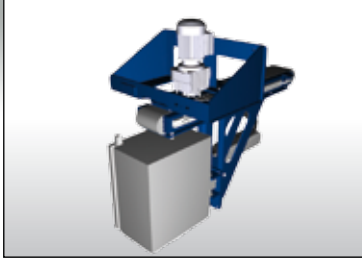
Strapping Lines in Module Structure

Universal Range of Machines.

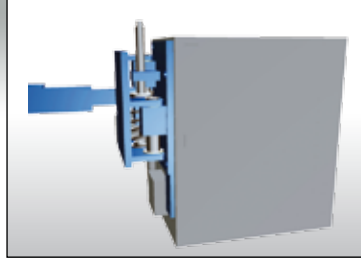


CYKLOP
INTERNATIONAL

THE
STRAPPING
COMPANY



Strapping head driving device



Strap tensioning equaliser

Vertical and Horizontal Strapping Systems Modular Structure.

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 guide and strap dispenser KA-4 for storage, all as standard modules.



Advantages:

- Established and proven technology over a 1,000 times.
- Optimal strapping results through high tensioning and holding force 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.

The strap chute will, depending on the load measurements, be assembled on the principle of raster technology. All machine functions are electronically controlled per programme and shown on a display or 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 - As **XP-model**: The so-called lance of the strap chute – running close to the floor – can be withdrawn per motor. This version is required if the straps are to be guided between the skids of the pallet on the floor.
- All machines comply with machine regulations 2006/42/EG.

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

➤ **Driven strapping head**

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

➤ **Strap tensioning equaliser**

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

➤ **Strap dispenser KA-4 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.



XP 112-M / Application: Chipboard

The XF / XP 112-M Series

Vertical strapping – strapping head on the side.

Function

The load is put 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.

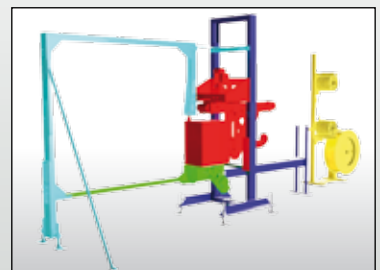


Advantages:

- 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.

Main specification

- Adaptable to heads 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 mobility: 500 mm
- Fully electrically driven. No pneumatics required



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



XP 112-M / Application: Cardboard cores



XPV 111-M / Application: Lead bars

The XF / XP 111-M Series

Vertical strapping – strapping head, above.

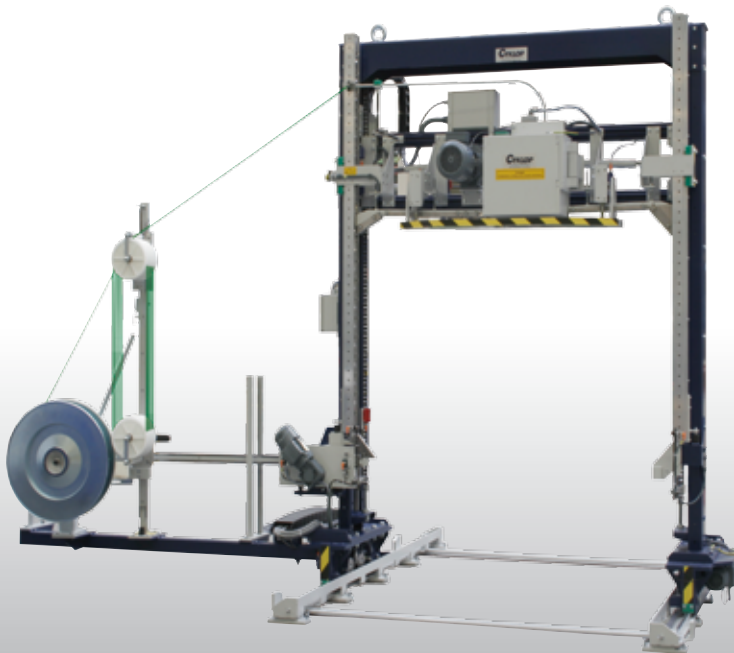
Function

XF/XP 111 MVB:

Only the strapping head is lowered to the 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 lowers onto the pallet load. The pallet load can be strapped even if it is only 210 mm high.



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.

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.

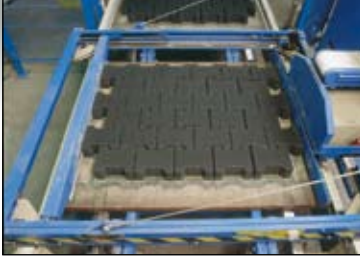
With this process different, freely definable strapping positions can be started without having to use the conveyor. This is necessary, e. g. in the construction industry. The conveying system often has tightly pre-selected strokes.



Driven by the XPV 111-MVB



XF 172-M / Application: Paving slabs



XF 172-M / Application: Paving stones

The XF 172-M Series

Horizontal strapping – strapping head on the side.

Function

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

The lift 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.

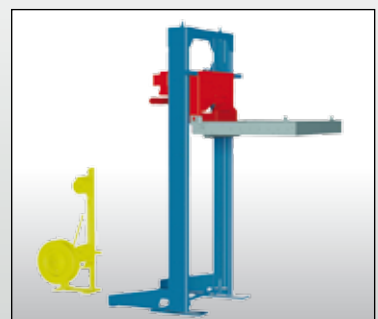


Advantages:

- The strapping head driving device (500 mm) and the strap tensioning equaliser are standard. This increases the holding force on the load.
- 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.

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 track
- Strap chute, variable
- Strap dispenser with storage



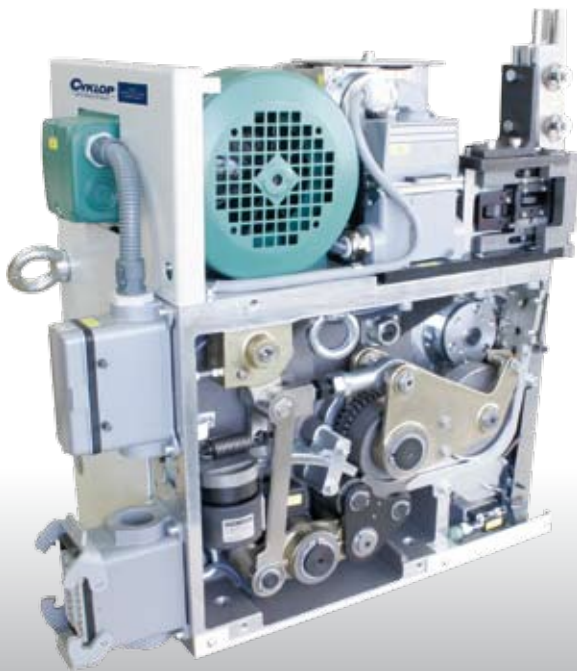
CFH-1 Strapping head, drive

Strapping Head CFH-1

The heart of every strapping machine is the strapping head.

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.



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.

Main specifications

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 R	V 94 Q-S3
Strap widths	9 - 16 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



PET strap in the strap dispenser KA-4

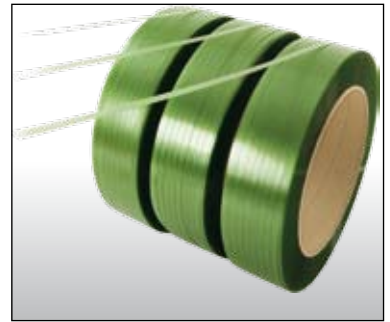
Cyklop PET strapping

Strength is not everything. It's the holding force 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.

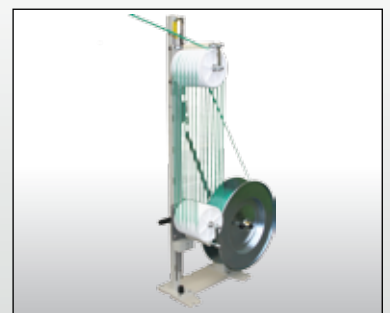
Cyklop PREMIUM is ideal for heavy-duty strapping jobs and is at the same time economical.

Cyklop strap dispenser for plastic strap

KA-3 Jumbo, KA-4 and KA-4 Tandem.

- Weight neutral strap feed
- Large volume storage
- Controlled, kink-free strap retraction
- Abrasion-free strap feed
- Ideal for the Cyklop strapping head technology

Dispenser	KA-3 Jumbo	KA-4 (Tandem)
Strap	PET	PP / PET
Width	9 - 19 mm	9,5 - 19 mm
Coil		
Core diameter	406 mm	406 mm
Outer diameter	800 mm (max.)	600 mm
Width	200 mm	150 mm
No. of strap loops	8	7
Static storage	21 m (max.)	12 m
Strap feeding force	7 - 8 N	appr. 5 N



Strap dispenser KA-4 for plastic strap

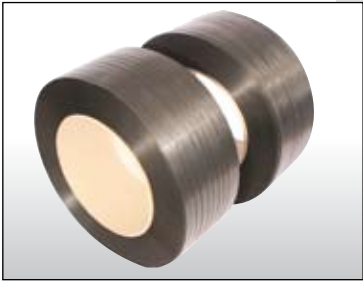


Strap dispenser KA-4 Tandem for plastic strap



Cyklop Wrapper

- Fully-automatic stretch wrapper with Cyklop Power-Eco-Stretch system enables the optimal pre-stretching from 0 to 300%
- Wraps variable package widths
- Precise and reproducible
- Operator comfort
- Quiet running
- Low maintenance



Strapping: Polystrap (PP)

- Cyklop offers – for PP strapping technology – complete tailor-made solutions in strap widths from 5 mm to 15.5 mm and varied breaking strengths from 500 N to 4,500 N.



Training and Service in Top Form

Our experts at Cyklop headquarters in Cologne, Germany can often help with advice and tips over the telephone. Cyklop has a supply quota of 96% for spare parts, so that from the beginning 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.

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