



# *BELTflex system*



"The Wire to leave the maze" 

**CABLE  
CABLE TRENCH &  
CONDUCTOR RAILS  
PROTECTION SYSTEM**

high performing products for the most demanding applications



# HIGH PERFORMANCE PRODUCTS FOR THE MOST DEMANDING APPLICATIONS

Auxema Stemmann is a leading company focused on the electrical feed and data transmission of the industrial mobile equipment, for more than 49 years.

All the efforts, reflected in the product range, are focused on improving the efficiency of the mobile equipment using electricity and creating the ecofriendliest industry.

Auxema Stemmann cable reels are specially designed for this purpose, offering greater results in terms of durability and prolonging the life of the cables, thanks to their high standard.

As mean of prolonging the cable life, Auxema Stemmann has designed and patented the *BELTflex* system; consisting in a cable trench cover composed of multiple layer of neoprene and a double metal frame.

When the trench is totally covered by *BELTflex*, the system protects the cable and the cable channel even against heavy road traffic, avoiding dangerous breaks in the cable and possible injuries to staff.

Specially recommended for shipyards, container terminals and general industries, it is used by several main ports and terminal operators worldwide.



channel cover solutions · rubber cover solutions · trench options · onsite assistance · additional accessories



## channel cover solutions

THE "OLD SYSTEM"

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Steel covers for the channels.  
Only for slow speed cranes.  
Noisy system.  
Old fashioned system



# Rubber cover solutions

*BELTflex* PROTECTION SYSTEM

The best protection system for cables that allows their correct fitting in the trench or channel, prolonging their life time.

Reinforced steel core flexible belt.

Prevents the accumulation of waste inside the trench

**SAFETY:** Avoids injuries and possible accidents to the staff.

Quick and easy installation.

Suitable for any cable guide.

Valid for modern and automatic machinery.

High visibility

## B&Y SAFE!

All *BELTflex* references can be customized with vulcanized yellow lines as a precaution signal, under request.



# BELTFLEX Rubber Cover Solution

## DIMENSIONS & SPECIFICATIONS

| Model                           | Reference                        | Measure |
|---------------------------------|----------------------------------|---------|
| <i>BELTflex</i>                 | <i>BELTflex</i> 300              | 295 mm  |
|                                 | <i>BELTflex</i> 400              | 395 mm  |
|                                 | <i>BELTflex</i> 500              | 495 mm  |
|                                 | <i>BELTflex</i> 600              | 595 mm  |
| <i>BELTflex</i> XTRA            | <i>BELTflex</i> XTRA300          | 295 mm  |
|                                 | <i>BELTflex</i> XTRA400          | 395 mm  |
|                                 | <i>BELTflex</i> XTRA500          | 495 mm  |
|                                 | <i>BELTflex</i> XTRA600          | 595 mm  |
| <i>BELTflex</i> SUPER-XTRA      | <i>BELTflex</i> SUPERXTRA300     | 295 mm  |
|                                 | <i>BELTflex</i> SUPERXTRA400     | 395 mm  |
|                                 | <i>BELTflex</i> SUPERXTRA500     | 495 mm  |
|                                 | <i>BELTflex</i> SUPERXTRA600     | 595 mm  |
| <i>BELTflex</i> SUPER-XTRA-PLUS | <i>BELTflex</i> SUPERXTRAPLUS300 | 295 mm  |
|                                 | <i>BELTflex</i> SUPERXTRAPLUS400 | 395 mm  |
|                                 | <i>BELTflex</i> SUPERXTRAPLUS500 | 495 mm  |
|                                 | <i>BELTflex</i> SUPERXTRAPLUS600 | 595 mm  |

Auxema Stemmann can customize sizes and measurements under customer's request





# BELTflex-EXTRA Rubber Cover Solution

## DIMENSIONS & SPECIFICATIONS

|                            | <i>BELTflex</i>  | <i>BELTflex-XTRA</i>                                     | <i>BELTflex SUPER-XTRA</i>                                     | <i>BELTflex-XTRA plus</i>                            |
|----------------------------|--|--|--|--|
| Description                | Designed for Sea-Side. Very light traffic and pedestrian crossing. | Designed for occasional traffic and pedestrian crossing. | Designed for usual light traffic and occasional heavy traffic. | Designed for very intensive heavy traffic.           |
| Thickness                  | ≥ 15 mm  | ≥ 15 mm  | ≥ 15 mm  | ≥ 20 mm  |
| Composition                | 80% CR Neopren<br>15% Steel cord<br>5% Dipped Nylon                | 75% CR Neopren<br>20% Steel cord<br>5% Dipped Nylon      | 72% CR Neopren<br>23% Steel cord<br>5% Dipped Nylon            | 50% CR Neopren<br>40% Steel cord<br>10% Dipped Nylon |
| Temperatura Range          | -35°C up to +120°C<br>-31°F up to 248°F                            | -35°C up to +120°C<br>-31°F up to 248°F                  | -35°C up to +120°C<br>-31°F up to 248°F                        | -35°C up to +120°C<br>-31°F up to 248°F              |
| Transversal Breaking Load  | ≥ 250 N/mm   | ≥ 500 N/mm   | ≥ 790 N/mm   | ≥ 790 N/mm   |
| Longitudinal Breaking Load | ≥ 100 N/mm   | ≥ 100 N/mm   | ≥ 500 N/mm   | ≥ 700 N/mm   |

### Composition-Neoprene rubber specific formula for marine environments 65° SHORE

|                     |             |        |
|---------------------|-------------|--------|
| Opening angle       | 90          | °      |
| Estimated runtime   | > 1.500.000 | cycles |
| Hardness            | 62 ± 5      | °Sh A  |
| Abrasion            | 130         | mm3    |
| Breaking Elongation | 400         | %      |



# Trench options

OUR ALTERNATIVE: CCG SYSTEM

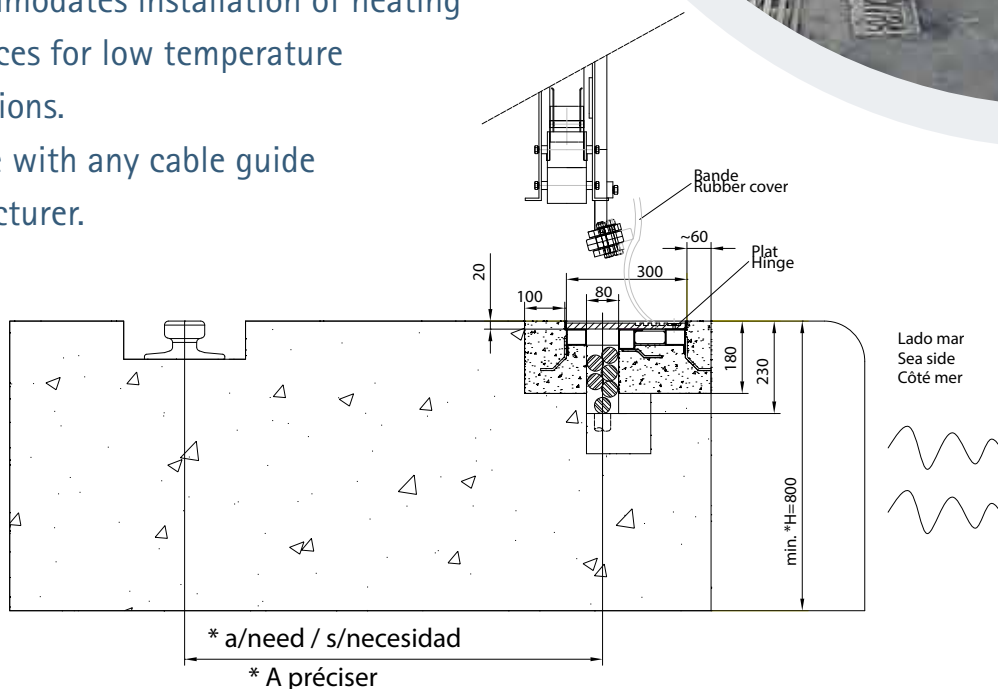
Lateral borders of electrowelded laminated profiles and/or tubes with fixings to be anchored to the concrete.

Material selection on demand: Hot dip galvanized or stainless steel.

Guides the cable into the concrete trench and reinforces the edges.

Advantages comparing to other systems:

- Easier to install and handle onsite.
- Quick implementation.
- Optimal adaptation to the dock.
- Accommodates installation of heating resistances for low temperature applications.
- Usable with any cable guide manufacturer.

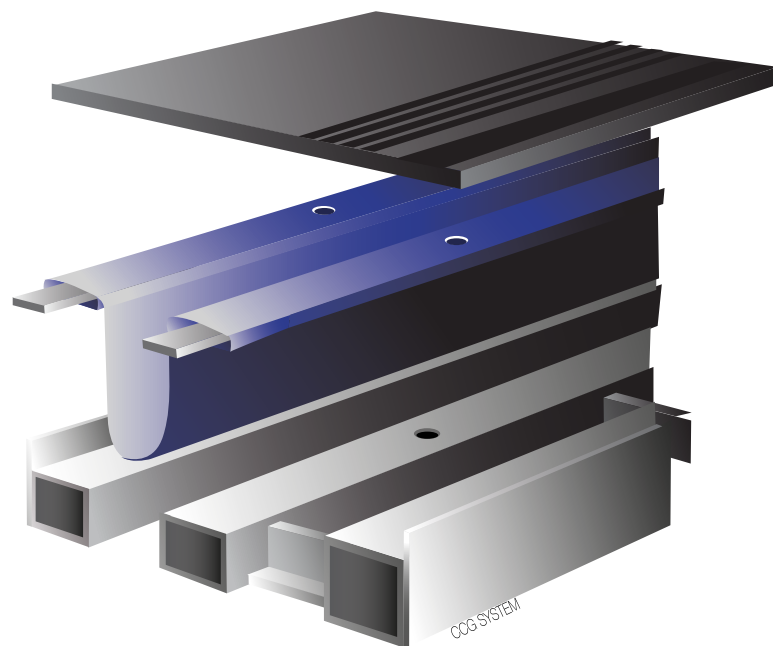
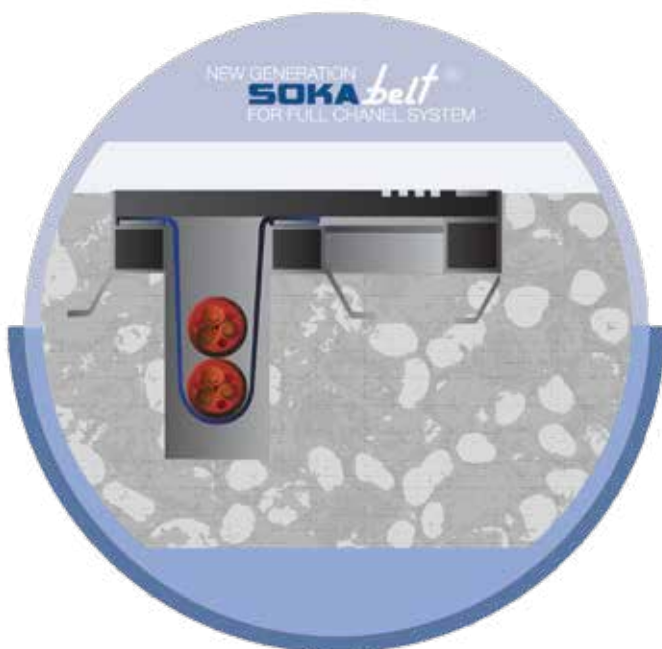


# Trench options

SOKAbelt

This innovative system, consisted in a Polyurethane layer, avoids the contact of the cable against the concrete, prolonging the life time of the cable.

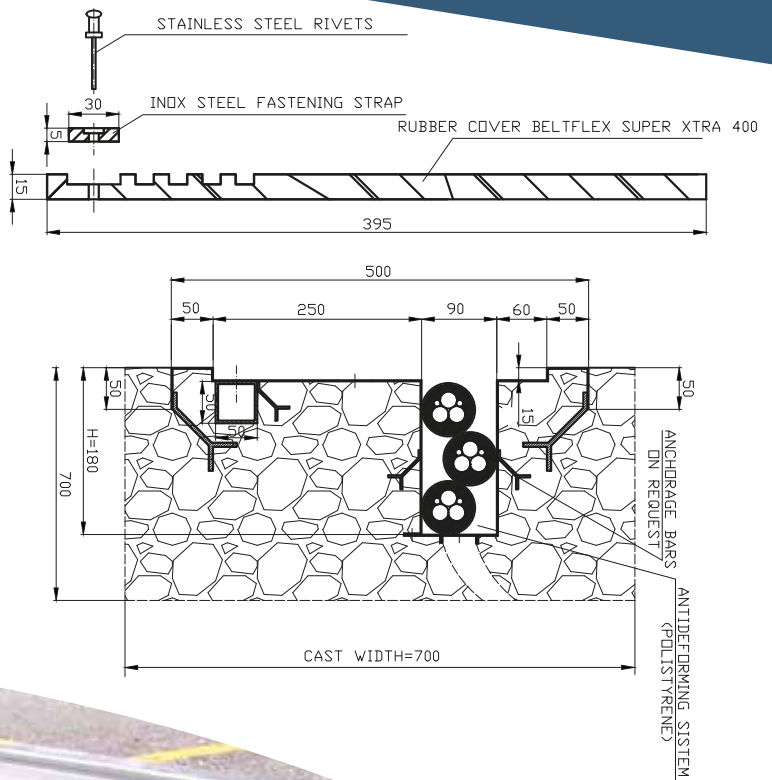
| Property                     | Standard                                  | Unit              | Measure                       |
|------------------------------|---|-------------------|-------------------------------|
| Density                      | Calculated                                | g/cm <sup>3</sup> | 1.15                          |
| Softening range              | TMA Onset-<br>Endset internal method      | °C                | 155-185                       |
| Hardness                     | DIN 53505                                 | Shore A           | 87                            |
| Breaking strength            | DIN EN ISO 527                            | MPa               | 60                            |
| Resistente to 50% elongation | DIN EN ISO 527                            | MPa               | 5-7                           |
| Elongation at brak           | DIN EN ISO 527                            | %                 | 550                           |
| Tear resistance              | DIN ISO 34.1, B                           | kN/M              | 50                            |
| Sheet material               | Polyurethane                              | m                 | Long. 6000<br>with On request |
| Strap material               | Stainless steel 304L<br>(316L on request) | m                 | Long. 6000<br>with 30         |



# Trench options

STAINLESS STEEL OR HOT DIP GALVANIZED FULL CHANNEL

- Traditional application.
- Continuous full SS (AISI 304 or 316) or hot dip galvanized channel.
- Joints and fixing anchors are included.
- Copper joints and Polystyrene blocks used for alignment.
- Customization of the channel is available on request (n° of cables...)
- Suitable with the *BELTflex* system.





# Trench options

## NEW CABLE TRENCH GENERATION

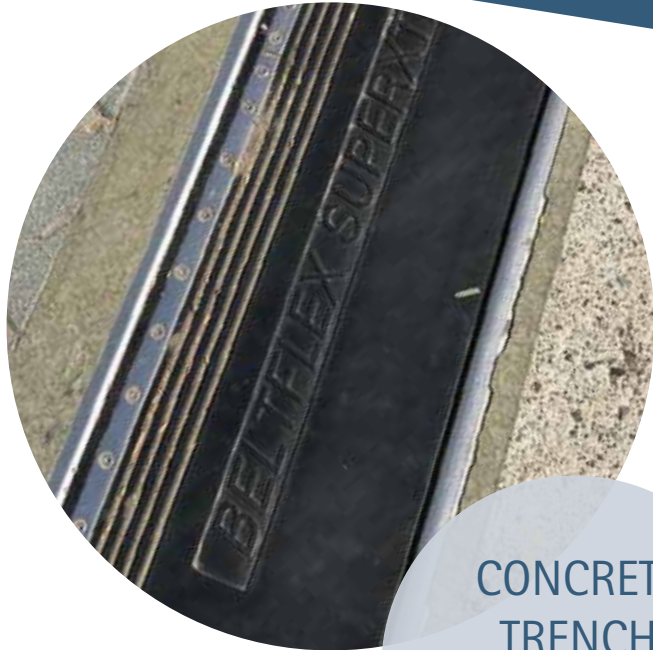
1. Complete inlaid piece, with no weldings. Supplied in lengths up to 6 meters, reduces the installation period in a 25-30%, being cost effective.

2. Reinforced area, in order to avoid any possible *BELTflex* connection bolt losing.

Thanks to this new manufacturing system we can get a more robust design, obtaining as a result an optimus anchoring surface.

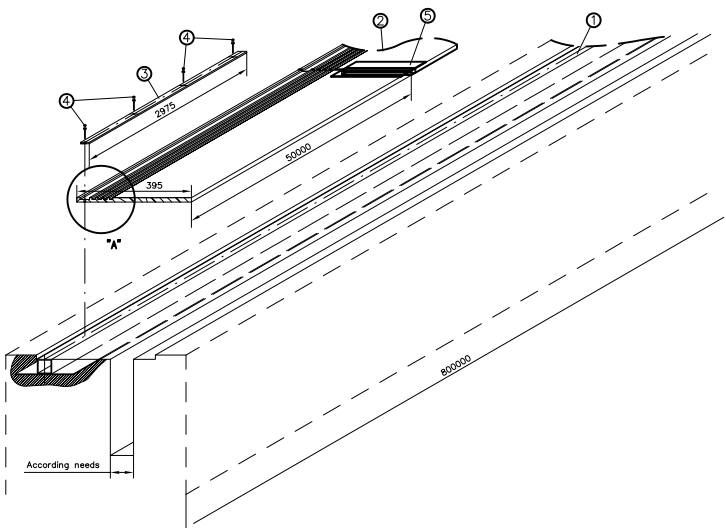


# Trench options



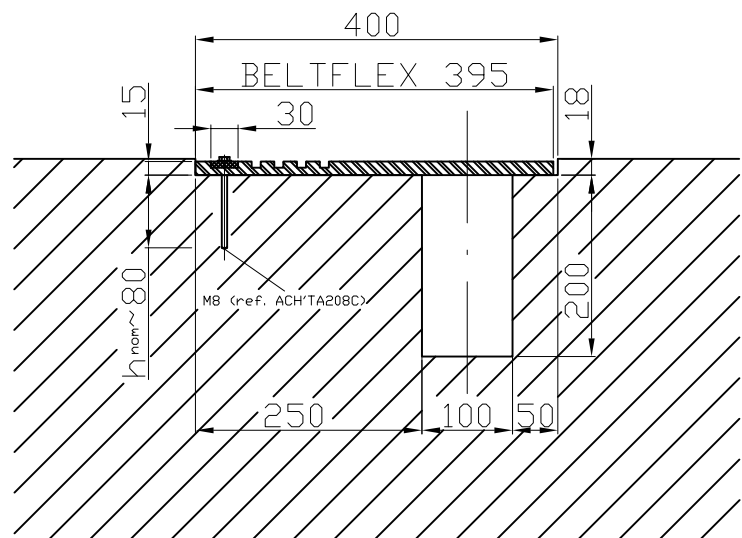
CONCRETE TRENCH WITH BELT FIXING DEVIDE

- Trench made of pure concrete.
- Supplied with a *BELTflex* fixing assembly and anchor fixings.



DIRECT CONECTION TO CONCRETE CHANNEL

- The belt is directly connected to the concrete channel with special bolts.



# Onsite assistance

## BELT LENGTH FIXING SYSTEMS

We have the possibility to offer two different options:

- Conventional system: The union of the different belt length is made with stainless steel coupling links
- Vulcanization: Using a special equipment, we join the different belt lengths, giving an uninterrupted run of the belt. With this system, we reduce the possibility of breaks in the belt, caused by the damaged coupling links.





## UP YOUR TRENCH

We can propose and develop a totally customized solution for your old cable trench

# Additional accessories

## BELT LIFTERS

The belt lifter enables the perfect elevation of the rubber cover of the channel (*BELTflex System*) while the crane is operating. They are specially designed and manufactured depending on the channel and crane sizes. All our belt lifter are suitable with all channel and rubber cover manufacturers.



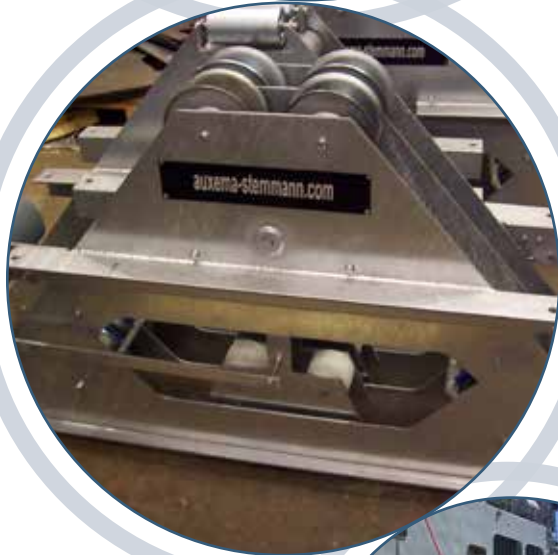
# Additional accessories



## SPECIAL CABLES

SOKAflex special cables are designed and manufactured under the most demanding standards for mobile applications.

Specific cables for high speed voltage and optic fibre are available



## CABLE GUIDES

The cable guides ensure the correct location of the cable in the trench.



## ELECTRICAL CONNECTORS

Feeding points, under the floor or on the top of it are available.

# Additional accessories

SLIP RINGS



CABLE REELS



ENGINEERING -MANUFACTURING- TECHNICAL ADVIDE-TOTAL  
INSTALLATION-COMMISSIONING SUPPORT-TRAINING





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