

## Belts for SUGAR INDUSTRY

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Food approved process  
Safe industrial environment  
High productivity



ISO 9001:2015





## Belts for the Sugar Industry

Covering the different mechanical specifications required in each case (light conveyors, trough conveyors, bucket elevators), we offer various options:

### FEBOR 21 CC - FEBOR 31 CC - FEBOR 32 CC - FEBOR 41 CC - FEBOR 61CC - FEBOR 91 CC

The PVC structure itself permits more specific and efficient formulations than rubber, perfectly matching the special requirements of the industry:



\* Esbelt requires and monitors that all of its materials suppliers comply, and consults the data base to look for hazard information.

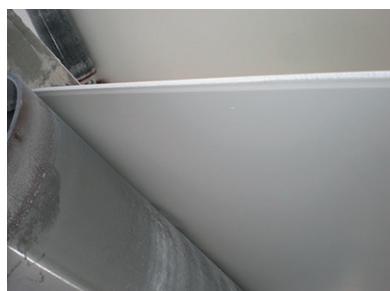
### General characteristics of esbelt FEBOR belts for the sugar industry:

| Type       | Top cover |              | Bottom cover |              | Special characteristics  | Temperature °C | Fabric   |          | Total thickness mm | total weight Kg/m <sup>2</sup> | at 20°C |      | Working load at 1% elongation N/mm |
|------------|-----------|--------------|--------------|--------------|--|----------------|----------|----------|--------------------|--------------------------------|---------|------|------------------------------------|
|            | Color     | Thickness mm | Color        | Thickness mm |  |                | Nº plies | Weft     |                    |                                | Ø mm    | Ø mm |                                    |
| FEBOR 21CC | White     | 2,00         | White        | 1,00         | FDA EU <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | -15 +80        | 2        | Flexible | 5,00               | 6,10                           | 140     | 190  | 20                                 |
| FEBOR 31CC | White     | 2,00         | White        | 1,00         | FDA EU <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | -15 +80        | 3        | Flexible | 6,10               | 7,60                           | 200     | 250  | 30                                 |
| FEBOR 32CC | White     | 2,75         | White        | 1,50         | FDA EU <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | -15 +80        | 3        | Flexible | 7,40               | 9,40                           | 200     | 350  | 30                                 |
| FEBOR 41CC | White     | 2,00         | White        | 1,00         | FDA EU <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | -15 +80        | 4        | Flexible | 7,40               | 9,20                           | 300     | 350  | 35                                 |
| FEBOR 61CC | White     | 2,30         | White        | 1,00         | FDA EU <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | -15 +80        | 3        | Flexible | 7,70               | 9,40                           | 350     | 400  | 55                                 |
| FEBOR 91CC | White     | 3,00         | White        | 1,00         | FDA EU <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | -15 +80        | 3        | Flexible | 9,60               | 11,90                          | 400     | 500  | 75                                 |

## FOOD APPROVED PROCESS:

**esbelt** sugar conveyor belts comply with all food regulations helping to ensure safer food products.

- **CERTIFIED FOOD GRADE:** FDA norm (Title 21 CFR section 175.300) and **EUROPEAN REGULATION (EU 10/2011)**.
- **REACH:** European standard whose aim is to ensure that the substances that are manufactured or marketed do not adversely affect human health or the environment.
- **WHITE COLOUR** below **ICUMSA 45**.
- Belt covers **ANTIMONY (Sb)** and **PHTHALATES FREE**.
- **ODORLESS**.
- **SEALED EDGES** (optional) to ensure 100% protection.



*— Detail of a sealed edge.*

## SAFE INDUSTRIAL ENVIRONMENT:

### ATEX: EXPLOSION RISK

**ATEX** European directives establish the necessary measures to ensure the safety and health of workers against the risk in centres with potentially explosive atmospheres.

**esbelt** belts for the sugar industry are **FLAME RETARDANT (ISO 340)** and **ANTISTATIC (ISO 284)**, preventing sparks which could act as a source of ignition for an explosion, and are certified in accordance with:

**ATEX DIRECTIVE 2014/34/EU Category 2** in accordance with **EN 13463-1:2009 - EN 13463-5:2011**.



## HIGH PRODUCTIVITY:

### ■ ABRASION RESISTANT (ISO 5740-1)

- Enables a belt life up to 35% higher to other alternatives in the market.



### ■ SMOOTH AND HOMOGENEOUS SURFACES. Help scrapers to be more effective with less pressure on the belt. Reduce particles that can be mixed with sugar.

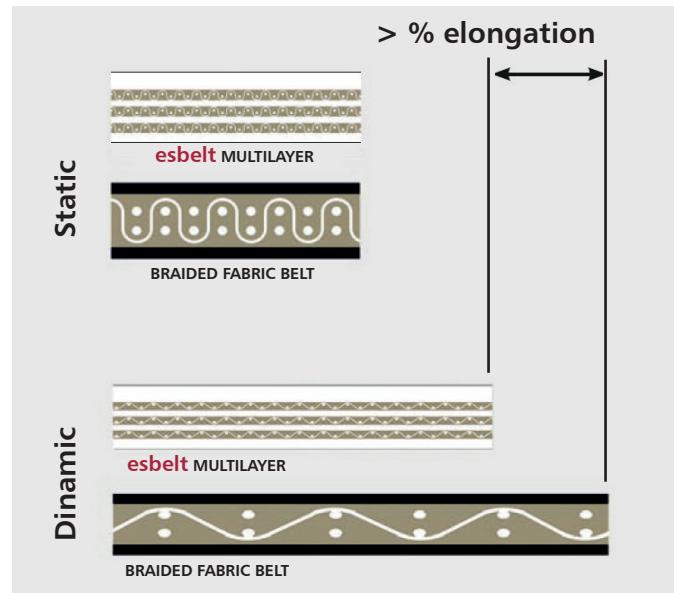
### ■ VULCANISED SPLICE that extends belt life and reduces damage by scrapers.

### ■ HUMIDITY RESISTANT (hydrolysis)

### ■ LIGHTWEIGHT: lighter belts mean reduction in motor energy consumption and less wear in the mechanical components of the conveyor.

### ■ HIGH WORKING AND BREAKING LOADS that enable absorption of temporary overloads with less belt elongation, reduction in maintenance stops.

### ■ ELONGATION: Multi-ply fabric construction distributes the load uniformly, reducing elongation.



LESS STOPS



INCREASED PRODUCTIVITY



July 2023

## SOME EXAMPLES:

|            | Belt type         | Application  | Conveyor dimensions |            | Belt type         | Application  | Conveyor dimensions |
|------------|-------------------|--|---------------------|------------|-------------------|--|---------------------|
| SUGAR BEET | <b>FEBOR 31CC</b> | Storage silo load.   | 650 mm x 150 m      | SUGAR CANE | <b>FEBOR 91CC</b> | Centrifugal discharge of humid sugar, 230 t/h, with high temperature (90°C). | 2000 mm x 65 m      |
|            | <b>FEBOR 32CC</b> | Centrifugal discharge of humid sugar with high temperature (80°C). | 2000 mm x 65 m      |            | <b>FEBOR 91CC</b> | Bucket elevators   | 1100 mm x 33 m      |
|            | <b>FEBOR 41CC</b> | Transfer to silo.  | 800 mm x 29 m       |            | <b>FEBOR 91CC</b> | Bucket elevators   | 450 mm x 47 m       |
|            | <b>FEBOR 41CC</b> | Bucket elevators   | 650 mm x 33 m       |            | <b>FEBOR 41CC</b> | Storage silo discharge. Dry sugar 350 t/h                                    | 800 mm x 400 m      |