EPP conveyor belts – extra strong for the most grueling demands
Highly durable EPP textile conveyor belts for the most extreme demands

Due to their minimal elongation and the extremely high durability of the cover stock against stone, logs, and rocks, CON-MONTEX® and CON-BITEX® conveyor belts are ideal for use in the cement industry, in timber processing, the recycling industry and in plant construction.

Structure of EPP textile conveyor belts

EPP conveyor belts have been developed by our engineers for the toughest conditions, and their special design helps them withstand extreme impact and pulling forces. EPP conveyor belts can be produced as CON-MONTEX® with a single-ply carcass and as CON-BITEX® with a double-ply carcass. Both types of EPP conveyor belt consist of warp, weft and joining threads.

The straight polyester (E) warp threads lie in the direction of belt travel, as do the polyamide (P) weft threads. Both are joined together by an additional binder yarn made of polyester (P). This produces a carcass featuring stretched threads, thus creating low stretch characteristics.
The special straight-warp fabric makes EPP conveyor belts from ContiTech especially robust. Modern production technologies guarantee the best true-tracking properties and a long service life.

EPP and EP conveyor belts – the difference

The table below shows the key differences between EPP and EP conveyor belts:

<table>
<thead>
<tr>
<th>EPP</th>
<th>Weight (g/m²)</th>
<th>EP</th>
<th>Weight (g/m²)</th>
<th>Difference (g/m²)</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>800/1</td>
<td>2,160</td>
<td>800/4</td>
<td>2,600</td>
<td>440</td>
<td>-17</td>
</tr>
<tr>
<td>1000/1</td>
<td>2,770</td>
<td>1000/5</td>
<td>3,250</td>
<td>480</td>
<td>-15</td>
</tr>
<tr>
<td>1250/1</td>
<td>3,270</td>
<td>1200/6</td>
<td>3,900</td>
<td>630</td>
<td>-16</td>
</tr>
</tbody>
</table>

An example:
Belt 1000 mm wide, 6+3 mm covers, grade Y

<table>
<thead>
<tr>
<th>EPP 400/1</th>
<th>EP 400/3</th>
<th>Difference (mm)</th>
<th>Difference %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt thickness (mm)</td>
<td>11.50</td>
<td>12.10</td>
<td>0.60</td>
</tr>
<tr>
<td>Carcass thickness (mm)</td>
<td>1.9</td>
<td>2.65</td>
<td>0.75</td>
</tr>
<tr>
<td>Belt weight (g)</td>
<td>13,400</td>
<td>14,000</td>
<td>600</td>
</tr>
</tbody>
</table>

CON-MONTEX® and CON-BITEX® EPP conveyor belts

CON-MONTEX® conveyor belts are available in types EPP 400/1 to EPP 1700/1, and CON-BITEX® conveyor belts in types EPP 800/2 to EPP 3200/2. EPP conveyor belts feature an extremely high tensile strength. This is a result of the special carcass structure in combination with the use of high-quality intermediate rubber and cover materials.

CON-MONTEX® and CON-BITEX® belts can be produced in all popular materials to suit your needs, with highly wear-resistant, oil- and grease-resistant and temperature-resistant properties. Our application engineers will be happy to provide further information.

Fabric structure:
1. Polyester warp threads
2. Polyamide weft threads
3. Polyamide binder threads
Belt splicing

The finger splice method is required for EPP conveyor belts as this supports the tensile strength of the conveyor belts. In this process, after preparation of both sides of the belt, fingers are cut into the carcass at the two ends of the belt. After the fingers are laid together, the join is filled with strips of rubber. An additional woven fabric, which transfers the tensile strength, is subsequently brought into the join area. All parts are finally bonded together by vulcanization.

Below you will find our length specifications for the production of a finger splice*:

<table>
<thead>
<tr>
<th>Belt type</th>
<th>Finger length (mm)</th>
<th>Transition length</th>
<th>Extension length (mm)</th>
<th>Joint length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPP 400/1</td>
<td>320</td>
<td>2 x 25</td>
<td>40</td>
<td>410</td>
</tr>
<tr>
<td>EPP 630/1</td>
<td>400</td>
<td>2 x 30</td>
<td>50</td>
<td>510</td>
</tr>
<tr>
<td>EPP 1000/2</td>
<td>710</td>
<td>2 x 50</td>
<td>60</td>
<td>870</td>
</tr>
<tr>
<td>EPP 1250/2</td>
<td>860</td>
<td>2 x 50</td>
<td>60</td>
<td>1020</td>
</tr>
</tbody>
</table>

* The given lengths apply to the respective belt types.
CON-MONTEX®
and CON-BITEX®

Decisive advantages of EPP belts
The use of CON-MONTEX® and CON-BITEX® belts provide the following advantages:

- 15 - 20 % lighter fabric – with the same tensile strength
- Minimal elongation due to straight threads in the running and transverse direction (e.g. the Micare coal mine in Mexico: 1250 m belt after 3 million tons of transported material only 0.90 m elongation)
- Superb running and troughing properties
- High impact resistance: resistance and absorption of impact energy with EPP 630/1 is comparable to a 4-ply belt with a strength rating of EP 1600/4
- Less rubber consumption due to fewer textile plies as compared with EP conveyor belts

CON-MONTEX®

CON-BITEX®

ContiTech Transportbandsysteme GmbH
We are a leading manufacturer of conveyor belts, integrated in the ContiTech AG organization and thus part of Continental AG and the Continental Corporation. We offer complete solutions – from textile and steel cable conveyor belts to special products and service materials. With our locations close to our customers, we are able to provide comprehensive support for your conveyor belts and systems – worldwide. With high-end conveyor belt technology from ContiTech, materials handling systems run reliably and cost effectively and are environmentally friendly. As a leading development partner with innovative conveyor belt technologies, we support the mining, machinery and equipment construction industries, as well as a host of other industries.

Conveyor Belt Group

Market segment
Industry
Mining Europe
Mining World

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The ContiTech division of the Continental Corporation is a development partner and original equipment supplier to numerous industries for high-quality functional parts, components and systems. With its know-how in rubber and plastics technology, ContiTech contributes significantly to industrial progress and mobility that is safe, comfortable and eco-friendly.

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