“We get things rolling.”
Norbert, 42, warehousing specialist

IN WORLDWIDE USE

As a strong partner to the logistics industry, Optibelt offers suitable drive solutions for the most demanding requirements. Reliability, precision and efficiency are in great demand in this industry. Here, the maintenance-free high performance belts and the high performance special ribbed belts from Optibelt have proven their worth in numerous applications and are therefore used worldwide.
An internationally established manufacturer of complete intralogistics systems had been plagued by ongoing problems with the belts used in its roller track conveyors. The high start-stop frequency of the plant caused the existing belts to fail after an average of 300,000 cycles, due to wear and loss of tension. Success was achieved here by equipping the system with high performance elastic optibelt CONVEYOR POWER ribbed belts. The roller track conveyor in question has now been in operation for more than 600,000 cycles without showing any irregularities.

The young Hungarian company LOGTRON manufactures ultra-modern conveying systems for challenging processes. LOGTRON’s search for a reliable partner to supply original equipment for its drive solutions ended, after comprehensive checks and approvals tests, with a clear decision in favour of Optibelt. The company was impressed not only by the high performance qualities and wide range of application options of the optibelt CONVEYOR POWER range, but also by the comprehensive and customised advice provided by the Optibelt team.
5. CURVED CONVEYORS
In order to divert the material to be conveyed, various curved systems with different drive elements are used, with flexible ribbed belts employed in most cases.

6. DRIVES
The roller conveyors are driven by geared motors, which transfer their power through timing belts to the individual sections.

7. PASSAGES
Here, hinged systems are used, which operate using timing belts, round belts or ribbed belts.

4. DISCHARGE ELEMENTS
Driven by timing belts or ribbed belts, the material is transferred to the neighbouring conveyor.

3. TRANSFER ELEMENTS
With the aid of transfer elements, packages are transferred from the flow direction to the next roller conveyor and also integrated in the existing flow.

2. BELT CONVEYORS (INCLUDING IN CURVES)
Special belt conveyors are used, for instance, if package sizes vary. Here, special solutions are needed.
Achieving a smooth material flow from goods receipt to goods issue is a complex task which can only be fulfilled with precisely planned and smoothly functioning conveying technology. Every fault in the distribution, every delay in sorting, every downtime causes high costs which can be avoided by the use of high-quality technical components. This is where Optibelt’s innovative drive solutions come into play. With their help, demanding challenges like this can be managed sustainably.

8. FEED ELEMENTS
When connecting two roller conveyors, feed elements are integrated. Here, round belts or ribbed belts are used for driving the individual rollers.

9. CURVED CONVEYORS WITH VERTICAL SHAFT
To transfer the conveyed material, e.g. curved conveyors with vertical shaft are used and the rollers are connected to this with a round belt.

1. ROLLER CONVEYORS
Timing belts, round belts, V-belts, flat belts and ribbed belts are used here to drive the rollers.

10. LIFTING DEVICES
With the aid of lifting devices which operate with the aid of timing belts or flat belts, height differences are overcome.
optibelt CONVEYOR POWER RB

STANDARD RIBBED BELTS

DIMENSIONS

Available in profiles
PH; PJ; PK

Lengths on request

ADVANTAGES AND CHARACTERISTICS
• combines the high flexibility of flat belts with the high performance of V-belts
• small pulley diameters
• high belt speeds possible
• good frictional power transmission and excellent performance
• insensitive to torque impulses and short-term overloading
• temperature resistance from $-40^\circ C$ to $+80^\circ C$ *

RIBBED BELT PULLEYS
standard range,
special pulleys on request

optibelt CONVEYOR POWER ERB

ELASTIC RIBBED BELTS

DIMENSIONS

256; 263; 286;
316; 336; 376; 386

These and other lengths
in the EPH, EPJ profiles

Other sizes on request

ADVANTAGES AND CHARACTERISTICS
• installation with fixed shaft distance
• good damping performance and shock load resistance due to high elasticity of belt
• maintenance-free, and no retensioning required
• easy assembly in service areas
• allows individual design of tension and elongation characteristics
• temperature resistance from $-40^\circ C$ to $+80^\circ C$ *

RIBBED BELT PULLEYS
standard range,
special pulleys on request

optibelt CONVEYOR POWER VB S=C Plus

SPECIAL V-BELTS

DIMENSIONS

B / 17 610–7140 mm
23–280 inches

Other profiles + dimensions on request

ADVANTAGES AND CHARACTERISTICS
• the components used are adjusted to the Optibelt PN rated outputs
• values are considerably higher than those of DIN 2218
• for existing drives, particularly for critical ones, even higher operating reliability is achieved
• overloads are avoided

V-GROOVED PULLEYS
all standard pulleys,
special pulleys on request

* Constructive measures are to be taken on the application side.
**optibelt CONVEYOR POWER RR/RR Plus**

**PLASTIC ROUND BELTS**

**DIMENSIONS**

<table>
<thead>
<tr>
<th>3</th>
<th>100 m</th>
<th>6*</th>
<th>100 m</th>
<th>7</th>
<th>100 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>200 m</td>
<td>8*</td>
<td>100 m</td>
<td>3</td>
<td>200 m</td>
</tr>
</tbody>
</table>

*Also with tension cord

Other profiles + dimensions on request

**ADVANTAGES AND CHARACTERISTICS**

- local welding, also in the version optibelt RR Plus
- no dismantling of the system
- quick troubleshooting
- short downtimes
- easy storage (on rollers)
- immediate availability
- versatile design, as any length can be produced

**optibelt OMEGA HP**

**HIGH PERFORMANCE TIMING BELTS**

**DIMENSIONS**

| 2M HP | 74–1224 mm |
| 3M HP | 111–1569 mm |
| 5M HP | 180–2525 mm |
| 8M HP | 288–3600 mm |
| 14M HP | 966–4578 mm |

Other profiles + dimensions on request

**ADVANTAGES AND CHARACTERISTICS**

- glass cord
- high performance timing belt for extremely large loads at high rotational speeds
- shear-resistant fabric with minimised wear and friction
- up to 2 times the power transmission capability of the optibelt OMEGA standard version

**optibelt ALPHA TORQUE**

**TIMING BELTS AND SPECIAL BELTS**

**DIMENSIONS**

| T2.5; T5; T10 / AT5; AT10 / DT5; DT10 | 120–2250 mm |
| MXL; XL; L | 2.4–67 inches |

Special belts on request

**ADVANTAGES AND CHARACTERISTICS**

- timing and double timing belts
- inch and metric profiles
- economic drive
- high wear resistance of teeth
- resistant to aggressive chemicals
- use with pulleys according to ISO 5296

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Optibelt offers custom high performance products for all applications. Customised products are designed to precisely meet customer’s drive application requirements. Optibelt engineers develop tailored drive solutions for superior efficiency and safety.

Optibelt application engineers are always available to provide advice to customer’s operations around the world. They can assist in optimising the drives for entire plant operations.

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