Tuberoll Belts

SLEEVE BELTS (WITHOUT JOINT) FOR PAPER TUBE AND CORE MANUFACTURING

BeltTS has developed TUBEROLL belts through extensive tests on Cardboard Tube Machinery.

Due to the special structure of the carcass and to the top covers compound, TUBEROLL belts allow to obtain the required quality in cardboard tube manufacture.

In particular, TUBEROLL belts enable a correct transverse stability without buckling and overlapping.

The **SYMMETRIC** and **BALANCED** configuration of TUBEROLL belts basically includes:

A. Top and Bottom rubber covers;
B. Two stabilizing layers, made of woven synthetic fibre (not present in the 5 mm thickness version);
C. Spiral synthetic cord (400daN/cm – 800 daN/cm);

<table>
<thead>
<tr>
<th>TYPE</th>
<th>COLOR</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Black</td>
<td>High wear resistance with good grip</td>
</tr>
<tr>
<td>M</td>
<td>Black</td>
<td>Better Grip and Fatigue resistance</td>
</tr>
<tr>
<td>MS</td>
<td>Black</td>
<td>Super Abrasion Resistance</td>
</tr>
<tr>
<td>NB</td>
<td>White</td>
<td>The same properties as NA but non-staining version</td>
</tr>
</tbody>
</table>

TECHNICAL SPECIFICATIONS

| INNER LENGTH | 1000 mm ÷ no limit |
| WIDTH | 30 mm ÷ 1000 mm |
| STANDARD THICKNESS | 5 - 8,5 - 10,5 mm |
| HARDNESS | 70° ± 5.0° ShA |
| EDGES | Cut or Sealed |

1: Other compounds and thickness available upon request
2: For 5 mm thickness version, only cut edges

Thanks to the design, TUBEROLL belts perform some advantages based on the OEMs’ requirements:

- The seamless design of the belts prevents weak points along the whole length and allows the complete exploitation of the resistance class of the tensile core;
- The spiral cord of the internal structure guarantees a very low elongation at nominal operating rates and, at the same time, allows a higher flexibility that permits wrapping around small pulleys;
- The quality of the used compounds assures a higher resistance to abrasion of outer covers and higher coefficient of friction suiting any type of cardboard;
- The rubber coated edges prevent fraying and extend the lasting time of the belt;
- Thanks to the symmetric & balanced configuration, it is possible to use both the surfaces of the belts (by flipping the belts) and both the edges (by turning the belts) increasing (from 2 to 4 times) the lasting time of the belts.
**DIMENSIONING OF THE BELT**

Every TUBEROLL belt is the result of several analyses related both to the Tube Winder Machines and to the produced Paper Tubes. For these reasons, in order to offer the best product, we require some additional information:

**Important technical details on the machinery:**
- the pulleys’ diameter
- the operating speed
- the required tension of the belt
- the take-up type (screw type)
- the take-up force
- the spindle diameter
- the transition distance
- power and amps of the electric motor
- the operating temperature
- the needed coefficient of friction
- the pulley diameter and the head pressure

**Important technical details on the product:**
- type of paper, number of plies and width
- the smallest tube diameter, inner
- the smallest tube diameter, outer
- the largest tube diameter, inner
- the largest tube diameter, outer
- the minimum wall thickness
- the maximum wall thickness

**Important technical details on Tuberoll belt:**
- the width
- the inner length
- the overall thickness
- the tensile strength
- non-marking properties of the belt, if required

**In case Tuberoll belts replace a previous brand:**
- present belt type and producer
- actual life in hours and quantity of produced tubes
- type of failure, if any

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**Calculating Length of a Winding Belt**

1. Move the pulleys to the middle of the adjustable range in the horizontal plane;
2. Measure the distance between the centerline of the pulleys (I);
3. Calculate or measure the circumference of one pulley (Cp);
4. Calculate or measure the circumference of the desired tube (Ct);

\[
\text{BELT LENGTH} = (2 \times I) + Cp + Ct
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