Conveyor and process belts for airports, materials handling and post office automation

Chiorino, a leading company in the materials handling and power transmission field, produces a wide range of:

- Conveyor and process belts
- Flat power transmission belts
- Endless rubber belts

The Chiorino products are capable of satisfying the increasing demands of reliability and higher sorting speeds in airports, warehouses, distribution and post office centres, ensuring quality and high levels of performance.

Through close cooperation with the most important OEM’s in the world, Chiorino R&D laboratories have developed innovative and customized solutions to meet customer demands.

Chiorino operates throughout the world with 15 associated companies and more than 60 partners, if one includes exclusive distributors, and highly qualified assistance centres capable of guaranteeing a speedy assistance and installation service, 24 hours a day. For more information on the Distribution Network see www.chiorino.com.

Quality and environment certified

CHIORINO offers full technical assistance and service to its customers, from the project design to the fitting stage. Sophisticated calculation programs developed by CHIORINO allow correct belt type selection and give the correct technical design data for any conveyor or transmission belt allowing CHIORINO to work in full technical partnership with its customers.

### Features and benefits

- Low energy absorption
- Flame retardant according to EN20340-ISO 340
- Quiet running
- Absolute working safety
- Long life
- Very high resistance to abrasion and impacts
- Wide range of surface patterns to satisfy any conveying requirement
- Technical assistance from the project design
- Worldwide 24-hours prompt response for installations
Airports baggage handling

- Check-in
- X-ray baggage control systems
- Explosives detectors
- Diverters Flipper and Pusher
- Aircraft loading and unloading

CHIORINO supplies to the most important international airports conveyor and process belts able to satisfy the growing demand for reliability and sorting speed for the handling of all types of baggage, from check-in through to loading into the luggage hold.

The wide range of CHIORINO belts, developed together with the leading airport handling system manufacturers, is able to satisfy any need, ensuring quality and high performance levels whilst at the same time fully complying with international safety standards.

Thanks to its distribution network CHIORINO is able to give an efficient rapid response service 24 hours a day in the airports throughout the world.

INTERNATIONAL AIRPORTS EQUIPPED WITH CHIORINO CONVEYOR BELTS

Europe
- Amsterdam, Netherlands
- Athens, Greece
- Barcelona, Spain
- Bergamo, Italy
- Birmingham, U.K.
- Bologna, Italy
- Bruxelles, Belgium
- Dresda, Germany
- Dusseldorf, Germany
- Frankfurt, Germany
- Geneva, Switzerland
- Milan Linate, Italy
- Milan Malpensa, Italy
- Nice, France
- Oporto, Portugal
- Palm of Majorca, Spain
- Paris, France
- Rome Ciampino, Italy
- Rome Fiumicino, Italy
- Stockholm, Sweden
- Tampere, Finland
- Turin Caselle, Italy

- Glasgow, Scotland
- Leeds Bradford, U.K.
- Lyon, France
- London Gatwick, U.K.
- London Heathrow, U.K.
- London Stanstead, U.K.
- Lugano, Switzerland
- Luxembourg
- Madrid, Spain
- Manchester, U.K.
- Marseilles, France
### Features and benefits

- Flame retardant according to EN20340-ISO 340
- Suitable for X-ray control systems
- Suitable for explosives detectors
- Low energy absorption
- Quiet running
- Antistatic
- Wide range of surface patterns to satisfy any conveying requirement
- Very high resistance to abrasion and impacts
- Long life
- Worldwide 24-hours prompt response for installations

---

### America

- Dallas Texas, U.S.A.
- Fargo North Dakota, U.S.A.
- Gaia, Barbados
- Idaho Boise, U.S.A.
- Lima, Peru
- Los Angeles California, U.S.A.
- Nassau, Bahamas
- New York, U.S.A.
- Portland Oregon, U.S.A.
- San Francisco California, U.S.A.
- Toronto, Canada

### Asia / Africa / Australia

- Adelaide, Australia
- Ashgabat, Turkmenistan
- Brisbane, Australia
- Cairns, Australia
- Canberra, Australia
- Cape Town, South Africa
- Darwin, Australia
- Dubai, United Arab Emirates
- Johannesburg, South Africa
- Marowa Salak, Cameroon
- Melbourne, Australia
- Newcastle, Australia
- Perth, Australia
- Shenzhen, China
- Singapore Changi
- Sydney, Australia
Together with the leading manufacturers of warehouse handling installations, CHIORINO has developed a range of conveyor and transmission belts, which are able to satisfy the growing demand for reliability of high speed sorting in warehouse and distribution centres.

The wide range of CHIORINO conveyor belt coatings (polyurethane, PVC, elastomer etc.) allows to select the best belt suitable for specific handling requirements.

CHIORINO offers to the OEM full technical assistance from the project design.

The CHIORINO R&D Laboratories develop innovative solutions to satisfy the higher market demands concerning reliability, quiet running and energy saving of the conveyor and process belts.

Thanks to its distribution network CHIORINO is able to give an efficient rapid response service 24 hours a day throughout the world.
Features and benefits

- Low energy absorption
- High capacity of conveying
- Very high resistance to abrasion and impacts
- Wide range of surface patterns
- Safety and reliability
- Quiet running
- Long life

Live roller drives

CHIORINO manufacture a complete range of products in thermoplastic materials suitable for live roller drives. CHIORINO thermoplastic belts can be fitted on site using the FAST JOINT system and equipment, which require only few minutes and no adhesives.

Elastic EL belts
Thermoplastic power transmission belts in polyester
Polyurethane round and V-belts (see general catalogue)
Post Office Automation

- OCR (optical code reader)
- VCR (video code reader)
- CFC (culler facer canceller)

CHIORINO offers the complete range of conveyor, transmission and mandrel made belts used in the mail sorting process machines adopting optical reading technology.

Features and benefits

- High capacity of conveying and constant coefficient of friction
- Anti-glazing
- Excellent resistance to abrasion and wearing
- Long life
- Dimensional stability
- Perforated belts can be supplied to Customer design
CHIORINO manufactures curve belts suitable for installation on any type of powered curve conveyor existing in the market. Through a sophisticated totally computer-based (CAD controlled) cutting table, CHIORINO belts can be manufactured without any limitation in the external radius and angle, from a few degrees up to a complete circle (360°). Thanks to this innovative cutting system, CHIORINO curve belts can be supplied on demand for any dimensional requirement and in accordance with customized drawings, ensuring absolute precision and correct working on the conveyor. The wide range of CHIORINO belts suitable for powered curve conveyors (see column 10 page 11) satisfies any application request in airport handling and sorting systems.

On request the curve belts can be fabricated with special finishing such as:
- perforations
- application of buttons
- application of eyelets.

### Features and benefits

- **Absolute precision**
- **Excellent flatness and superb flexibility**
- **Suitable for small pulley diameters**
- **Wide range of surface patterns**
- **Flame retardant version also available, according to EN20340-ISO 340**
- **Long life**
### Polyurethane

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Material</th>
<th>Type</th>
<th>Traction Core</th>
<th>Top Cover</th>
<th>Bottom Cover</th>
<th>Low Temp Elastic Limit (A)</th>
<th>High Temp Elastic Limit (B)</th>
<th>Total Elongation</th>
<th>Minimum Diameter</th>
<th>Pull for 1% elongation</th>
<th>Maximum Diameter</th>
<th>Minimum Tensile Strength</th>
<th>Comparative Coefficient of Friction</th>
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<td>24 -20 +100 MF</td>
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</tbody>
</table>

### PUR

- **NEW!**

### NBR

- **NEW!**

### TPU

- **NEW!**

### PET

- **NEW!**

### PVC

- **NEW!**

### Traction core

- **Top cover**

- **Bottom cover**

- **Low Temp Elastic Limit (A)**

- **High Temp Elastic Limit (B)**

- **Total Elongation**

- **Minimum Diameter**

- **Pull for 1% elongation**

- **Maximum Diameter**

- **Minimum Tensile Strength**

- **Comparative Coefficient of Friction**

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2. Minimum outer diameter is dependent on running velocity recommended by CHORINO.
3. For TRANSMISSION BELTS, the value indicates the tensile strength.
4. Top cover coefficient of friction: low LF, medium MF, high HF.
5. Elastic belts ‘EL’: pull for 8% elongation.
6. R execution (hardness) available.
7. Minimum diameter for MF belts is according to total thickness.

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<table>
<thead>
<tr>
<th>Traction core</th>
<th>Top cover</th>
<th>Bottom cover</th>
<th>Low Temp Elastic Limit (A)</th>
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<th>Total Elongation</th>
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</tbody>
</table>

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**Note:**

- LF: Low Friction
- MF: Medium Friction
- HF: High Friction
- EL: Elastic
- MF: Medium Friction
- LF: Low Friction
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SURFACE PATTERNS

COATING AND INTERLAYER MATERIALS

TEXTILE CARCASS

CONDUCTIVITY

CONVEYOR AND PROCESS BELTS EXPLANATION OF TYPE DESIGNATION

- Number of plies
- Textile carcass
- Pad for 5% elongation [N/mm]
- Bottom cover
- Thickness (mm/10)
- Possible interply
- Top cover
- Thickness (mm/10)
- Material
- Thickness (mm/10)
- Other characteristics
- Top cover
- Other characteristics
- Belt without textile carcass

MATERIALS

SILON 60 NA
SILON 60 HC
SILON 40 HC

OTHER CHARACTERISTICS

NFH: Not woven
40: Thickness (mm/10)
NC: Other characteristics

TEXTILE CARCASS

N: Rigid polyester
M: Combined polyester
T: Flexible polyester
E: Belt without textile carcass

Endless belts Explanation of type designation

MF: Endless belt (mandrel made)
T: Polyester fabric
EL: Very high resistance HS

Synthetic rubber, green colour 65 Sh.A inner cover
A: Polyester fabric
B: NBR synthetic rubber
H: Very high resistance HS

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