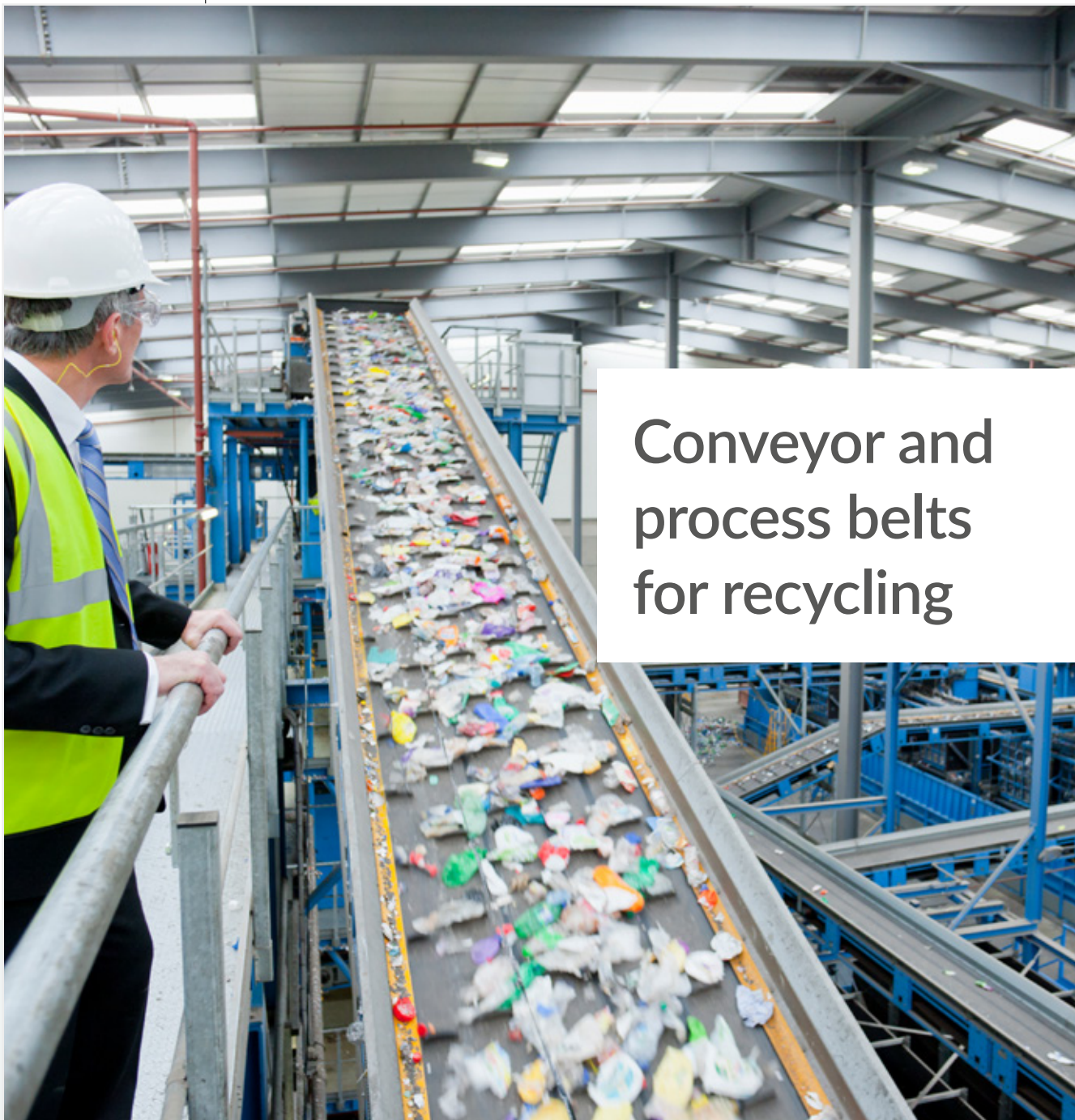


Your partner  
for process  
efficiency



**Conveyor and  
process belts  
for recycling**



# Lightweight conveyor belts for recycling increased efficiency

The increased waste of plastic, cardboard, metal, batteries etc. requires a higher recycling efficiency and sorting precision, in order to support the circular economy, reduce the CO<sub>2</sub> emissions and safeguard the environment.

Chiorino has developed a wide range of **lightweight thermoplastic conveyor belts** able to support the demand for faster and more efficient recycling processes.

Chiorino lightweight thermoplastic belts respond to the very latest requirements of the recycling industry, offering high performance solutions compared to the less efficient

rubber traditional conveyor belts that require long and complex splicing procedures.

Chiorino thermoplastic belts **reduce maintenance operations and costs**, thanks to the quick and easy onsite installation equipment, **optimizing the total cost of ownership**.

They resist chemical attacks and maintain flexibility at low temperatures, **extending the belt service life**. They run on smaller pulleys allowing motor downsizing, lighter and faster machinery design and **reducing energy consumption**.



Energy saving



Reliability



Optimized TCO



Sustainability



# Thermoplastic belting solutions



## POLYURETHANE

High performance lightweight belting solutions for increasing efficiency and reducing maintenance operations and costs, extending belt service life.



Excellent resistance to cuts and wear caused by sharp, abrasive and sticky waste



Highest resistance to chemicals, liquids, oils



Ideal for high speed



Reduced energy consumption



Prevent dust build-up & Easy to clean



Quick and easy to install on site

## PVC/NITRILE ELASTOMER

The unique PVC/nitrile blend "V12" offers optimal performances and fast replacement on site.



Great resistance to chemicals, liquids, oils



Excellent resistance to cuts and wear



Lateral stability and excellent tracking



Reduced downtime



# Complete belting range for all recycling applications



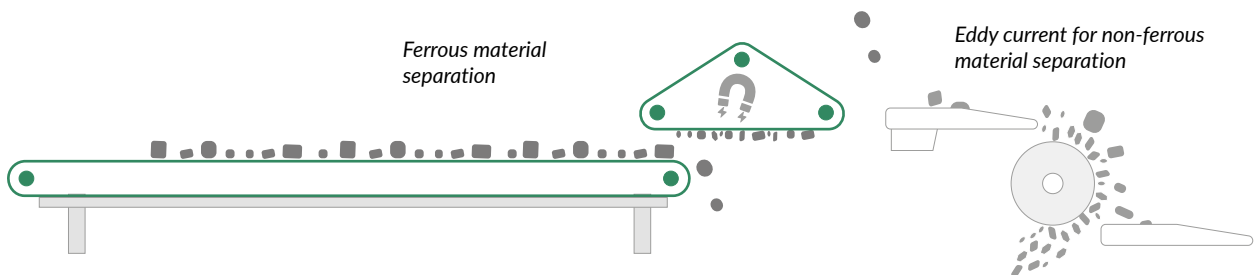
Example flow of conveyor belt applications in a plastic recycling center.



1

## Collection, delivery, bag opening and placing on the sorting lines

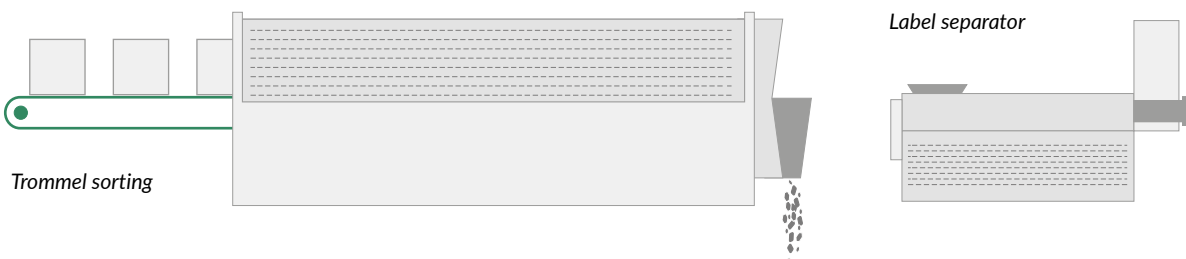
- Heavy-duty polyurethane or PVC/nitrile belts with high mechanical performances and resistance to high loads.



3

## Magnetic metal sorter / Overband / Eddy current separator

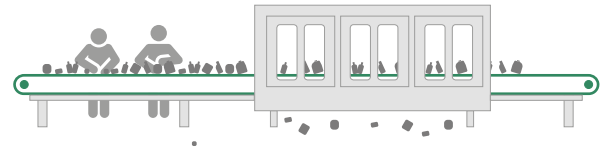
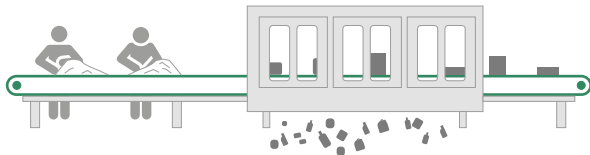
- Magnetic metal sorter for ferrous material: polyurethane belts with high resistance to oils and solvents contained in metal waste
- Overband: polyurethane belts with optimal thickness allow for improved metal sorting
- Eddy current separator for non ferrous materials: polyurethane belts with correct thickness



5

## Trommel sorting / Label separator

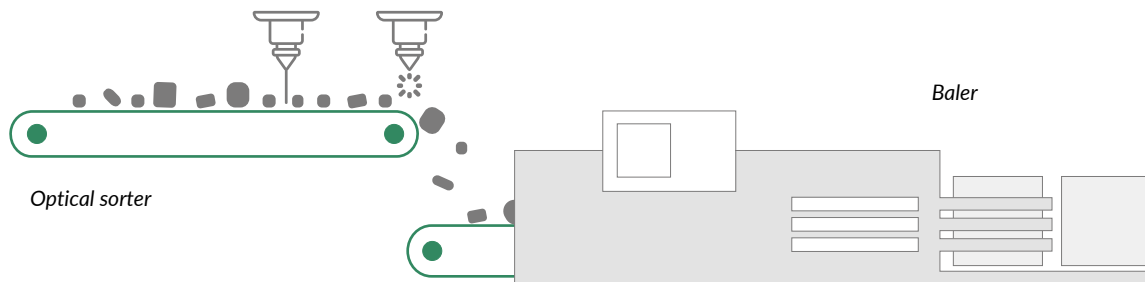
- In this phase water, hot steam and detergents are used to remove labels and small contaminants.
- Belts with excellent resistance to high temperature and chemicals
  - Lightweight belts are ideal to withstand high speed



## Initial and secondary manual sorting / Star screening process

- Heavy-duty polyurethane or PVC/nitrile belts with matt surface prevents light reflection and facilitates manual sorting.

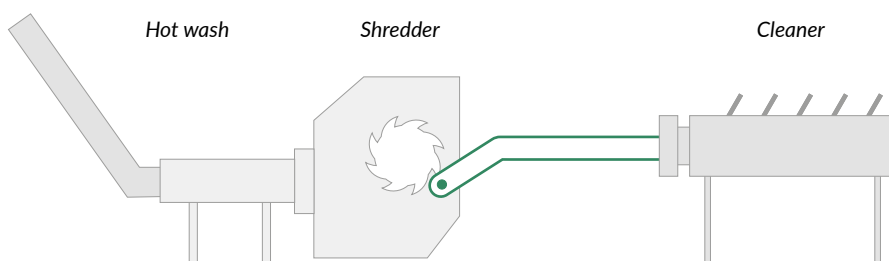
2



## Optical sorters (Infrared, Laser, X-Ray) / Baler

- The belts matt surface guarantees minimal light reflection, increasing sorting efficiency, precision and productivity. Uniform and even matt surface also in the joining area.
- The matt surface prevents dirt and dust accumulation and it's easy to clean
- Lightweight belts flexibility is ideal for small pulleys and high speed sorters, reducing energy consumption

4



## Hot wash / Shredder / Cleaning

A further washing and cleaning phase for removing all potential contaminants from the waste.

- Belts resistant to high temperature and chemicals
- Belts with the proper surfaces to avoid the waste slipping during the cleaning operations

6

# Technical data

Product name	Conveying surface	Colour	Coefficient of friction	Textile carcass	Total thickness	Min. diameter <sup>(1)</sup>	Elongation 1%	Max. admissible pull	Temperature resistance <sup>(2)</sup>		Max. width	Product code
					mm	mm	N/mm	N/mm	min °C	max °C	mm	

## POLYURETHANE

2M12 U0-U10 W A	smooth	white	low	PET	2.40	50	12	24	-20	100	2000	NA887
2M12 U0-U15	smooth	green	low	PET	3.00	60	12	24	-20	100	2000	NA1035
2DM12 U0-V-U5 N	matt	black	medium	PET	2.90	60	12	24	-10	60	3500	NA1825
2M12 U0-V-U15 N	matt	black	medium	PET	4.10	100	12	24	-10	60	3500	NA1622
2DM18 U0-U20 N A	matt	black	medium	PET	5.50	120	18	36	-20	100	3500	NA1812
2T30 U10-U20 N A FM/MATT	matt	black	medium	PET	5.00	120	30	60	-20	100	2000	NA1811
3M18 U0-V-U30 VL N	velvet	black	low	PET	6.00	120	18	36	-10	60	2000	NA1608

## PVC/NITRILE ELASTOMER

Z 20/2 FV/V12-40 MT black	matt	black	low	PET	4.00	80	20	40	-10	70	3000	NA2545
Z 25/3 FV/V12-50 MT black	matt	black	low	PET	5.00	110	20	50	-10	70	3000	NA2612

A wide range of polyurethane and PVC/Nitrile profiles and sidewalls is available. Please contact the Sales Department.

<sup>(1)</sup> Minimum diameter is dependent on the joint recommended by Chiorino.

<sup>(2)</sup> Use of the belt with limit values may reduce its life.

## Quick & Easy On-site installation equipment

For a **Fast, Easy & Environment-Friendly replacement** of the lightweight thermoplastic belts, Chiorino has designed and engineered equipment that can be used up to 4000 mm width, even in limited and narrow space for maintenance operations.



**Easy to use**



**Downtime reduction**



**No adhesives required**



**Optimized cost of ownership**



Sorting Lines	Manual sorting and star screening	Magnetic metal sorter	Overband	Eddy current separator	Optical sorters	Baler	Trommel sorting Label separator	Hot wash Shredder Cleaning	Product name
---------------	-----------------------------------	-----------------------	----------	------------------------	-----------------	-------	------------------------------------	----------------------------------	--------------

				•					2M12 U0-U10 W A
			•	•			•	•	2M12 U0-U15
•	•		•	•	•	•	•	•	2DM12 U0-V-U5 N
•	•			•	•	•	•	•	2M12 U0-V-U15 N
•	•		•	•	•				2DM18 U0-U20 N A
		•	•						2T30 U10-U20 N A FM/MATT
•	•		•	•	•				3M18 U0-V-U30 VL N

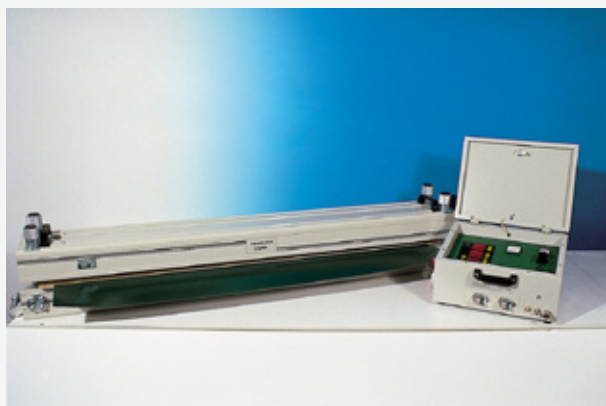
•	•			•	•	•			Z 20/2 FV/V12-40 MT black
•	•			•	•	•			Z 25/3 FV/V12-50 MT black



## PTR 4000

### Crawler press

The PTR 4000 (AT591) crawler press is designed to operate in narrow spaces and it is quick & easy to assemble. With a pre-heating, a welding and a cooling station, it is ideal for installing belts on-site up to 6 mm thick and up to 4000 mm wide.



## P1200-3400 L

### Traditional light presses

Wide range of handy presses for thermoplastic belts, with heated plates and cooling system. Ideal for quickly joining belts on site up to 20 mm thick and 3400 mm wide.

## HEADQUARTERS

### CHIORINO S.p.A.

Via S. Agata, 9  
I-13900 Biella, Italy

Tel. +39 015 8489 1  
Fax +39 015 8489 161

chiorino@chiorino.com  
www.chiorino.com



## CHIORINO GROUP COMPANIES

### America

CHIORINO AMERICA Inc.  
Suwanee, GA  
Tel. +1-302-292-1906  
info@chiorino.us

SAFARI BELTING SYSTEMS, Inc.  
Olathe, KS  
Tel. +1-888-662-6611  
info@safaribelting.com

### Australia

CHIORINO AUSTRALIA Pty. Ltd.  
Brisbane  
Tel. +61-7-32741900  
sales@chiorino.com.au

### Benelux

CHIORINO BENELUX B.V.  
Utrecht - The Netherlands  
Tel. +31-302-413-060  
chiorino@chiorino.nl

### Czech Republic

REKO s.r.o.  
Jaromer  
Tel. +420-491-840012  
info@reko-sro.cz

### France

CHIORINO SAS  
Lagny, Paris  
Tel. +33-1-64304075  
chiorino.paris@chiorino.fr

### Germany

CHIORINO GmbH  
Mainz  
Tel. +49-(0)6131-55449-0  
info@chiorino.de

### Hungary

CHIORINO Kft.  
Szigetszentmiklós, Budapest  
Tel. +36-24-525930  
mail@chiorino.hu

### India

FRANSTEK BELTS PRIVATE Ltd.  
Salcete Goa  
Tel. +91 93709 18733  
info@chiorino.in

### Italy

CHIORINO PARMA s.r.l.  
Parma  
Tel. +39-0521-292236  
chiorinoparma@chiorino.com

CHIORINO VENETO s.r.l.  
Colle Umberto (TV)  
Tel. +39-0438-430460  
chiorinoveneto@chiorino.com

### Poland

CHIORINO Sp. z o.o. Bydgoszcz  
Tel. +48-(0)52-3487708  
chiorino@chiorino.com.pl

### Portugal

CHIORINO PORTUGAL, Lda  
Alfena Valongo, Porto  
Tel. +351-229684442  
geral@chiorino.pt

### Romania

CHIORINO srl  
Sannicodara, Jud.Cluj Napoca  
Tel. +40-264-432977  
chiorino@chiorino.ro

### Slovakia

CHIORINO SLOVAKIA s.r.o.  
Nové Zámky  
Tel. +421-910-486654  
info@chiorino.sk

### South Africa

CHIORINO SOUTH AFRICA Pty. Ltd.  
Johannesburg  
Tel. +27-11-3971268  
sales@chiorino.co.za

### Spain

CHIORINO IBERICA S.A.  
Rubí, Barcelona  
Tel. +34-93-5860480  
chiorino@chiorino.es

### Switzerland

CHIORINO SCHWEIZ GmbH  
Wetzikon  
Tel. +41-(0)43-3116001  
info@chiorino.ch

### Türkiye

ZİLİĞEN BT KONVEYÖR BANT  
İstanbul  
Tel. +90-216-671 11 90  
info@ziligen.com

### Ukraine

CHIORINO UKRAINE LLC  
Poltava region,  
Shcherbani village  
Tel. +38-050806560  
office@chiorino.com.ua

### United Kingdom

CHIORINO U.K. Ltd.  
Glasshoughton  
Tel. +44-1977-691880  
sales@chiorino.co.uk

Chiorino operates all over the world through the Group companies and more than 100 distributors.

More info on [www.chiorino.com](http://www.chiorino.com)



Customer  
proximity



Engineering  
consultancy



Quick  
delivery



On-Site Fitting  
& Assistance

