

Ideas in motion



**Conveyor belts, belts for tangential drives,
roller coverings, technical rubber items
for the Textile Industry**



Conveyor belts, belts for tangential drives, roller coverings, technical rubber items for the Textile Industry



CHIORINO produces a complete range of high performance items able to meet all application requirements of the whole textile cycle, from yarn production to printing, cutting and packaging.

Ranges of CHIORINO products for the textile industry:

- belts for textile printing
- belts for nonwoven production
- belts for finishing, cutting and packaging
- belts for industrial laundries
- belts for tangential drives and spindle tapes
- Texgum roller coverings
- aprons and cots for spinning and texturizing
- condenser rub aprons
- coverings for expanding rollers

CHIORINO has over 100-year in TEXTILE CULTURE.

Founded in 1906 in Biella (heart of the Italian wool industry) as a tannery to supply the local spinning and weaving mills with technical leather items, the Company is today one of the leading manufacturers of synthetic conveyor and transmission belts for all industrial sectors.

The hundred-year-old experience in textile, the constant attention to the technological developments of the market and the expertise of our R&D laboratories in developing customized solutions make CHIORINO the ideal partner for OEMs and endusers of the textile sector all over the world.

Quality and environment certified

EMAS - UNI EN ISO 9001:2008 - UNI EN ISO 14001:2004



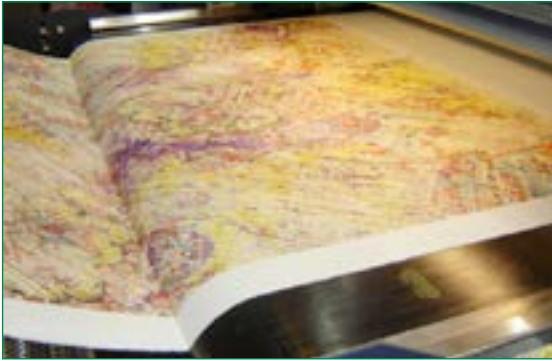


For more info on the Distribution Network please visit
the website www.chiorino.com



CHIORINO operates all over the world through **15 Associated Companies** and **more than 60 highly qualified Distributors and Assistance Centres** which guarantee and provide prompt assistance and installation service **24/7**.





Textile printing

CHIORINO polyurethane belts are the ideal solution for OEMs and endusers demanding the best performance printing of any kind of fabric. CHIORINO belts offer the highest precision in any type of machine:

- > **FLAT-BED PRINTING**
- > **ROTARY PRINTING**
- > **DIGITAL PRINTING**

Advantages of CHIORINO belts:

- **total printing precision**
- **total evenness, also on the joint area**
- **excellent dimensional stability**
- **excellent resistance to solvents and cleaning products**
- **suitable to print at high speeds**
- **easy to fit**
- **long service life**

Technical information on CHIORINO belts for textile printing: table at pages 6/7 - belts in column 1.



Nonwoven and diapers

CHIORINO polyurethane belts for nonwoven production are developed in close co-operation with OEMs and endusers and meet the increasingly growing demands for light-weighted, fast and mechanically performing machines:

- > **CROSS-LAPPERS**
- > **DIAPERS PRODUCTION**

Advantages of CHIORINO belts:

- **high conductivity**
- **suitable for high speeds**
- **excellent sliding properties**
- **lightness**
- **excellent evenness**
- **excellent mechanical resistance**
- **high resistance to oils, greases and chemicals**
- **long service life**

Technical information on CHIORINO belts for nonwoven and diapers: table at pages 6/7 - belts in columns 2, 3.

Finishing, cutting and packaging

CHIORINO wide offer meets belt demand for any kind of application:

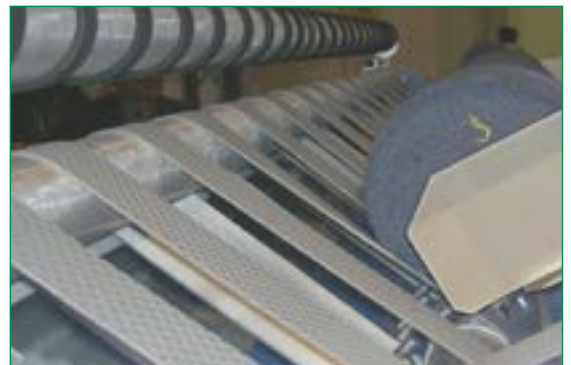
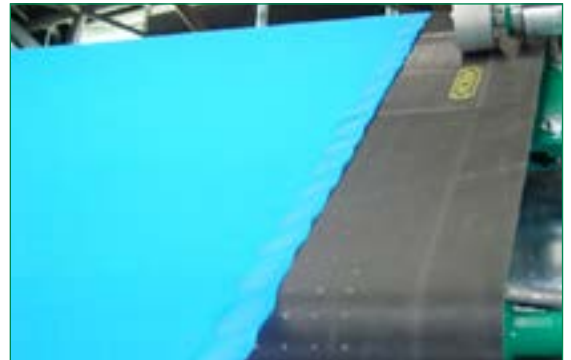
- > **FABRIC INSPECTION**
- > **AUTOMATIC CUTTING**
- > **PACKAGING**

If required, CHIORINO supplies belts with high precision perforations in any size.

Advantages of CHIORINO belts:

- **absolute conveying precision**
- **low noise**
- **no damage to fabrics**
- **optimal friction coefficient**
- **high cut resistance**
- **air permeable**
- **long service life**

Technical information on CHIORINO belts for finishing, cutting and packaging: table at pages 6/7 - belts in columns 4, 5, 6.



Industrial laundries

CHIORINO supplies first equipment belts to the leading manufacturer of industrial laundries. The wide range of CHIORINO belts satisfy all the requirements for belts with textile carcass and for FAST JOINT elastic belts which ensure an easy and quick installation on site.

If required, CHIORINO supplies belts with high precision perforations in any size.

Advantages of CHIORINO belts:

- **high resistance to wear**
- **total conveying uniformity**
- **low noise**
- **excellent drag**
- **no damage to textiles**
- **wide variety of surface patterns**
- **easy and quick installation of Fast Joint belts**
- **long service life**






Technical information on CHIORINO belts for industrial laundries: table at pages 6/7 - belts in column 7.



Conveyor and process belts

Production program

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Type	Textile carcass	Conveying surface coating		Driving surface coating		Perm. antistatic	Low noise fabric on driving surface (LdB) (1)	Total thickness	Weight	Min. diameter (2)	Pull for 1% elong.	Max. admiss. pull	Temperature resistance		Coeff. of friction (3)	Max. production width	
		material	colour	material	colour								min.	max.			
								mm	kg/m ²	mm	N/mm	N/mm	[°C]	[°C]		mm	
EL3-U15 FL	-	TPU	●	TPU	●	✓		1,5	1,6	10	3 ⁽⁴⁾	3	-20	60	MF	2000	
1M6 U0-U5 FL	PET	TPU	●	TPU	●	✓	✓	1,0	1,0	10	6	6	-20	100	MF	2000	
2M5 U0-U2 HP W A	PET	TPU	○	TPU	●	✓		1,3	1,4		6	12	-30	110	MF	2000	
2M8 U0-U2 SP	PET	TPU	●	TPU	●	✓		1,5	1,6		8	16	-20	100	LF	3500	
2M12 U0-U20	PET	TPU	●	TPU	●	✓	✓	3,4	3,8	80	12	24	-20	100	LF	2000	
2M20 U0-U5 PB N	PET	TPU	●	TPU	○	✓		2,1	2,3	80	12	20 ⁽⁵⁾	-30	110	LF	2100	
3M8 U0-U3	PET	TPU	●	TPU	●	✓		2,2	2,4	60	10	20	-20	100	LF	2000	
3M8 U0-V-U3 N SP	PET	TPU	●	TPU	○	✓		2,1	2,6	60	10	20	-10	60	LF	3000	
1M6 U0-V3 A N	PET	PVC	●	TPU	●	✓		0,8	0,8	20	6	6	-10	60	LF	3500	
1M6 U0-V5 N	PET	PVC	●	TPU	●	✓	✓	1,0	1,1	20	6	6	-10	60	LF	3000	
2MT5 U0-V3 N	PET	PVC	●	TPU	○	✓	✓	1,8	2,0	20	6	12	-10	60	LF	3000	
2MT5 U0-V3 SM N	PET	PVC	●	TPU	○	✓	✓	1,9	2,0	20	6	12	-10	60	LF	2000	
2T5 0-V-0	PET	-	○	PET	○	✓		1,6	1,7	20	5	10	-10	60	LF	2000	
2M8 U0-V-U0	PET	-	○	TPU	○	✓		1,5	1,5	30	8	16	-10	60	LF	3000	
2M8 U0-V5 A	PET	PVC	●	TPU	●	✓		2,0	2,3	30	8	16	-10	60	MF	3500	
2M8 U0-V5 FM	PET	PVC	●	TPU	●	✓		2,1	2,3	30	8	16	-10	60	MF	3000	
2M8 U0-V5 FM N	PET	PVC	●	TPU	●	✓		2,1	2,3	30	8	16	-10	60	HF	3000	
2M8 U0-V5 PS GR	PET	PVC	●	TPU	○	✓		2,3	2,3	30	8	16	-10	60	HF	500	
2M8 U0-V5 RT GR	PET	PVC	●	TPU	○	✓		2,2	2,3	30	8	16	-10	60	HF	2000	
2M8 U0-V17 GP	PET	PVC	●	TPU	●	✓		5,2	3,7	50	8	16	-10	60	HF	2000	
2M12 U0-V-U0 GR	PET	-	○	TPU	○	✓	✓	1,7	1,6	40	12	24	-10	60	LF	3000	
2M12 U0-V3	PET	PVC	●	TPU	●	✓	✓	1,9	2,1	40	12	24	-10	60	LF	3000	
2M12 U0-V3 N	PET	PVC	●	TPU	●	✓	✓	1,9	2,1	40	12	24	-10	60	LF	3000	
2M12 U0-V8 RT	PET	PVC	●	TPU	●	✓	✓	2,3	2,4	40	12	24	-10	60	HF	2000	
2M12 U0-V10 RT	PET	PVC	●	TPU	●	✓	✓	2,6	2,6	50	12	24	-10	60	HF	2000	
2M12 U0-V15 GPL N	PET	PVC	●	TPU	●	✓	✓	3,8	3,5	60	12	24	-10	60	HF	2000	
2M12 U0-V20 GP	PET	PVC	●	TPU	●	✓	✓	5,5	3,9	50	12	24	-10	60	HF	2000	
2T12 U0-V10	PET	PVC	●	TPU	●	✓		2,5	2,9	50	12	24	-10	60	MF	3000	
2M8 U0-U-G10 FH	PET	NR	●	TPU	●	✓		2,3	2,4	50	8	16	-20	100	HF	1200	
2T12 U0-U-G10 HS FH	PET	NBR	●	TPU	●	✓		2,2	2,2	50	12	24	-20	100	HF	1200	
2M5 U0-U-S2 W	PET	SILICONE	○	TPU	○	✓		1,3	1,4		6	12	-30	100	HF	2000	
SILON 25 W	PET	PET	○	PET	○			2,5	1,3	30	10	10	-20	120	LF	2000	
SILON 25 HC	PET	PET	●	PET	●	✓		2,5	1,6	30	10	10	-20	120	LF	2000	
SILON 40 HC	PET	PET	●	PET	●	✓		4,0	2,4	60	10	10	-20	120	LF	2000	

The data of this table have been formulated under normal environment conditions. They are subject to alteration without notice.

- (1) The belts having a LdB bottom fabric give quiet running properties.
- (2) Minimum roller diameter is dependent on the joint recommended by CHIORINO.
- (3) Conveying surface coefficient of friction: **LF** low, **MF** medium, **HF** high.
- (4) Elastic belts "EL": pull for 8% elongation.
- (5) 2M20 = the figure in this code relates to the max. admissible pull.

: knife edge

	Textile printing	Nonwoven	Diapers production	Fabric inspection	Automatic cutting	Packaging	Industrial laundries	Type
	1	2	3	4	5	6	7	
							✓	EL3-U15 FL
						✓		1M6 U0-U5 FL
			✓					2M5 U0-U2 HP W A
		✓						2M8 U0-U2 SP
					✓			2M12 U0-U20
	✓							2M20 U0-U5 PB N
	✓							3M8 U0-U3
	✓							3M8 U0-V-U3 N SP
		✓						1M6 U0-V3 A N
						✓		1M6 U0-V5 N
				✓				2MT5 U0-V3 N
				✓				2MT5 U0-V3 SM N
							✓	2T5 0-V-0
						✓		2M8 U0-V-U0
			✓			✓		2M8 U0-V5 A
		✓						2M8 U0-V5 FM
			✓					2M8 U0-V5 FM N
							✓	2M8 U0-V5 PS GR
							✓	2M8 U0-V5 RT GR
				✓		✓		2M8 U0-V17 GP
						✓		2M12 U0-V-U0 GR
						✓		2M12 U0-V3
						✓		2M12 U0-V3 N
		✓						2M12 U0-V8 RT
		✓						2M12 U0-V10 RT
				✓				2M12 U0-V15 GPL N
				✓		✓		2M12 U0-V20 GP
				✓		✓		2T12 U0-V10
							✓	2M8 U0-U-G10 FH
							✓	2T12 U0-U-G10 HS FH
			✓					2M5 U0-U-S2 W
							✓	SILON 25 W
					✓			SILON 25 HC
					✓			SILON 40 HC

EXPLANATION OF TYPE DESIGNATION

- 2** Number of plies
- M** Textile carcass
- 8** Pull for 1% elongation (N/mm)
- U** Driving surface coating
- 0** Thickness (mm/10)
- U** Possible interply
- G** Conveying surface coating
- 10** Thickness (mm/10)
- FH** Surface pattern
Other characteristics

- EL** Elastic belt
without textile carcass
- 3** Pull for 8% elongation (N/mm)
- U** Material
- 15** Thickness (mm/10)
- FL** Surface pattern
Other characteristics

- SILON** Nonwoven
- 25** Thickness (mm/10)
- W** Other characteristics

TEXTILE CARCASS

- M** Rigid polyester
- MT** Combined polyester
- T** Flexible polyester

COATING AND INTERPLY MATERIALS

- G** Elastomer
NBR synthetic rubber
NR natural rubber
- S** Silicone
- U** TPU polyurethane
- V** Polyvinyl chloride (PVC)

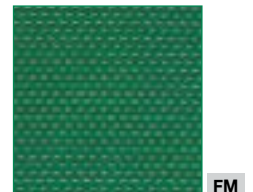
OTHER CHARACTERISTICS

- A** Permanent antistatic (UNI EN 1718)
- GR** Grey colour conveying surface
- HC** Static conductivity (ISO 284)
- HP** High performance polyurethane
- HS** High performance elastomer
- N** Black colour conveying surface
- PB** Printing Blanket
- SM** Super matt conveying surface
- SP** Polyurethane belt
3000-3500 mm wide
- W** White colour conveying surface

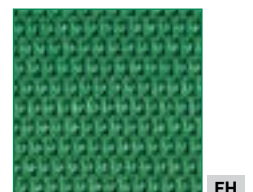
SURFACE PATTERNS



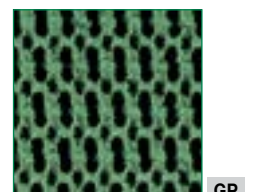
FL



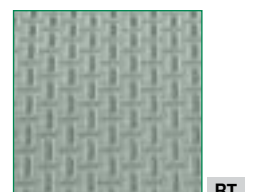
FM



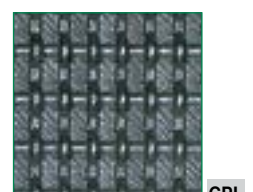
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GP



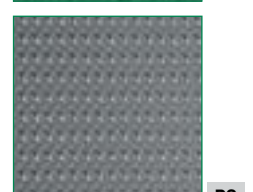
RT



GPL



SM



PS



Belts for tangential drives

CHIORINO produces a wide range of belts for tangential drives able to meet the requirements of the most recent machinery for any application:

- > **SPINNING MACHINES**
- > **OPEN-END**
- > **TEXTURIZING MACHINES**

Advantages of the CHIORINO belts for tangential drives:

- **high duty and energy saving**
- **high transmittable power**
- **excellent dimensional stability**
- **antistatic**
- **low noise**
- **high resistance to abrasion**
- **constant friction and excellent adherence**
- **high resistance to heat, oils and dust**
- **outstanding straight running**
- **long service life**

CHIORINO Series of belts for tangential drives:

- 1) **T-E series: THERMOPLASTIC belts with POLYESTER traction core.** Last generation belts made with high performing elastomers. They can be fitted on site with the CHIORINO FAST JOINT systems and equipments.
- 2) **T-T yellow-black series: belts with POLYAMIDE traction core.** Evolution of the traditional belts in grey elastomer, they offer excellent performances on the more sophisticated spinning machines.
- 3) **T grey series: belts with POLYAMIDE traction core.** Traditional series of CHIORINO belts suitable for any application.

Spindle tapes

The CHIORINO tapes are suitable to work at high speed on small diameters spindles, without any dimensional alteration, offering many competitive advantages:

- **energy saving**
- **antistatic**
- **excellent flexibility**
- **high chemical-physical-mechanical resistances**
- **low noise**
- **uniformity of yarn count**
- **no dust accumulation on edges**
- **long service life**

The **thermoplastic ST06** type can be fitted on site with the CHIORINO FAST JOINT systems and equipment.

Belts for tangential drives and spindle tapes

Type	Top surface			Traction core	Driving surface			Perm. antistatic	Thick-ness	Weight	Min. diam. (1)	Pull for 1% elonga-tion	Tensile strength	Temperature resistance	
	material	colour	coeff. friction on steel		material	colour	coeff. friction on steel							min. [°C]	max. [°C]

1) T-E Series: THERMOPLASTIC belts with POLYESTER traction core



T-E 10/20	elastomer	●	0,7	polyester	elastomer	●	0,7	yes	2,2	2,5	25	10,0	90	-20	70
T-E 30/30	"	●	0,7	"	"	●	0,7	yes	3,0	3,5	50	30,0	250	-20	70

2) T-T Series: belts with POLYAMIDE traction core

T1-T	elastomer	●	0,7	polyamide	elastomer	●	0,7	yes	1,8	2,1	25	5,0	200	0	100
T2-T	"	●	0,7	"	"	●	0,7	yes	2,7	3,1	60	7,5	300	0	100
T3-OE	"	●	0,7	"	"	●	0,7	yes	2,7	3,0	90	10,0	400	0	100
T3-T	"	●	0,7	"	"	●	0,7	yes	2,9	3,4	100	10,0	400	0	100
T4-T	"	●	0,7	"	"	●	0,7	yes	3,4	3,7	150	15,0	600	0	100

3) T Series: belts with POLYAMIDE traction core

T0	elastomer	●	0,7	polyamide	elastomer	●	0,7	yes	1,4	1,5	20	2,0	80	0	100
T1	"	●	0,7	"	"	●	0,7	yes	1,7	1,8	25	5,0	200	0	100
T1R	"	●	0,7	"	"	●	0,7	yes	2,1	2,3	25	5,0	200	0	100
T2	"	●	0,7	"	"	●	0,7	yes	2,3	2,6	60	7,5	300	0	100
T2R	"	●	0,7	"	"	●	0,7	yes	3,2	3,6	75	7,5	300	0	100
T3	"	●	0,7	"	"	●	0,7	yes	2,6	2,8	100	10,0	400	0	100
T3R	"	●	0,7	"	"	●	0,7	yes	3,4	3,7	100	10,0	400	0	100
T4	"	●	0,7	"	"	●	0,7	yes	3,1	3,4	150	15,0	600	0	100
T4R	"	●	0,7	"	"	●	0,7	yes	3,9	4,5	150	15,0	600	0	100
T4S	"	●	0,7	"	"	●	0,7	yes	5,1	5,9	150	15,0	600	0	100

(1) The above mentioned values depend on the running speed.

The data of this table have been formulated under normal environment conditions. They are subject to alteration without notice.

Type	Top surface			Traction core	Driving surface			Perm. antistatic	Thick-ness	Weight	Min. diam. (1)	Pull for 1% elonga-tion	Max. adm. pull	Temperature resistance	
	material	colour	coeff. friction on steel		material	colour	coeff. friction on steel							min. [°C]	max. [°C]

Thermoplastic spindle tape



ST06	polyure-thane	●	-	polyester	TPU impre-gn. fabric	●	0,2	yes	0,6	0,6	10	4	4	-30	100
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Spindle tapes with polyamide traction core

CNG	elastomer	●	-	polyamide	polyamide	●	0,2	yes	0,7	0,7	20	2	4	-20	100
CNPG	"	●	-	"	"	●	0,2	yes	1,0	0,9	20	2	4	0	100

(1) The above mentioned values depend on the type of CHIORINO joint recommended.

The data of this table have been formulated under normal environment conditions. They are subject to alteration without notice.



CHIORINO produces a wide range of “Texgum” roller coverings designed to increase the coefficient of friction of rollers, suitable for any type of fabric, including the thinnest, and for any application in the weaving and finishing industry.

The CHIORINO roller coverings are fully-cycle produced with elastomers designed by the R&D Labs to meet specific requirements.

The comprehensive range offers technical qualities such as:

- **high quality textile carcass with very good dimensional stability even for wet processing**
- **high wear resistant covers**
- **excellent chemical resistance**
- **high constant quality due to the fully automated cycle of production control**
- **long service life**

Characteristics:

- Textile carcass: polyester fabric, except for the FG types (fiberglass), FLO (non woven).
- Self-adhesive version (/A): can be supplied for all types, except for SI0-FG, SI0-FG tr, SI2-FG.
- Roll's width: available in 50 - 70 mm. Other widths upon request.

Recommendations for fitting

Clean rollers thoroughly by means of non oily solvent. To wrap the roller covering spiral-wise, cut the end of the covering aslant by a length equal to the circumference of the roller. Apply the adhesive first to the roller and then to the Texgum covering and wrap the latter while it is still slightly tacky. The silicone adhesive must be applied to the roller only, taking care to wrap the covering on the roller immediately. Then fix the ends of the covering by means of an adhesive tape. Wait for 8 hours before use.

Adhesives

- Texcol: for all types, except SI0-FG.
- Silicone: for SI0-FG.

Type	Covering			Thick-ness mm	Weight Kg/m ²	Temperature resistance		Rolls' length m
	material	colour	hardness Sh.A			min. °C	max. °C	
NG0	Natural elastomer	●	50	1,5	1,6	0	100	100
NG3		●	50	2,0	2,2	0	100	100
NG5		●	50	1,9	2,1	0	100	100
NG7		●	50	1,7	1,9	0	100	115
NG7-S		●	50	2,5	2,6	0	100	115
NG8		●	55	2,0	2,0	0	100	100
SG0	Synthetic elastomer	●	55	1,8	2,1	-10	120	115
SG0-D		●	75	2,3	2,1	-10	120	115
SG0-E		●	40	2,7	2,2	-10	120	115
SG0-M		●	50	2,2	2,3	-10	120	115
SG0-S		●	55	2,5	2,6	-10	120	115
SG1		●	55	2,0	2,6	-10	120	115
SG1-E		●	40	3,0	2,3	-10	120	115
SG3		●	65	2,0	2,2	-10	120	100
SG4		●	50	4,2	2,9	-10	120	100
SG5		●	65	2,0	1,8	-10	120	100
SG6		●	65	2,0	2,3	-10	120	100
SG7		○	65	2,0	2,2	-10	120	115
SG7 gr		●	65	2,0	2,2	-10	120	115
SG7-H		●	65	2,0	2,2	-10	120	115
SG7-L		○	65	1,7	2,0	-10	120	115
SG7-M		●	50	1,9	1,3	-10	120	115
SG7-S		○	65	2,5	2,9	-10	120	115
SG8		●	60	2,0	2,1	-10	120	100
SG8 HX		●	50	2,5	2,1	-10	120	100
PU0	Poly-urethane	●	70	1,7	1,9	-20	80	100
PU5		●	70	2,1	1,8	-20	80	100
PU8		●	70	2,0	1,8	-20	80	100
PV0	PVC	⊗	45	1,8	2,0	0	60	100
PV0 ve		●	45	1,8	2,0	0	60	100
PV5		⊗	45	2,3	2,4	0	60	100
PV5 ve		●	45	2,3	2,4	0	60	100
PV6		⊗	45	1,9	2,0	0	60	100
PV6 ve		●	45	1,9	2,0	0	60	100
PV7		⊗	45	1,9	2,0	0	60	100
PV7 ve		●	45	1,9	2,0	0	60	100
SI0	Silicone	○	50	1,1	1,0	-20	160	115
SI0-FG		○	50	1,4	1,3	-50	200	115
SI0-FG tr		⊗	50	1,4	1,3	-50	200	115
SI0-S		○	50	2,0	2,1	-20	160	115
SI1 az		●	45	1,6	1,7	-20	150	115
SI2-FG		⊗	50	1,5	1,4	-50	200	115
NP0/A	Neoprene	●	---	3,5	0,7	-40	70	50
FLO	Velvet	●	---	2,4	0,8	-10	60	50

SG Type of covering

0 Surface pattern

M Special execution

TYPE OF COVERING

- FLO** Velvet
- NG** Natural elastomer
- NP** Neoprene
- PU** Polyurethane
- PV** PVC
- SG** Synthetic elastomer
- SI** Silicone

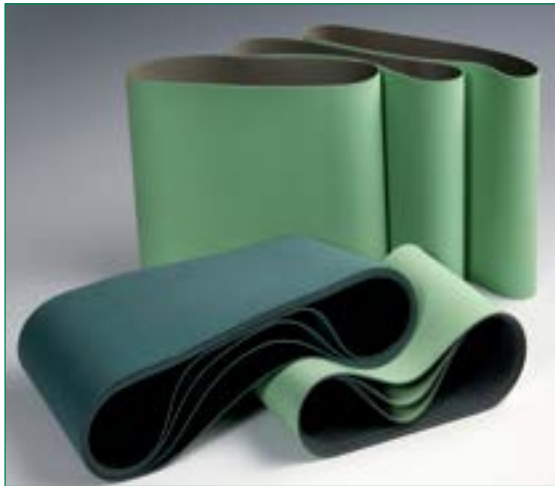
SURFACE PATTERNS

- 0** Smooth
- 1** Light fabric
- 2** Medium fabric
- 3** Heavy fabric
- 4** Grip face
- 5** Pimpled
- 6** Fine sandblast
- 7** Medium sandblast
- 8** Heavy sandblast

SPECIAL EXECUTIONS

- D** High shore hardness
- E** Foam synthetic elastomer
- FG** Fiberglass textile carcass
- H** High performance
- HX** High performing carboxylic elastomer
- L** Less rubber
- M** Soft
- S** Extra rubber

The data of this table have been formulated under normal environment conditions. They are subject to alteration without notice.



Spinning aprons

The CHIORINO spinning aprons are made of synthetic antistatic rubber and are manufactured on extremely automated lines capable of ensuring very high quality standards. They are composed of two outside elastomer layers and of a spiral-shaped textile insert with exceptional resistance.

Advantages:

- **great uniformity in spinning**
- **very good resistance to wear, spinning oils and cracking caused by ozone.**



Cots for pressure rollers

The CHIORINO range of rubber cots has kept up with the technological evolution of the textile machinery, regarding both innovative spinning systems and development of the quality and count of fibres processed.

Advantages:

- **total absence of winding**
- **highly conductive surface, which can be ground to a mirror-finish**
- **excellent fibre control, thanks to elasticity and permanent friction**
- **perfect seal thanks to various types of available reinforcement and direct vulcanization.**



Coverings for expanding rollers

Products featuring exclusive CHIORINO technology, they provide the basic component of the expanding units with rotating bending rollers.

They are particularly performing in the finishing machines and tissue control thanks to the following features:

- **exceptionally high resistance to wear**
- **maintenance of surface friction through time, even in presence of chemical and physical agents**
- **different ranges of types and structures allowing use on any machine with any type of material.**

Type	Outer / inner colour	Characteristics and applications
T/E	light green / anthracite	Wide bottom apron for NSC spinning frames.
LB	dark green / black	For special processing (linen and jute for example). Especially recommended as single bottom apron.
X46	light green / anthracite	All-rubber wide apron suitable for control assembly on NSC finishers.

Type	Colour	Hardness Sh.A	Characteristics and applications
T70	brick	67	Good elastic regeneration. Good antistatic value.
C83	grey	80	For spinning, drawing, finishers and wool drawing frames with high pressures.
SA80	black	80	Wear- and cut-resistant for linen wet-spinning.
Executions			
Standard	All rubber. To be fitted with adhesive.		
"AB" Auto-Block	Core in metal alloy suitable for fitting without adhesive on rollers with tolerance range +0 -0,01 mm.		
"RR" Rubber Reinforcement	With ebonite cushion. Can be fitted without adhesive to work with low loads.		
"SB" Self-Block	Ebonite cushion with thin spiral-shaped textile reinforcement. Suitable for fitting without adhesive.		
"V" Vulcanized	Vulcanized rubber directly onto the metal or plastic roller.		
Finish			
Rough-textured	Rough external surface with extra thickness, to obtain the required diameter after grinding.		
Ground	Smooth surface and external diameter already to size.		

Type	Colour	Hardness Sh.A	Temp. res. °C min. max	Characteristics and applications
AL/H 60	brown	55	-10 +130	Excellent resistance to natural and synthetic oils and fats. Good resistance to alcohols.
AL/N 60	black	60	-10 +130	Excellent resistance to natural and synthetic oils and fats. Good resistance to acid and basic solutions at room temperature.
AL/NP 70	black	70	-10 +100	Good resistance to ozone and alcohols. Good mechanical properties. Suitable for expanding rollers that handle plastic films and paper.
AL/E 60	black	60	-35 +140	Good resistance to acids, alkalics and hydrogen peroxide even in highly concentrated solutions and at high temperatures.
AL/X 70	black	70	0 +130	Excellent resistance to abrasion. Used for expanding rollers that process paper and abrasive materials.
Executions and finish				
Standard: all rubber.				
"RF": cushion in wear-resistant rubber, with polyester cord reinforcement. Recommended for large rollers.				
Finish: finely-ground smooth surface.				



Texturizing aprons

Aprons produced for processing of continuous filament synthetic fibres on drawing frames, twisters, draw-twisters, texturizers and draw-texturing machines. Purposely designed for the heavy loads of the apron-holder units and for accidental overloading.

Advantages:

- **great uniformity in spinning**
- **very good resistance to wear**
- **double elastomer layer with special CHIORINO spiral-shaped textile insert particularly suitable for high speed, it is not subject to vertical or transversal vibrations**
- **high load at break.**



Texturizing cots

Cots produced for processing of continuous filament synthetic fibres on drawing frames, twisters, draw-twisters, texturizers and draw-texturing machines.

Advantages:

- **high coefficient of friction**
- **resistance to spinning oils**
- **very good wear-resistance with heat, even after a long running period**
- **good antistaticity**
- **high resistance to aging and cracking.**



Condenser rub aprons

Produced using highly specialized technology and materials, the CHIORINO condenser rub aprons are appreciated all over the world thanks to the following qualities:

- **excellent rubbing**
- **high carcass resistance**
- **very good resistance to spinning oils**
- **long life: they work on any type of condenser and with any type of fibre.**

Type	Outer / inner colour	Characteristics
X74	green / anthracite	Perfect ratio of the friction coefficients. Utmost resistance to abrasion and swelling.
Y9	yellow /anthracite	Ultra-high resistance to abrasion even under hot conditions. Long life.

Type	Colour	Hardness Sh.A	Characteristics
T70	brick	67	Good elastic regeneration. Good antistatic value.
Executions			
Standard		All rubber. To be fitted with adhesive.	
"RR" Rubber Reinforcement		With ebonite cushion. Can be fitted without adhesive to work with low loads.	
"SB" Self-Block		Ebonite cushion with thin spiral-shaped textile reinforcement. Suitable for fitting without adhesive.	
"V" Vulcanized		Rubber vulcanized directly on metal roller. Special CHIORINO system suitable for high-temperature applications and high peripheral speeds (over 1500 m/min). Can be also supplied on metal or plastic shells, already rubberized, ground and balanced.	
Finish			
Rough-textured		Rough external surface with extra thickness, to obtain the required diameter after grinding.	
Ground		Smooth surface and external diameter already to size.	

Type	Colour	Characteristics and applications																	
H	brownish red	For all fibres, also light-colour ones.																	
N	black	For heavy-duty. Not recommended for light colours. With extra-fine grooving can be used for fibres replacing asbestos.																	
X874	brown	Special type, suitable where high resistance to wear is required.																	
Finish																			
Ends																			
<ul style="list-style-type: none"> • Standard: recessed by about 1 mm in the button area. Rivets embedded. • On request: not embedded rivets and recessed ends. 																			
Buttons																			
<ul style="list-style-type: none"> • Standard: made of impact-proof polyamide with rounded edges (ø 18 mm, h 9 mm, pitch approx. 40 mm). • On request: smaller buttons recommended for condenser with small diameter rollers (12 mm, h 6 mm, pitch approx 35 mm). 																			
Grooving																			
<ul style="list-style-type: none"> • Standard: 20 grooves/dm with "b" groove type. • On request: number of grooves and groove type according to the table on the right. Aprons with smooth finish can be supplied on request. 																			
		Grooves/dm	Applications	<table border="1"> <thead> <tr> <th>Type</th> <th>Width (mm)</th> <th>Depth (mm)</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>1,0</td> <td>0,8</td> </tr> <tr> <td>b</td> <td>1,2</td> <td>0,9</td> </tr> <tr> <td>c</td> <td>1,5</td> <td>1,0</td> </tr> <tr> <td>z</td> <td>0,8</td> <td>0,7</td> </tr> </tbody> </table>	Type	Width (mm)	Depth (mm)	a	1,0	0,8	b	1,2	0,9	c	1,5	1,0	z	0,8	0,7
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a	1,0	0,8																	
b	1,2	0,9																	
c	1,5	1,0																	
z	0,8	0,7																	
		16, 18 20, 22, 24	For all types																

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