

**Partner for
food conveying solutions**

Homogeneous and Drive belts





The ultimate solution for total hygiene

HP COMPACT® is a homogeneous conveyor and process belts - smooth or positive drive - assuring **total hygiene** and designed to resist the **most severe cleaning** procedures.

It goes beyond the application limits of both modular and monolithic belts, reinforced or not, commonly found in the market.

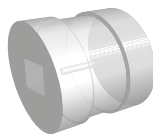
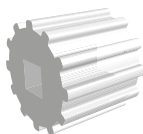
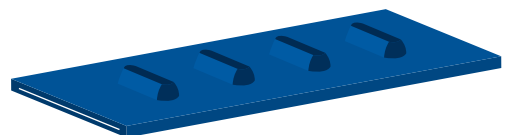
HP COMPACT® conveying systems



Compact belt design, reinforced traction core.
The HP COMPACT® belts assure the total compliance with the requisites imposed by the HACCP practice in the whole production process.



Compact belt having a reinforced traction core and toothed profile on the running side.
The HP COMPACT DRIVE® belts for positive drive can be supplied with any kind of teeth and pitch, both standard and customized.



Chiorino supplies standard or customized pulleys according to Customer's needs.



Certified Food Compliance

REGULATION EC 1935/2004 and amendments

REGULATION EC 2023/2006 and amendments

REGULATION EU 10/2011 and amendments

FDA (Food and Drug Administration)

USDA (United States Department of Agriculture)

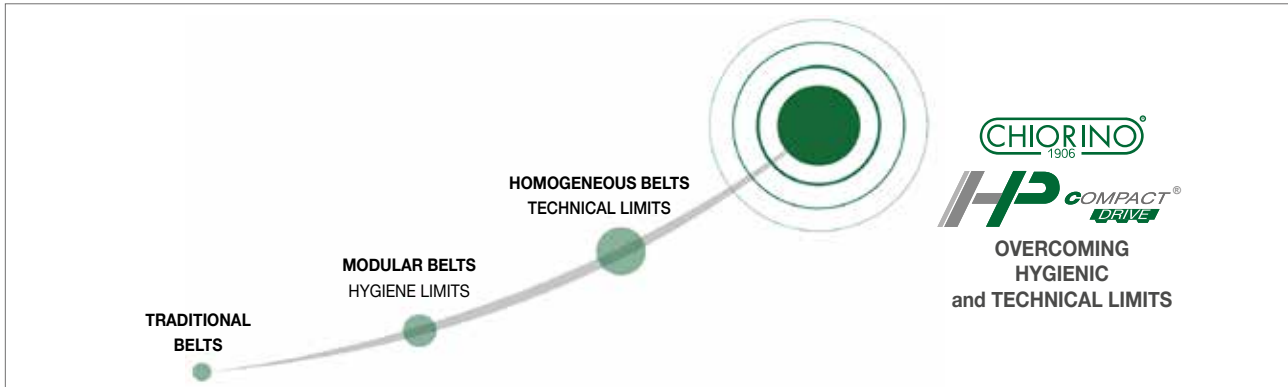
REGULATION NSF/ANSI 3-A 14159-3-2014 and amendments

HALAL (World Halal Authority)



Food belts and hygienic requirements

HP COMPACT DRIVE® is the answer to the most demanding requirements of Food industry in terms of **food safety** and **mechanical performances**.



The benchmark in food processing



The Chiorino HP® conveyor and process belts are today the leading products for the food industry as far as **hygiene**, **performance** and **working life** are concerned.

The HP® belts fully support all the **HACCP practices** through the whole food manufacturing process.

HP® SYSTEM main benefits

- ▶ Extraordinary resistance to continuous washing and sanitization processes.
Ideal for Clean-in-Place systems
- ▶ Superior resistance to fats and oils
- ▶ Excellent resistance to low temperatures



HP COMPACT DRIVE® main benefits

- 100% Food safety
- Superior resistance to washing and sanitizing
- Excellent resistance to fats and oils
- No deformations
- Self-tracking
- Ideal for Z-Conveyors
- Up to 2000 mm width

Optimized cost of ownership

HP COMPACT DRIVE® belts guarantee a considerable **Time**, **Water**, **Energy** and **Maintenance saving** compared to modular and traditional homogeneous or monolithic belts.



-60%



-60%



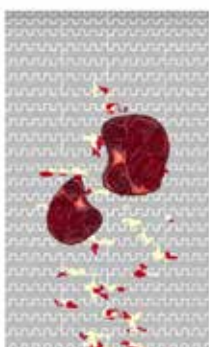
-50%



-60%

Total food safety and water saving

Modular belts



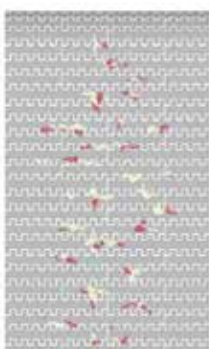
Modular belts require a high initial investment and show critical issues related to cleanability and food safety.

Chiorino HP COMPACT DRIVE® **washing is quick and easy**, assuring total hygiene and reducing downtime to a minimum.



Modular belts require an excessive water and energy consumption, still resulting in an effectively impossible sanitization.

Up to **60% water saving** compared to modular belts is one of the main competitive advantages of HP COMPACT DRIVE® belts.

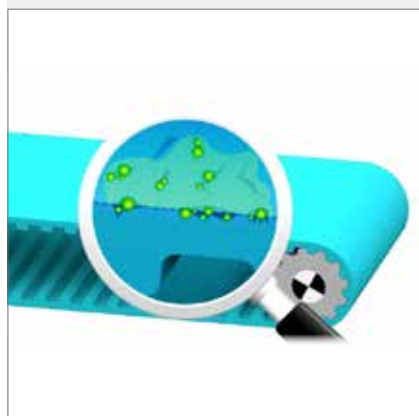
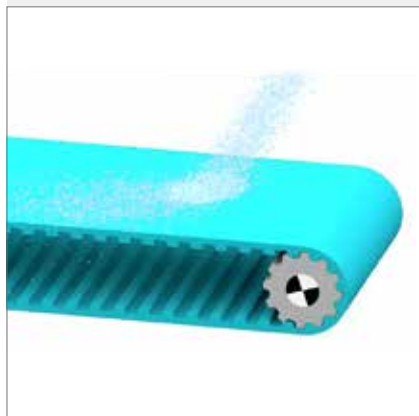


Even after long cleaning operations, foodstuff residuals remain on modular belts surface, resulting in poor hygiene.

HP COMPACT DRIVE® belts' surface is perfectly clean and safe, ready for starting further operations assuring **total food safety**.

Excellent resistance to bacterial proliferation

Monolithics and traditional homogeneous belts



Frequent washings affect the conveyor belts' surface that undergoes the hydrolisis attack, with heavy consequences in terms of hygiene and belts life.

The porous surface of monolithics and traditional homogeneous belts particularly suffers the hydrolisis effect.

The surface of traditional monolithic belts cracks and becomes a natural shelter for bacterial growth.

The **highly compact polyurethane** resulting from the exclusive Chiorino **HP® product system** resists hydrolisis more than any other belt with no crackings on the surface.

If bacteria are not completely removed there is a considerable risk of bacterial layer formation on the belts surface.

Thanks to the HP® closed and compact surface, bacteria are completely removed.

This makes HP COMPACT DRIVE® the **best solution for total food safety**.

Excellent mechanical stability

Monolithics and traditional homogeneous belts



One of the biggest issues of traditional homogeneous and monolithic belts is the poor resistance to hydrolisis.

After frequent washing processes, their polymeric material quickly ages causing wavings, deformation and finally tracking problems.

HP COMPACT DRIVE® guarantees a superior resistance to hydrolisis overcoming the technical and mechanical limits of monolithic and traditional homogeneous belts.

Monolithics and traditional homogeneous belts suffer waving and deformations and require frequent and expensive maintenance.

HP COMPACT DRIVE® is **mechanically stable, constant running and trouble free.**

Ideal for all conveyor designs

The special **Chiorino compact reinforced traction core** assures unlimited flexible and innovative configurations, making HP COMPACT DRIVE® ideal for the use on all demanding applications such as swan neck conveyors.

KEY FEATURES

Compact reinforced traction core



MAIN BENEFITS

No deformations
Cross rigidity
Self tracking
No elongations
Low fitting tension

Exclusive design



No vibrations
Ideal for Z-conveyors
Up to 2000 mm width

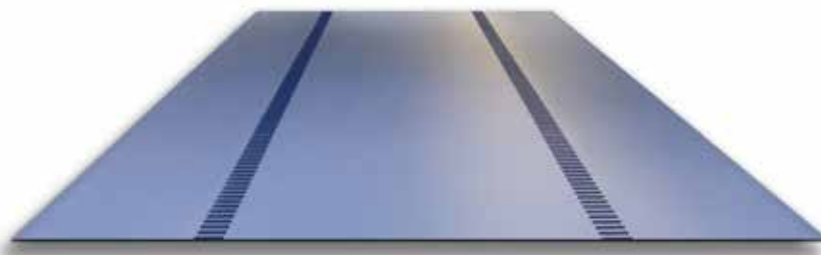


Beyond the limits of custom solutions!

HP COMPACT DRIVE® is produced in **2000 mm width** and no length limits for endless belts.

It can be supplied with a **double row of teeth** up to 2000 mm belts width.

HP COMPACT DRIVE® is the **only homogeneous reinforced belt** available in **2000 mm** width.



Pitches and pulleys

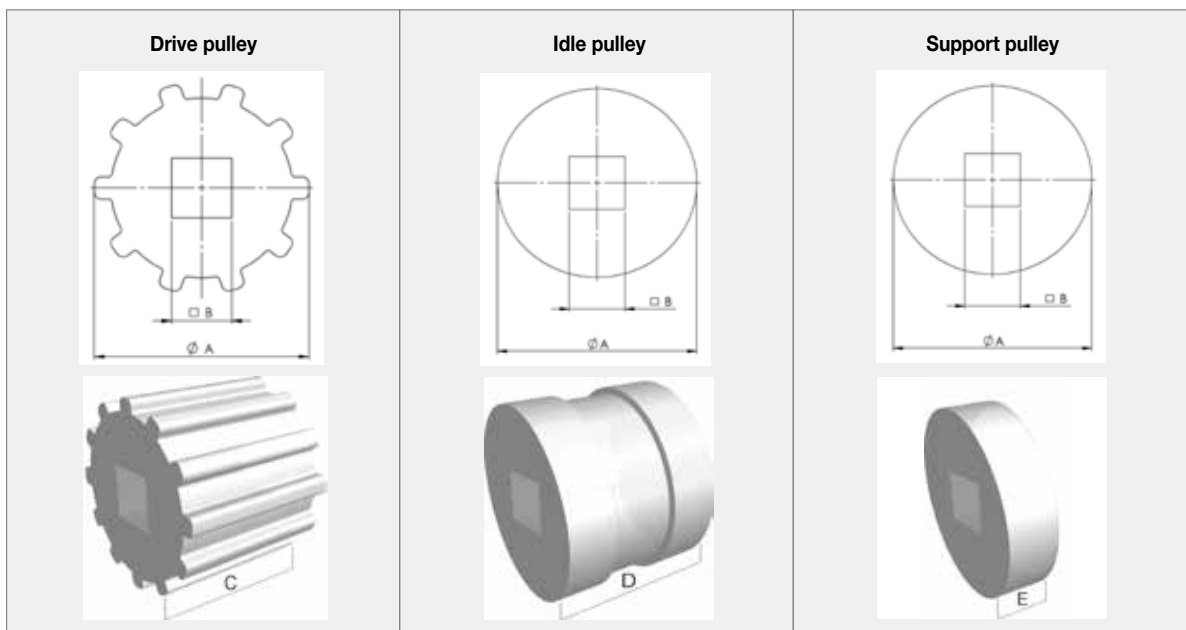
The traditional positive drive conveyor construction consists of:

- **Drive pulley**
- **Slidebed**
- **Idle pulley with tensioning device**
- **Support pulleys**

Chiorino supplies both **standard** and **customized pulleys** according to Customer's needs.



Chiorino standard sprockets / pulleys





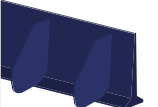
Number of teeth	Pitch mm	External Ø A mm	Inner square □ B mm	Width C mm	Width D mm	Width E mm
8	40	99	40 x 40	80	105	20
10	40	125	40 x 40	80	105	20
12	40	150	40 x 40	80	105	20
14	40	176	40 x 40	80	105	20
16	40	201	40 x 40	80	105	20

On demand HP COMPACT DRIVE® belts can be supplied with customized pitches.


Profiles and Sidewalls

Code	Type	Dimensions b x h mm	Material	Hardness Sh A / Sh D	Min. transversal pitch mm	Min. transversal diameter ¹ mm
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Transversal profiles

	ES-543	L20 U HP blue	10 x 20	TPU HP®	70 Sh A	40	40
	ES-546	L30 U HP blue	10 x 30	TPU HP®	70 Sh A	40	40
	ES-549	L40 U HP blue	10 x 40	TPU HP®	70 Sh A	40	40
	ES-535	L50 U HP blue	10 x 50	TPU HP®	70 Sh A	40	40
	ES-538	L80 U HP blue	10 x 80	TPU HP®	70 Sh A	40	40
	ES-731	L80 U HP blue 55D	10 x 80	TPU HP®	55 Sh D	40	40
	ES-563	T20 U HP blue	10 x 20	TPU HP®	70 Sh A	40	40
	ES-560	T30 U HP blue	10 x 30	TPU HP®	70 Sh A	40	40
	ES-557	T40 U HP blue	10 x 40	TPU HP®	70 Sh A	40	40
	ES-554	T50 U HP blue	10 x 50	TPU HP®	70 Sh A	40	40
	ES-534	T60 U HP blue	10 x 60	TPU HP®	70 Sh A	40	40
	ES-713	T50 U HP blue 55D	10 x 50	TPU HP®	55 Sh D	40	40
	ES-793	T100 U HP blue 55MD ²	10 x 100	TPU HP®	55 Sh D	40	50
	ES-785	T120 U HP blue 55MD ²	10 x 120	TPU HP®	55 Sh D	40	50
	ES-856	T80 U HP RG blue 55MD ²	10 x 80	TPU HP®	55 Sh D	40	50
	ES-855	T100 U HP RG blue 55MD ²	10 x 100	TPU HP®	55 Sh D	40	50
	ES-840	TS80 U HP blue 55MD ²	10 x 80	TPU HP®	55 Sh D	200-250	40
	ES-841	TS100 U HP blue 55MD ²	10 x 100	TPU HP®	55 Sh D	200-250	40
	ES-842	TS120 U HP blue 55MD ²	10 x 120	TPU HP®	55 Sh D	200-250	40

Sidewalls

	Code	Type	Dimensions			Material	Hardness	Thickness	Minimum diameter ¹
			Pitch mm	Width mm	Height mm		Sh A	mm	mm
	ES-707	C-U 10/20 HP blue	24	22	20	TPU HP®	85	1.6	50
	ES-708	C-U 10/30 HP blue	24	22	30	TPU HP®	85	1.6	70
	ES-709	C-U 10/40 HP blue	24	22	40	TPU HP®	85	1.6	100
	ES-710	C-U 10/50 HP blue	24	22	50	TPU HP®	85	1.6	120
	ES-711	C-U 20/60 HP blue	50	42	60	TPU HP®	85	1.6	150
	ES-712	C-U 20/80 HP blue	50	42	80	TPU HP®	85	1.6	190
	ES-763	C-U 20/40 HP Compact blue	40	42	40	TPU HP®	85	2.7	100
	ES-762	C-U 20/50 HP Compact blue	40	42	50	TPU HP®	85	2.7	120
	ES-764	C-U 20/60 HP Compact blue	40	42	60	TPU HP®	85	2.7	145
	ES-765	C-U 20/80 HP Compact blue	40	42	80	TPU HP®	85	2.7	200
	ES-794	C-U 20/100 HP Compact blue	40	42	100	TPU HP®	85	2.7	240
	ES-795	C-U 20/120 HP Compact blue	40	42	120	TPU HP®	85	2.7	290

¹ Minimum pulley diameters referred to environment conditions of 20°C.

² Available in 800 mm length bars.

HY-FAST™ is a **unique hygienic fastener** designed by Chiorino for the **installation on site** of HP COMPACT DRIVE® food conveyor belts. Made of thermoplastic food compliant material, it does not contain any metal component.

QUICK & EASY

Thanks to HY-FAST™ the belt can be easily replaced for the *daily cleaning procedures* then *instantly and easily* fitted on the machine.






KEY BENEFITS

- Food safety
- High mechanical resistance
- Excellent resistance to frequent washings
- Suitable for Clean-in-Place systems
- Downtime reduction

HY-FAST™ is available only for the HP COMPACT 25 series and for belts up to a max. width of 1000 mm.







Technical data

Code	Type	Total thickness	Material	Driving toothed side surface texture	Conveying side surface texture	Pitch	Tooth section	Tooth length	Pull for 1% elong.	Min. diameter ¹	Temperature resistance	Max. width	Inclined	Swan neck	Trough
		mm				mm	b x h mm	mm	N/mm	mm	min. °C max. °C	mm			



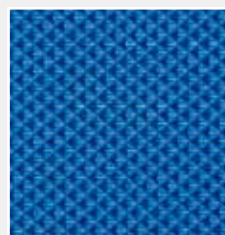
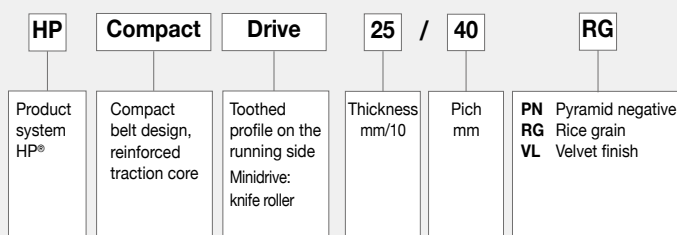
NA-1359C_D13	HP Compact Drive 20/40 blue	2.0	TPU HP®	smooth	smooth	40	13 x 8	72	8	80	-30 +90	2000			•
NA-1207C_D13	HP Compact Drive 25/40 blue	2.5	TPU HP®	smooth	smooth	40	13 x 8	72	8	80	-30 +90	2000		•	
NA-1294C_D13	HP Compact Drive 25/40 PN blue	2.5	TPU HP®	smooth	PN	40	13 x 8	72	8	80	-30 +90	2000	•	•	
NA-1328C_D13	HP Compact Drive 25/40 RG blue	2.5	TPU HP®	smooth	RG	40	13 x 8	72	8	80	-30 +90	2000	•	•	
NA-1257C_D13	HP Compact Drive 25/40 VL blue	2.5	TPU HP®	smooth	VL	40	13 x 8	72	8	80	-30 +90	2000		•	
NA-1307C_D13	HP Compact Drive 40/40 blue	4.0	TPU HP®	smooth	smooth	40	13 x 8	72	15	80	-30 +90	2000		•	



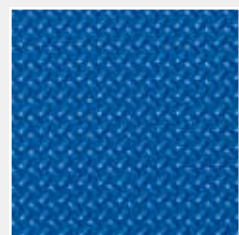
Code	Type	Total thickness	Material	Driving side surface texture	Conveying side surface texture	Pull for 1% elong.	Min. diameter ¹	Temperature resistance	Max. width	Knife roller	Inclined	Swan neck	Trough
		mm				N/mm	mm	min. °C max. °C	mm				
NA-1366A	HP Compact 15 blue	1.5	TPU HP®	smooth	smooth	5	25	-30 +110	2000	•			
NA-1359A	HP Compact 20 blue	2.0	TPU HP®	smooth	smooth	8	50	-30 +110	2000				•
NA-1207A	HP Compact 25 blue	2.5	TPU HP®	smooth	smooth	8	50	-30 +110	2000			•	
NA-1294A	HP Compact 25 PN blue	2.5	TPU HP®	smooth	PN	8	50	-30 +110	2000		•	•	
NA-1328A	HP Compact 25 RG blue	2.5	TPU HP®	smooth	RG	8	50	-30 +110	2000		•	•	
NA-1328A RG	HP Compact RG 25 blue	2.5	TPU HP®	RG	smooth	8	50	-30 +110	2000			•	
NA-1257A	HP Compact 25 VL blue	2.5	TPU HP®	smooth	VL	8	50	-30 +110	2000			•	
NA-1307A	HP Compact 40 blue	4.0	TPU HP®	smooth	smooth	15	80	-30 +110	2000			•	

¹ Minimum roller diameter is dependent on the joint recommended by Chiorino.

EXPLANATION OF TYPE DESIGNATION



PN



RG

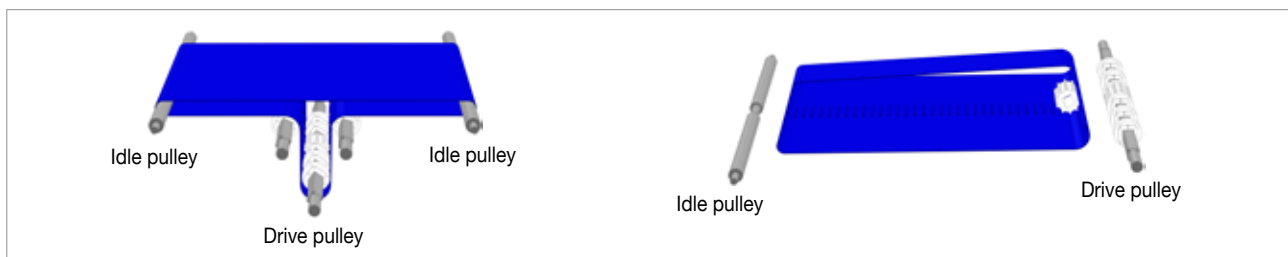
HP COMPACT MINI DRIVE® is the ultimate solution for **food positive drive belts** featuring a **reduced teeth pitch**. Ideal for running on small pulleys, it assures smooth product transfer and increased production efficiency.

KEY FEATURES

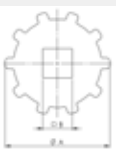
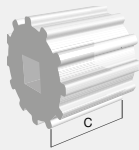
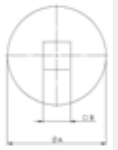
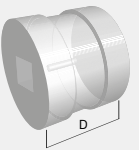
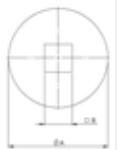

BENEFITS

Engineered for small pulleys	▶ Accurate product transfer. Minimized production waste
HP COMPACT® exclusive design	▶ No mistracking. No misalignments. Suitable for bi-directional running. Ideal for high speed
HP® excellent resistance to bacteria proliferation and cleaning procedures	▶ Total food safety
High resistance to oils, fats, abrasion	▶ Long service life
Lower tension = Highest resistance to mechanical stress (shafts and bearings saving). Easy to clean = Water saving	▶ Optimized cost of ownership


Configuration



Chiorino standard sprockets / pulleys

Drive pulley		Idle pulley		Support pulley		
						
Number of teeth	Pitch mm	External Ø A mm	Inner square □ B mm	Width C mm	Width D mm	Width E mm
9	20	55	20 x 20	80	105	20
10	20	62	25 x 25	80	105	20
11	20	68	25 x 25	80	105	20
12	20	74	25 x 25	80	105	20

Technical data

Code	Type	Total thickness mm	Material	Driving toothed side surface texture ↑	Conveying side surface texture ↓	Pitch mm	Tooth section b x h mm	Tooth length mm	Pull for 1% elong. N/mm	Min. diameter ¹ mm	Temperature resistance min. max. °C °C	Max. width mm	Knife roller 
NA-1481F_D6	HP Compact Minidrive 15/20 A blue	1.5	TPU HP®	smooth	smooth	20	6 x 4	72	10	20	-30 +90	800	•
NA-1366F_D6	HP Compact Minidrive 15/20 blue	1.5	TPU HP®	smooth	smooth	20	6 x 4	72	5	25	-30 +90	1200	•

¹ Minimum roller diameter is dependent on the joint recommended by Chiorino.

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