# VOLTA

# GenCon Belts



The Next Step in Belting



# Flat Belts for General Conveying Applications

The conveyor belting industry is increasingly using thermoplastic elastomers for general applications as end users become aware of the many benefits this versatile material has to offer. Volta Belting brings to this market more than 30 years of experience in developing high quality products to solve difficult conveying applications in various industries. Our product line includes a wide range of belts and coatings to answer the demanding needs of special applications. We are confident that our General Conveying Belt Line meets the high standards that our customers demand to keep their conveying system moving smoothly.

Volta Belting has the product for your special application: standard flat belts to positive-drive belts and soft belts with high grip to hard surfaces that resist cutting, punctures and abrasion. Our belts are easily welded on the conveyor, reducing production downtime. Sidewalls, flat belt cleats, profiles on the conveying side and V guides on the drive side are all easily welded to belts using Volta tools. Ask for our Tools Catalog from your local Volta distributor.



# Homogeneous

Our conveyor belts are based on thermoplastic elastomers that resist water, oils, chemicals, abrasion and cutting. This outstanding quality ensures a conveying surface that is not easily damaged. Here's how: the homogeneous nature of the belt provides a thick base without fabric, thus eliminating delamination of layers. Our reinforced belts have a single fabric layer overlaid by a thick layer of thermoplastic elastomers. Volta GenCon belts are available in a wide range of hardnesses, colors and belt thicknesses. All GenCon belts are easily fabricated and made endless using our versatile tools.

# **Quality Fabrications**

All you have to do to easily produce quality fabrications is use our high quality belts and tools. We can assure you that your fabrications will last for the whole belt's life. The reason: the base for the fabrication is made of a thick homogeneous layer of TPE and, therefore, allows the belt to handle heavier loads; and, at the same time, eliminates the possibility of delamination.

When using fabrication materials such as remnants of Volta flat belts, T Cleats and Sidewalls, V-belts or electrodes; will open a new world of possibilities for creating unique custom fabrications for your conveying system.

# **Excellent Grip**

Volta Belting conveyor belts come in a wide range of hardnesses (65A to 55D) and grip characteristics (coefficient of friction). This range of hardnesses and grip often make it possible to eliminate or, at least, reduce the complexity of custom fabrications.

What's even better, our FST Line extends the grip capacity while maintaining Volta belts unique homogenous characteristics. Another reason to use FST products is that complex coating and gluing processes are no longer required. For extra grip capacity, check our Top Impressions and Spikes product lines.

# Flat Belts for General Conveying Applications



### Water and Oil Resistant

The thermoplastic elastomers eliminate the carcass commonly used in other conveyor belts. This solves the possibility of liquids being absorbed by the fabric causing delamination and premature belt failure.

We use the highest quality materials in the production of our conveyor belts. These materials are extremely resistant to hydrolysis and oils; ensuring a long and efficient operating life for the belt.

# **Resistance to Chemicals**

No belt is immune to the corrosive effects of industrial chemicals, but the materials used by Volta Belting in the production of our belts provides good resistance to most industrial chemicals.







### **Resistant to Cuts**

The same materials that provide resistance to hydrolysis, oils and chemicals also exhibit a high resistance to cuts and punctures.

For instance, when a cut occurs on the surface of the belt, delamination does not occur since there is no carcass layer underneath it. This is one benefit when using our homogeneous GenCon belts. An added benefit is that when a cut or puncture does occur, you can usually repair the damaged section within minutes instead of replacing the entire belt. Of course, we recommend using our tools to accomplish this task quickly and efficiently.

### **Resistant to Abrasion**

We use materials to manufacture conveyor belting that have a very high resistance to abrasion. These products provide years of belt operation under the harshest conditions. Our product line provides you with a range of coefficients of friction to choose from.



# Flat Belts for General Conveying Applications



# Easy Installation & Minimum Downtime

The homogenous material characteristics of our belts allow you to install them in a matter of minutes, which dramatically reduces production downtime to a minimum. Installation is so easy that all you need to do is connect to standard electrical power - no need for water and high pressure air connections!

For most standard belting needs, the tools are easily handled by one technician.

# **Easily Repairable**

With our tools, local personnel can close holes and patch tears in most of our conveyor belts. After cleaning the tear in the belt and welding a piece of electrode, an identical patch to the original belt is created. For larger damaged areas, a piece can be easily spliced into the belt to mend the damage.

Repairs are quick and easy, returning the belt to active service and extending its operating life.



# Wide Range of Belt Widths

The natural characteristics of Volta conveyor belts make them easy to cut into thin strips. What's more, you can easily and accurately weld along their length to the required width. Volta tools make the task of creating different width belts easy and efficient.



### Tools

We developed a full range of tools for welding and fabricating TPE flat belts. These tools are easy to operate and require only standard electrical power (110 VAC/220 VAC). Best of all, their construction makes them suitable for use in the fabrication shop and field.

Another good reason to use our tools is that they do not require air and water for operation. Thus, making field use easy and simple.

Check our Tool Catalog for more detailed information.

# Main Industries



Fruit and Vegetables Packing Fish Peanuts

# **Metal Industries**



Magnetic Elevators Metal Can Manufacture Metal Parts Stamping Automotive Industry

# Plastic



Plastic Injection Moulding

# **Construction Industries**



Brick Works Marble & Ceramics Industry Wood Industry Roof Tile Industry

# Recycling



Aluminum Recycling Glass Recycling Metal Recycling Paper Recycling

# Printing



Printing Press

# **Detergents and Chemicals**



Salt Processing Ice Processing

# Packaging



General Packaging Corrugated Box Industry

# **Other Industries**



Fabric Cutting Can Productions Cotton Processing



# Technical Data

Belt Type	Illustration	Thickness	Color	Shore Hardness	Temperature Range	Coefficient of Friction on Steel (bottom)	Maximum Work Load		Minimum Pulley Diameter		Pull Force at a Pretension of 1% <sup>(2)</sup>	
							kg/cm	lbs/in	mm	inch	kg/cm	lbs/in
HOMOGENEOUS												
FL	3 4 5 8* 2 2,5 3,2 4 5	3		<b>80A</b>	-40 ~ 130 °F / -40 ~ 55 ℃	0.55	2.9	5.3	20	3⁄4	0.4	2.2
		4					3.2	7.2	30	13/16	0.6	3.4
		5	-				4	9	35	13/8	0./	3.9
		8*					6.4	14.4	60	23/8	1.2	6.8
FZ		2					10	45	30	13/	1.2	6.4
		2.5	95A /	-20 ~ 140 °F /	0.26	10	20 72	30	13/8	1.5	0 10.0	
		J.Z		46D	-30 ~ 60 ℃	0.50	15	7.5	43 60	736	2	12.6
		5					20	112	80	2-78	2.0	16.8
		18		<b>5</b> 9D	-5 ~ 170 °F / -20 ~ 75 ℃	0.28	13	70	60	23%	1.9	10.0
		2.5	.5 3 4				18	100	80	31/8	2.5	14
FK		3					21	120	88	31/2	3.2	17.6
		4					28	160	105	41/4	4.2	23.5
		5					35	200	150	51/8	5	28
HOMOGENEOUS EMBOSSED BOTTOM												
FEST		2			-40 ~ 110 °F / -40 ~ 45 °C	0.7	1.5	8.4	9	11/32	0.3	1.68
		3					1.9	10.64	14	9/16	0.45	2.52
		4		65A			2.6	14.56	18	<sup>23</sup> / <sub>32</sub>	0.6	3.36
		5					3.1	17.36	22	7/8	0.75	4.2
EED7		3		• 86A	-20 ~ 120 °F / -30 ~ 50 ℃	0.35	8	45	30	13/16	0.8	5.1
FEFZ		4					11	61	40	15/8	1.1	6.3
FEZ		2		95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.2	8	45	30	13/ <sub>16</sub>	0.8	4.5
		2.5					10	56	35	13/8	1.0	5.6
		3.2					13	73	43	1 3/4	1.3	7.3
		4					16	90	60	23/8	1.6	9
		5					20	112	80	31/8	2.1	11.8

# Technical Data

Belt Type	Illustration	Thickness	Color	Shore Hardness	Temperature Range	Coefficient of Friction on Steel (bottom)	Maximum Work Load		Minimum Pulley Diameter		Pull Force at a Pretension of 1% <sup>(2)</sup>	
							kg/cm	lbs/in	mm	inch	kg/cm	lbs/in
REINFORCED												
FRL		2		80A	-40 ~ 120 °F / -40 ~ 50 °C	0.2	120(1)	670(1)	10 (25) <sup>(3)</sup>	<sup>3</sup> / <sub>8</sub> (1) <sup>(3)</sup>	5	28
		3					125(1)	700(1)	30 (60) <sup>(3)</sup>	1 <sup>3</sup> /16 (2 <sup>3</sup> /8) <sup>(3)</sup>	12	67
		5					135(1)	756(1)	60 (120) <sup>(3)</sup>	2 <sup>3</sup> / <sub>8</sub> (4 <sup>3</sup> / <sub>4</sub> ) <sup>(3)</sup>	13	73
	Varan	2		86A	-20 ~ 120 °F / -30 ~ 50 ℃	0.2	100(1)	560(1)	20 (40)(3)	<sup>3</sup> ⁄4 (1 <sup>5</sup> /8) <sup>(3)</sup>	5.2	29.1
FRPZ		3					105(1)	588(1)	30 (60) <sup>(3)</sup>	1 <sup>3</sup> /16 (2 <sup>3</sup> /8) <sup>(3)</sup>	5.6	31.4
		4					110(1)	616(1)	40 (80)(3)	1 <sup>5</sup> /8(3 <sup>1</sup> /8) <sup>(3)</sup>	6	33.6
		6					120(1)	672(1)	80 (150) <sup>(3)</sup>	31/8 (6) <sup>(3)</sup>	6.8	38.1
		8(4)					130(1)	728(1)	100 (200) <sup>(3)</sup>	4 (8)(3)	7.6	42.6
EDC		2		95A/ 46D	-20 ~ 140 °F / -30 ~ 60 °C	0.2	130 (1)	725(1)	27 (50) <sup>(3)</sup>	1 <sup>1</sup> / <sub>16</sub> (2) <sup>(3)</sup>	6	33.5
FNG		3					140(1)	780(1)	36 (70) <sup>(3)</sup>	1 <sup>3</sup> /8 (2 <sup>3</sup> /4) <sup>(3)</sup>	7	39
FRGZ		2	2 3 4	95A/ 46D	-20 ~ 140 °F / -30 ~ 60 °C	0.2	130(1)	725(1)	27 (50) <sup>(3)</sup>	1 <sup>1</sup> / <sub>16</sub> (2) <sup>(3)</sup>	6	33.5
		3					140(1)	780(1)	36 (70) <sup>(3)</sup>	1 <sup>7</sup> / <sub>16</sub> (2 <sup>3</sup> / <sub>4</sub> ) <sup>(3)</sup>	7	39
		4					150(1)	836(1)	45 (90) <sup>(3)</sup>	1 <sup>3</sup> ⁄ <sub>4</sub> (3 <sup>1</sup> ⁄ <sub>2</sub> ) <sup>(3)</sup>	7.5	41.7
					IMPRE	SSION TOP						
FEL-ITR10		4		80A	-40 ~ 110 °F / -40 ~ 45 °C	0.45	3.5	5.0	25	1	0.62	3.47
FRL-ITR10	A CAR	4		80A	-40 ~ 120 °F / -40 ~ 50 °C	0.2	125(1)	640(1)	30 (60) <sup>(3)</sup>	1 (2)(3)	3.4	19
SPECIAL/ HI GRIP												
FRG/ST		3		Тор 65А	-20 ~ 140 °F / -30 ~ 60 °C	Top 1.1 Bottom 0.2	115(1)	655 <sup>(1)</sup>	35 (60) <sup>(3)</sup>	13/8 (23/8)(3)	6	33
		3.5					120(1)	670(1)	40 (65) <sup>(3)</sup>	1 <sup>5</sup> /8 (2 <sup>5</sup> /8) <sup>(3)</sup>	6	33
		5		Bottom 95A			130(1)	730(1)	60 (100) <sup>(3)</sup>	2 <sup>3</sup> /8 (4) <sup>(3)</sup>	7	39

(1) Ultimate strength for reinforced belts. (2) Maximum recommended pretention is 3% for non reinforced belts and 1.2% for reinforced belts. For pretension other than 1% multiply the tabled figure by the pretension (%) required. (3) Minimum Pulley for back bending of reinforced flat belts. (4) Not included in standard width.

\* Standard roll size: width - 60" (1500 mm), length - 100 ft (30 m).

\*\* The above data is correct at the time of printing. Nevertheless, we hold the right to revise any details without prior notice.

# Reasons to Use Volta GenCon Belts

- Quality belts made of thermoplastic elastomers that resist water, oils and chemicals; abrasion and cutting
- Excellent Grip keeps your products on the belt throughout
- Belt installation is a matter of minutes
- Repairs are quick and easily made
- Volta GenCon belts are found in the major industry conveying systems
- Powerful carrying capacity due to its thickness variants and reinforced capabilities

Remember: Volta GenCon Belts are the best solution for your conveying system. Our GenCon belts will always provide you with a long and reliable service life.





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