Flat Belts Food Conveyor Belts





The Next Step in Belting



Volta Belts for the Food Industry Applications

Volta Belting developed the use of thermoplastic elastomers in the production of food grade conveyor belts over 30 years ago. The experience and knowledge we have acquired over the years is apparent in every conveyor belt we manufacture. Our high quality materials and rigorous production standards guarantee you the best conveyor belt on the market. All our food belts meet the highest standards for quality and reliability and are USDA/ FDA certified.

Volta food grade belts are designed to incorporate our special homogenous structure and uniquely developed materials in order to deliver a highly hygienic flat food belt line. Here is how: Our belts are manufactured with materials that are resistant to cuts and abrasion; thus, eliminating cuts and crevices where bacteria may harbor and grow. This makes cleaning easy and efficient resulting in savings on labor costs and reduced production downtime. Volta conveyor belts require less water and cleaning chemicals for thorough and efficient cleaning. We recommend using our tools for fabricating and welding your food grade belts in order to maintain the hygienic characteristics of your Volta belt. Ask for our Tools Catalog from your Volta dealer.



Positive-Drive Belts

SuperDrive™ is an extremely hygienic belt due to its homogenous material characteristics and smooth operating surfaces, ensuring effective and easy cleaning. We have integrated teeth to the drive-side which function as a positive-drive and guide for the belt. This in turn, prevents slippage, belt tension and off-tracking; belt and product damage.

The **DualDrive**[™] belt has integral teeth and is designed for easy and fast replacement of currently running modular applications with no retrofit requirements on existing sprockets. The pitch of the teeth matches the Intralox Series 800 drives or similar 2" pitch.

Hygienic and Easy to Clean

Volta belts have a well-earned reputation for their extremely smooth cut and abrasion resistant surfaces. These smooth, highly resistant surfaces eliminate places for bacteria and microbes to harbor and grow.

Easy belt cleaning will lower costs for your company by:

- Reducing water, detergent and sewage consumption
- Lower sanitation costs
- And minimizing production downtime

Homogeneous and Non-Absorbent

Our flat food product line is extremely hygienic due to its homogenous material characteristics and smooth operating surfaces, which significantly contribute to the non-absorbent and odor-resistant characteristics of our belts.

We offer a special fabric reinforced belt with covered bottom for applications that require high loads and a small pulley. This belt has a single fabric reinforced layer on the bottom of the belt, leaving between 1.6 to 8 mm of homogeneous TPE on top of the belt that is in contact with the conveyed goods. For high-hygienic applications, we offer a TPE fabric reinforced belt with sealed edges.

Volta Belts for the Food Industry Applications



FDA/USDA Certified

Volta food belts are used throughout the food industry from product transfer to food processing lines. This is why we generated a Quality System that encompasses every stage in the production of food conveyor belts.

As a result, Volta belts not only meet the highest standards for quality and reliability, but also meet the toughest international standards for food contact materials.





Improved Shelf Life of Final Product

Volta food grade belts stay clean longer and show exceptionally low bacteria and microbe counts during normal operations. In turn, our belts improve the final product's shelf life by greatly reducing the chances of contamination and eliminating expensive recalls of the conveyed end-products.

Low bacteria counts:

- Reduce product contamination
- Extend and improve product shelf life
- Reduce the potential for expensive recalls

Highly Flexible

Many applications require the transfer of product from one conveyor to another. In order to bring the two conveyors close together, the pulleys at the transfer point must be very small placing a lot of stress on the belt. We have a number of belts - homogeneous and reinforced - that are designed for these applications. Reduced stress on the belt extends the belt's operating life.



Opaque (See-Through) Quality

The food processing industry is increasingly using optical scanners for sorting of the products during processing and packaging; and for monitoring of contamination and defects.

Volta has the ideal solution for these new applications: Our thin LW and H material candling belts. These belts allow good light transmission since they are opaque. Another reason to use our LW and H material belts is that there are no blind spots to the scanner after welding the belt. The reason: Volta tools weld the belt producing a seam identical to the other section of the belt.



Volta Belts for the Food Industry Applications









Non-Sticking Surface

Many applications require a conveying surface that will prevent food from sticking. The unique conveying surface on our flat belts reduces this problem in most applications. For particularly sticky products, we have a line of belts with impression tops to make product release even easier.

Easy product release from the belt:

- Reduces the amount of product lost at the transfer point
- Makes the belt cleaning easier and more efficient
- Maintains the integrity of the product

Long Life of Belt

When using Volta's high quality materials and techniques, you will stop removing your belt early on. Instead, when using our conveyor belts, your belt life will greatly increase. Thus, a long operating life for your conveyor belt.

- No fabric layers to be contaminated or cause possibility of delamination
- Rugged, damage resistant surfaces eliminate belt contamination
- High resistance to hydrolysis, oils and chemicals gives the belt the ability to maintain its resilience over many years

Quality Fabrications

Volta homogenous flat belts are an ideal and strong base for a full range of fabrications such as cleats, sidewalls, guides and various types of pacelines. Using our tools make the fabrication process quick and easy.

By combining Volta homogeneous flat belts with cleats, guides and sidewalls made from our high quality materials and versatile tools, we ensure you that the fabricated belt will last for a long time. Therefore, your Volta cleats, sidewalls and guides will not break nor delaminate.

Simple Installation and Easy to Use Tools

Use Volta materials and tools to make the process of replacing a belt simple and straight forward. Welding your belt on the conveyor is easy with our Flat Butt Welder or FT Electrode Welder. There is no need to bring high pressure air or cooling water to the job sight. For most belt widths, the tools can be handled safely by one technician. Volta tools reduce the time and costs associated with belt installations. Returning a conveyor to service in the shortest time possible reduces costly downtime. Operation of the tools is easily learned and they require only standard electrical power (110 VAC/220 VAC). Our tools may be used in the fabrication shop and field. Check our Tool Catalog for details.

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% ⁽²⁾	
		mm					kg/cm	lbs/in	mm	inch	kg/cm	lbs/in
HOMOGENEOUS												
		2		95A / 46D	-20 ~ 140 °F/ -30 ~ 60 °C	0.4	7.7	43	30	1 ³ / ₁₆	1.14	6.4
FW*		3					11.5	64	40	15/8	1.7	9.6
		4					15.5	85	60	23/8	2.28	12.8
		2	_	95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.36	8	45	30	1 ³ / ₁₆	1.2	6.8
	Ţ.	2.5					10	56	35	13/8	1.5	8.4
FMW*		3					12	67	40	15/8	1.8	10.1
		4					16	90	60	2 ³ /8	2.4	13.5
		5					20	112	80	31/8	3.0	16.9
		2	_	95A /	-20 ~ 140 °F / -30 ~ 60 ℃	0.36	8	45	30	1 ³ / ₁₆	1.2	6.8
FMB*		2.5 3					10	56	35	1 ³ /8	1.5	8.4
				46D			12	67	40	15/8	1.8	10.1
		4					16	90	60	23/8	2.4	13.5
		1.5		59D	-5 ~ 170 °F / -20 ~ 75 ℃	0.28	10	60	50	2	1.5	8.4
FHW*		2					14	80	70	23/4	2.0	11.2
		2.5					18	100	80	31/8	2.5	14.0
		3					21	120	90	31/2	3.0	16.8
		4					28	160	110	41/4	4.0	22.4
		5					35	200	150	57/8	5.0	28.0
		2			-5 ~ 170 °F / -20 ~ 75 °C	0.28	14	80	70	23/4	2.0	11.2
FHB*		3		59D			21	120	90	31/2	3.0	16.8
		4			20 75 C		28	160	110	41/4	4.0	22.4
HOMOGENEOUS EMBOSSED BOTTOM												
		1.6			-40 ~ 120 °F / -40 ~ 50 °C	0.45	1.6	2.9	10	3/8	0.32	1.79
FELW		2	\bigcirc	80A			2	3.6	12	1/2	0.40	2.24
		3					3	5.4	20	3/4	0.60	3.36
FELB		1.6		80A	-40 ~ 120 °F / -40 ~ 50 ℃	0.45	1.6	2.9	10	3/8	0.32	1.79
		2					2	3.6	12	1/2	0.40	2.24
FEW		2		95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.25	7.7	43	30	1 ³ /16	0.76	4.2
		3	\bigcirc				11.5	64	40	15/8	1.12	6.3
		4					15.5	85	60	23/8	1.50	8.4

* USDA Dairy Approved



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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% ⁽²⁾		
		mm					kg/cm	lbs/in	mm	inch	kg/cm	lbs/in	
		2	-	95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.25	8	45	30	1 ³ / ₁₆	0.80	4.50	
		2.5					10	56	35	13/8	1.00	5.60	
FEMW*		3					12	67	40	15/8	1.20	6.80	
	Carrier and Carrier	4	-				16	90	60	23/8	1.60	9.20	
		5					20	112	80	31/8	2.10	11.70	
		2	-		-20 ~ 140 °F / -30 ~ 60 ℃	0.25	8	45	30	1 3/16	0.80	4.50	
FEMB*		2.5		95A/			10	56	35	13/8	1.00	5.60	
		3		46D			12	67	40	15/8	1.20	6.80	
		4					16	90	60	2 ³ /8	1.60	9.20	
REINFORCED													
EDI W/		1.6		80A	-40 ~ 120 °F / -40 ~ 50 °C	0.2	110 (1)	615 (1)	8 (20)(3)	⁵ / ₁₆ (³ / ₄) ⁽³⁾	4	22	
		2				0.2	115 (1)	640 (1)	10 (25) ⁽³⁾	³ / ₈ (1) ⁽³⁾	5	28	
EDIR	10000	1000 000 000 000 000 000 000 000 000 00	1.6		<u>00</u> A	-40 ~ 120 °F /	0.2	110 (1)	615 ⁽¹⁾	8 (20)(3)	⁵ / ₁₆ (³ / ₄) ⁽³⁾	4	22
TRED	Caracter and	2		007	-40 ~ 50 °C	0.2	115 (1)	640 (1)	10 (25) ⁽³⁾	³ / ₈ (1) ⁽³⁾	5	28	
ED\//	2 3 2 2.5 3		2		95A/	-20 ~ 140 °F /	0.2	120 (1)	670 (1)	25 (50) ⁽³⁾	1 (2)(3)	6	33.5
FRVV			3	\cup	46D	-30 ~ 60 ℃		130 (1)	726 (1)	35 (70) ⁽³⁾	1 ³ / ₈ (2 ³ / ₄) ⁽³⁾	7	39
			2	2					130 (1)	725 (1)	25 (50) ⁽³⁾	1(2)(3)	6
FRMW			95A / 46D	-20 ~ 140 °F /	0.2	135 (1)	752 (1)	30 (60) ⁽³⁾	1 ³ / ₁₆ (2 ³ / ₈) ⁽³⁾	6.5	36.2		
			3		400	50 × 00 C		140 (1)	780 (1)	35 (70) ⁽³⁾	1 ³ / ₈ (2 ³ / ₄) ⁽³⁾	7	39
COVERED BOTTOM													
FRLW CEBB		2	\bigcirc	80A	-40 ~ 120 °F / -40 ~ 50 ℃	0.30	100 (1)	560 ⁽¹⁾	19 (35) ⁽³⁾	³ / ₄ (1 ³ / ₈) ⁽³⁾	2.2	12.4	
		2 3 3 95			-40 ~ 120 °F /		100 (1)	560 (1)	19 (35) ⁽³⁾	3/4 (13/8)(3)	2.2	12.4	
FRER CERR			80A	-40 ~ 50 ℃	0.30	110 (1)	610 (1)	30 (55) ⁽³⁾	1 ¹ / ₄ (2 ¹ / ₈) ⁽³⁾	2.8	15.6		
FRMW CEBC			95	95A /	-20 ~ 140 °F /	0.30	110 (1)	620 (1)	40 (100) ⁽³⁾	1 ⁵ / ₈ (4) ⁽³⁾	6.8	38	
		5		46D	-30 ~ 60 ℃		120 (1)	670 ⁽¹⁾	80 (175) ⁽³⁾	3 ¹ / ₈ (7) ⁽³⁾	10	56	
FRMB CEBB		3		95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.30	110 (1)	620 ⁽¹⁾	40 (100) ⁽³⁾	15/8 (4) ⁽³⁾	6.8	38	

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		mm					kg/cm	lbs/in	mm	inch	kg/cm	lbs/in
MINI CLEAT												
FFIW-MC		2.5		80A	-40 ~ 120 °F / -40 ~ 50 ℃	0.45	2.5	4.5	40 (35)	15/8 (13/8)	0.50	2.8
		3					3	5.4	50 (40)	2 (15/8)	0.60	3.4
FEMB MC	XX	3		95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.25	12	67	70 (50)	2 3/4(2)	1.2	6.8
FRMB CB MC	\checkmark	3		95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.45	110 (1)	620 (1)	70 (100) ⁽³⁾	23/4 (4)(3)	7.2	40
IMPRESSION TOP*												
FELW ITO 50		3					2.5	14	18	¹¹ / ₁₆	0.5	2.8
FELW ITR 10		4		80A	-40 ~ 120 °F / -40 ~ 50 °C	0.45	3.75	21	25	1	0.7	3.92
		2.5					2.1	11.6	15	⁹ / ₁₆	0.4	2.32
FELBIIO 30	ІТО	3					2.5	14	18	11/16	0.5	2.8
FRLW ITO 50		2.5		0.0.4	-40 ~ 120 °F /	0.2	110 (1)	620 (1)	15 (30) ⁽³⁾	9/ ₁₆ (1 1/ ₄) ⁽³⁾	3.2	18
FRLW ITR 10		4		80A	-40 ~ 50 ℃		125 (1)	640 (1)	30 (60) ⁽³⁾	1 (2)(3)	3.4	19
FRLB CEB-B- ITO-50		2.5		80A	-40 ~ 120 °F / -40 ~ 50 ℃	0.30	110 (1)	620 (1)	15 (30)	⁹ / ₁₆ (1 ³ / ₁₆)	3.5	18
	ITR	2.5		95A /	-20 ~ 140 °F /	0.25	7.4	41.44	35	13/8	0.74	4.2
		3		46D	-30 ~ 60 ℃		9.3	52.08	40	15/8	0.94	5.26
		2					5.8	32.48	30	1 3/16	0.6	3.36
FEMW ITO 50		2.5	$\left \right\rangle$	95A / 46D	-20 ~ 140 °F / -30 ~ 60 °C	0.25	7.4	41.44	35	13/8	0.74	4.2
		3					9.3	52.08	40	15/8	0.94	5.26
FRMW ITO 50		2.5		95A /	-20 ~ 140 °F / -30 ~ 60 ℃	0.2	125 (1)	700 (1)	32 (64) ⁽³⁾	11/4 (21/2)(3)	4.1	24
		3		46D			130 (1)	730 (1)	36 (70) ⁽³⁾	17/16 (27/8) ⁽³⁾	4.3	25.2
FRMB ITO 50		2.5		95A / 46D	-20 ~ 140 °F / -30 ~ 60 ℃	0.2	125 (1)	700 (1)	32 (64) ⁽³⁾	11/4 (21/2)(3)	4.1	24
		3					130 (1)	730 (1)	36 (70) ⁽³⁾	17/16 (27/8)(3)	4.3	25.2

(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.

* For more information on specific texture types, please consult with your Volta representative and/or request our Impression Top flier.

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

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

Reasons to Use Volta Flat Food Belts

- Overall Cleanliness No more cuts, crevices or fraying where bacteria may harbor and grow
- Extremely smooth and non-absorbent; cut and abrasion resistant surfaces
- Minimum Downtime Easy to clean and simple installation on-site
- Improved end-product shelf-life
- Strong base for a full range of fabrications and coatings
- USDA/ FDA/ USDA Dairy Approved

Remember: Our Food Grade Belts always stay clean longer and will always provide you with a long and reliable service life.





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