



*Conveying Solutions*  
***Flat Belts - Food Industry***



# Flat Belts For the Food Industry

- ➔ For over 40 years Volta has been manufacturing Flat Food Belting from highest quality Thermoplastic Elastomers (TPE) material providing unique homogeneous characteristics. Standard Belt Width = 1524mm /60"
- ➔ Meet with international hygiene standards for quality, reliability and food contact. **FDA/USDA Approved**. Declaration of Conformity in compliance with **EU Regulations No.: 10/2011, 1935/2004** and **Directive 2002/72/EC**. Suited to **HACCP** standards.
- ➔ A variety of fully extruded textured tops are offered and belt underside is available in smooth, embossed or reinforced types.
- ➔ The smooth base belts have cut and abrasion resistant surfaces, eliminating any crevices where bacteria may harbor. Their non-absorbent nature makes cleaning simple, increasing hygiene levels.
- ➔ Volta's environment friendly belts allow drastic reduction in water usage and convert cleaning time to precious production time.
- ➔ These belts are also easy to install on-site and act as a strong base for quality thermo welded specialized fabrications, providing solutions to our customers' special design.
- ➔ Volta products are the ideal choice where hygiene and conveying efficiency are vital.

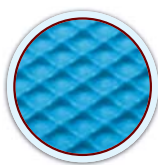
## Homogeneous Belts

Product & Color	Shore Hardness	Temperature Range	Coefficient of Friction on Steel (Bottom)	Thickness	Minimum Pulley Diameter		Pull Force: Pretension of 1%		Approvals
				mm	mm	Inch	kg/cm	lbs/in	
FHB	59D	-20° C to 75° C -5° F to 170° F	0.28	1.5	50	2	1.50	8.40	FDA/ USDA/ EU
				2	70	2¾	2	11.20	
				3	90	3½	3	16.80	
				4	110	4¾	4	22.40	
				5	150	5¾	5	28.00	
FHW	59D	-20° C to 75° C -5° F to 170° F	0.28	1	34	1¾	1	5.60	FDA/ USDA/ EU
				1.5	50	2	1.50	8.40	
				2	70	2¾	2	11.20	
				2.5	80	3⅛	2.50	14.00	
				3	90	3½	3	16.80	
				4	110	4¾	4	22.40	
FMB	95A/46D	-30° C to 60° C -20° F to 140° F	0.36	1.6	21	13/16	0.96	5.37	FDA/ USDA/ EU
				2	30	1¾	1.20	6.80	
				2.5	35	1¾	1.50	8.40	
				3	40	1¾	1.80	10.10	
				4	60	2¾	2.40	13.50	
FW	95A/46D	-30° C to 60° C -20° F to 140° F	0.36	2	30	1¾	1.14	6.40	FDA/ USDA/ EU
				3	40	1¾	1.70	9.60	
				4	60	2¾	2.28	12.80	
FMW	95A/46D	-30° C to 60° C -20° F to 140° F	0.36	1.6	21	13/16	0.96	5.37	FDA/ USDA/ EU
				2	30	1¾	1.20	6.80	
				2.5	35	1¾	1.50	8.40	
				3	40	1¾	1.80	10.10	
				4	60	2¾	2.40	13.50	
				5	80	3⅛	3	16.90	

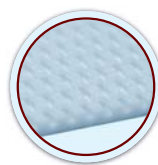
## Flat Belt Top Surfaces



Smooth



ITO-50  
Impression Top  
Oval



ITR-10  
Impression Top  
Rough



IRT  
Impression  
Roof Top



SP  
Spikes



CT  
Crescent Top

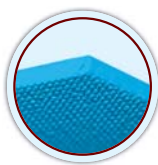


MC  
Mini Cleats

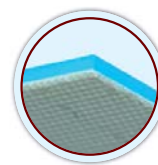
## Flat Belt Bottom Surfaces



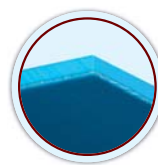
Smooth



Embossed



Reinforced



Reinforced Covered Bottom

### Homogeneous Embossed Bottom Belts

Product & Color		Shore Hardness	Temperature Range	Coefficient of Friction on Steel (Bottom)	Thickness		Minimum Pulley Diameter		Pull Force: Pretension of 1%		Approvals
					mm	mm	Inch	kg/cm	lbs/in		
<b>FEHB</b>		95D	-20° C to 75° C -5° F to 170° F	0.20	3	90	3½	3	16.80	FDA/ USDA/ EU	
<b>FEHW</b>					4	110	4¾	4	22.40		
<b>FELB</b>		80A	-40° C to 50° C -40° F to 120° F	0.45	1.6	10	¾	0.32	1.79	FDA/ EU	
					2	12	½	0.40	2.24		
					3	18	13/16	0.60	3.36		
<b>FELW</b>		80A	-40° C to 50° C -40° F to 120° F	0.45	1.6	10	¾	0.32	1.79	FDA/ EU	
					2	12	½	0.40	2.24		
					2.5	15	9/16	0.50	2.80		
					3	20	13/16	0.60	3.36		
<b>FEMB</b>		95A/46D	-30° C to 60° C -20° F to 140° F	0.25	1.6	24	15/16	0.64	3.62	FDA/ USDA/ EU	
					2	30	1¾	0.80	4.50		
					2.5	35	1¾	1	5.60		
					3	40	1⅝	1.20	6.80		
					4	60	2¾	1.60	9.20		
<b>FEMW</b>		95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	30	1¾	0.80	4.50	FDA/ USDA/ EU	
					2.5	35	1¾	1	5.60		
					3	40	1⅝	1.20	6.80		
					4	60	2¾	1.60	9.20		
					5	80	3⅛	2.10	11.70		
<b>FEW</b>		95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	30	1¾	0.76	4.20	FDA/ USDA/ EU	
					3	40	1⅝	1.12	6.30		
					4	60	2¾	1.50	8.40		

### Reinforced Belts

<b>FRLB</b>		80A	-40° C to 50° C -40° F to 120° F	0.20	1.6	8	5/16	4	22	FDA/ EU
					2	10	¾	5	28	
<b>FRLW</b>		80A	-40° C to 50° C -40° F to 120° F	0.20	1.6	8	5/16	4	22	FDA/ EU
					2	10	¾	5	28	
					2.5	15	9/16	6.20	34.50	
					3	18	11/16	7.50	42	
<b>FRMB</b>		95A/46D	-30° C to 60° C -20° F to 140° F	0.20	2	25	1	6	33.50	FDA/ USDA/ EU
					3	35	1¾	7	39	
<b>FRMW</b>		95A/46D	-30° C to 60° C -20° F to 140° F	0.20	2	25	1	6	33.50	FDA/ USDA/ EU
					2.5	30	1¾	6.50	36.20	
					3	35	1¾	7	39	

Impression Top Belts

Product & Color		Shore Hardness	Temperature Range	Coefficient of Friction on Steel (Bottom)	Thickness			Minimum Pulley Diameter		Pull Force: Pretension of 1%		Approvals
					mm	mm	Inch	kg/cm	lbs/in			
ITO 50	FELB - ITO50	80A	-40° C to 50° C -40° F to 120° F	0.45	2	12	1/2	0.32	1.87	FDA/ EU		
					2.5	15	9/16	0.40	2.32			
					3	18	11/16	0.50	2.80			
	FELW - ITO50	80A	-40° C to 50° C -40° F to 120° F	0.45	2	12	1/2	0.32	1.87	FDA/ EU		
					2.5	15	9/16	0.40	2.32			
					3	18	11/16	0.50	2.80			
	FMB - ITO50	95A/46D	-30° C to 60° C -20° F to 140° F	0.36	2.5	35	1 3/8	1.50	8.40	FDA/ USDA/ EU		
	FEMB - ITO50	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	30	1 3/16	0.60	3.36	FDA/ USDA/ EU		
					2.5	35	1 3/8	0.74	4.20			
					3	40	1 5/8	0.94	5.26			
	FEMW - ITO50	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	30	1 3/16	0.60	3.36	FDA/ USDA/ EU		
					2.5	35	1 3/8	0.74	4.20			
					3	40	1 5/8	0.94	5.26			
	FHW - ITO50	59D	-20° C to 75° C -5° F to 170° F	0.28	2	70	2 3/4	1.50	8.40	FDA/ USDA/ EU		
					2.5	80	3 1/8	2	11.20			
					3	90	3 1/2	2.50	14			
	ITR10	FELW - ITR10	80A	-40° C to 50° C -40° F to 120° F	0.45	3	18	11/16	0.50	2.80	FDA/ EU	
						4	25	1	0.70	3.92		
IRT	FELB - IRT	80A	-40° C to 50° C -40° F to 120° F	0.45	4	25	1	0.60	3.40	FDA/ EU		
	FEMB - IRT	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	3.5	40	1 5/8	1	5.60	FDA/ USDA/ EU		
					4	55	2 3/16	1.20	6.80			
FMB - IRT	95A/46D	-30° C to 60° C -20° F to 140° F	0.36	3.5	52.5	2 1/8	2.10	11.80	FDA/ USDA/ EU			
Spikes*	FELB - SP	80A	-40° C to 50° C -40° F to 120° F	0.45	2	20	13/16	0.40	2.24	FDA/ EU		
					2.5	24	15/16	0.50	2.80			
					3	28	1 1/8	0.60	3.36			
FEMB - SP	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	40	1 5/8	0.80	4.50	FDA/ USDA/ EU			
				2.5	45	1 3/4	1	5.60				
				3	50	2	1.20	6.80				
FEMW - SP	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	40	1 5/8	0.80	4.50	FDA/ USDA/ EU			
				2.5	45	1 3/4	1	5.60				
				3	50	2	1.20	6.80				
Crescent Top	FELB - CT	80A	-40° C to 50° C -40° F to 120° F	0.45	3	35	1 3/8	0.60	3.36	FDA/ EU		
	FMB - CT	95A/46D	-30° C to 60° C -20° F to 140° F	0.40	3	60	2 3/8	1.80	10.12	FDA/ USDA/ EU		
	FEMB - CT			0.25	3	60	2 3/8	1.20	6.75			
	FEMW - CT			0.25	2.5	50	2	1	5.60			
Mini Cleats	FELB - MC	80A	-40° C to 50° C -40° F to 120° F	0.45	2.5	40	1 5/8	0.50	2.80	FDA/ EU		
	FELW - MC	80A	-40° C to 50° C -40° F to 120° F	0.45	2.5	40	1 5/8	0.50	2.80	FDA/ EU		
					3	50	1 5/8	0.60	3.40			
FEMB - MC	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	3	70	2 3/4	1.20	6.80	FDA/ USDA/ EU			

Notes: Spikes - \*Height of Spikes above base belt is 2.8 mm.

### Reinforced Impression Top Belts

Product & Color	Shore Hardness	Temperature Range	Coefficient of Friction on Steel (Bottom)	Thickness		Minimum Pulley Diameter		Pull Force: Pretension of 1%		Approvals
				mm		mm	Inch	kg/cm	lbs/in	
FRLB - ITO50	80A	-40°C to 50°C / -40°F to 120°F	0.20	2.5		15	9/16	3.20	18	FDA/ EU
FRLW - ITO50	80A	-40° C to 50° C -40° F to 120° F	0.20	2.5		15	9/16	3.20	18	FDA/ EU
				3		18	11/16	3.48	21.60	
FRMB - ITO50	95A/46D	-30° C to 60° C -20° F to 140° F	0.20	2.5		32	1 1/4	4.10	24	FDA/ USDA/ EU
				3		36	17/16	4.30	25.20	
FRMW - ITO50	95A/46D	-30° C to 60° C -20° F to 140° F	0.20	2.5		32	1 1/4	4.10	24	FDA/ USDA/ EU
				3		36	17/16	4.30	25.20	
FRLW - ITR10	80A	-40°C to 50°C / -40°F to 120°F	0.20	4		30	1	3.40	19	FDA/ EU

### ➔ Covered Bottom Flat Belts

Ideal for long runs in the food industry where hygiene is a priority and reinforcement is necessary. The fabric reinforcement is thermally coated with a thin layer of Volta TPE to entirely seal the fabric preventing contamination from liquid penetration and avoiding delamination. In addition, edges can be thermo sealed to completely prevent fraying.



### Covered Bottom/ Covered Bottom Impression Top Belts

Product & Color	Shore Hardness	Temperature Range	Coefficient of Friction on Steel (Bottom)	Thickness		Minimum Pulley Diameter		Pull Force: Pretension of 1%		Approvals
				mm		mm	Inch	kg/cm	lbs/in	
FRLB - CEB - B	80A	-40° C to 50° C -40° F to 120° F	0.30	2		19	3/4	2.20	12.40	FDA/ EU
				3		30	1 1/4	2.80	15.60	
FRLW - CEB - B	80A	-40° C to 50° C -40° F to 120° F	0.30	2		19	3/4	2.20	12.40	FDA/ EU
				3		30	1 1/4	2.80	15.60	
FRLW - CEB - C	80A	-40° C to 50° C -40° F to 120° F	0.20	2		19	3/4	2.20	12.40	FDA/ EU
				3		30	1 1/4	2.80	15.60	
FRLW - CB	80A	-40°C to 50°C / -40°F to 120°F	0.45	2		19	3/4	3.10	17.40	FDA/ EU
FRMB - CEB - B	95A/46D	-30° C to 60° C -20° F to 140° F	0.30	3		40	1 5/8	6.80	38	FDA/ USDA/ EU
FRMB - CEB - C			0.30	3		40	1 5/8	6.80	38	FDA/ EU
FRMB - CB			0.45	3		40	1 5/8	7.20	40	FDA/ USDA/ EU
FRMW - CEB - C			0.30	3		40	1 5/8	6.80	38	FDA/ USDA/ EU
FRLB - CEB - B - ITO50	80A	-40°C to 50°C / -40°F to 120°F	0.30	2.5		15	9/16	3.50	18	FDA/ EU

### Belt Coating Materials for the Food Industry

Products	GIB	MIB	WIB	FEIB	FEMB-SP	FEMW-SP	FELB-SP
Illustration							
Description	Super Grip	Multi Grip	Wood Grip	High Grip	Spikes	Spikes	Spikes
Hardness	62A	62A	62A	62A	95A	95A	85A
Size (mm)	Width*	50	50	70	1524	1524	1524
	Thickness	4	6	4	2/ 2.5/ 3/ 4	2/ 2.5/ 3**	2/ 2.5/ 3**
CoF (Steel)	0.98	1.08	1.05	0.95	0.25	0.25	0.45
Temperature Range	-20° C to +40° C				-30° C to +60° C		-40° C to +50° C

**Notes:** Width\* - Maximum available width. \*\*Height of Spikes above base belt is 2.8 mm.

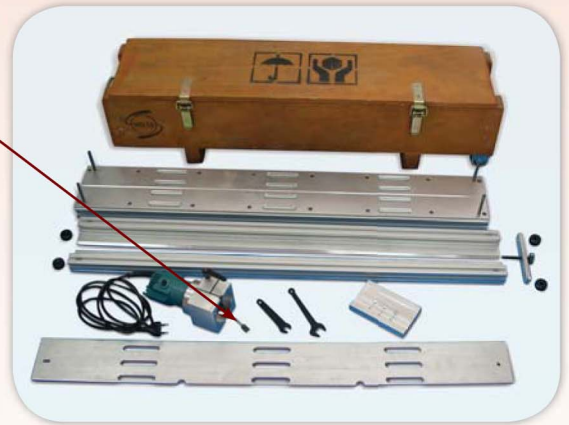
## Endless Making Techniques

Volta provides you with a choice of tools especially designed to ensure high quality heat welded endless making of the full range of Flat belts. Our tools have a lightweight design which makes each tool compact, rugged and easy to use in the field and workshop. When using Volta tools only electrical power is needed and no water cooling or air pressure is required.



### ← FBW - Butt Welding Tool

The FBW System was created to butt-weld flat belts making them endless. The FBW Welding System should be used with suitable adaptors available for special textured top flat belts



### → FT - Electrode Welding Kit

The FT Welding System is a tool for electrode welded endless making highly suitable for Volta flat belts. The FT Welding System uses a router to cut the bevel on the belt edges and to trim the weld on completion. The weld is carried out by using a Leister Hot Air Gun and Volta electrodes.

### → Volta Lace Systems

The Volta Lace is a device that allows you to easily open the belt for cleaning or servicing of the conveyor. Our lace can also be used in applications where metal detectors are required and we can provide you with a polyester hinge pin upon request. Volta lace is compatible with Volta 'M' Family Flat Belts of 2.5 to 5 mm thickness. All Volta flat belt material is easy to clean without removing from conveyor and therefore we only recommend lace when absolutely necessary.



*We are committed to providing a complete package focusing on servicing our customers all the way, up until the belts are safely installed and the conveyor is running smoothly.*

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