



Conveying Solutions

Flat Belts-Food Industry



The Next Step in Belting

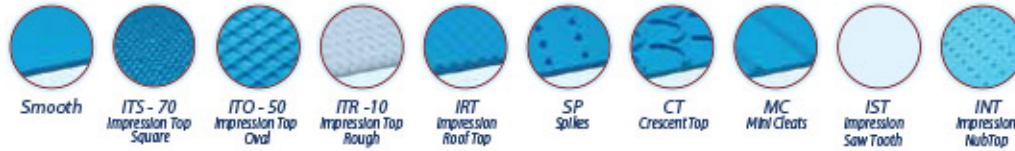
Flat Belts for the Food Industry

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	2 ¾	2	11.20	
				3**		90	3 ½	3	16.80	
				4		110	4 ⅜	4	22.40	
				5		150	5 ⅞	5	28.00	
				6		180	7	6	33.60	
FHW	59D	-20° C to 75° C -5° F to 170° F	0.28	1*		34	1 ⅜	1	5.60	FDA/ USDA/ EU
				1.5		50	2	1.50	8.40	
				2		70	2 ¾	2	11.20	
				2.5		80	3 ⅛	2.50	14.00	
				3		90	3 ½	3	16.80	
				4		110	4 ⅜	4	22.40	
				5		150	5 ⅞	5	28.00	
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	1 ⅜	1.20	6.80	
				2.5		35	1 ⅜	1.50	8.40	
				3**		40	1 5/8	1.80	10.10	
				4		60	2 ⅜	2.40	13.50	
				5		80	3 ⅛	3	16.90	
				6		90	2 5/8	3.60	20.25	
				7		105	4 ⅓	4.20	23.80	
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	1 ⅜	1.20	6.80	
				2.5		35	1 ⅜	1.50	8.40	
				3		40	1 5/8	1.80	10.10	
				4		60	2 ⅜	2.40	13.50	
				5		80	3 ⅛	3	16.90	
				7		105	4 ⅓	4.20	23.80	
FW	95A/46D	-30° C to 60° C -20° F to 140° F	0.36	2		30	1 ⅜	1.14	6.40	FDA/ USDA/ EU
				3*		40	1 5/8	1.70	9.60	
				4*		60	2 ⅜	2.28	12.80	
FLB	80A	-40°C to 50°C/ -40°F to 120°F	0.55	2.5**		17	2 1/32	0.30	1.80	FDA/EU
				3**		20	¾	0.40	2.20	
				4**		30	1 ⅜	0.60	3.40	
FTB	72A	-40°C to 40°C -40°F to 104°F	1.25	2.5		16	5/8	0.475	2.66	FDA/ USDA/ EU
				3		19	¾	0.57	3.2	
Low Temperature (LT) Homogeneous Belts										
FMB-LT	95A/46D	-35°C to 40°C -31°F to 104°F	0.4	1.6		16	5/8	0.64	3.60	FDA/ USDA/ EU
				2		30	1 ⅜	0.80	4.40	
				3		40	1 5/8	1.20	6.70	
				4		60	2 ⅜	1.60	9	
				5		80	3 ⅛	2	11.20	
				6		90	2 5/8	2.40	13.40	

Note: * Not standard. Standard belt width=1524mm/60".

**Available in 2000mm /80" width.

Flat Belt Top Surfaces



Flat Belt Bottom Surfaces



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		
FEHB	Blue	59D	-20° C to 75° C -5° F to 170° F	0.20	3	90	3½	3	16.80	FDA/ USDA/ EU	
FEHW					4	110	4¾	4	22.40		
FELB	Blue	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	20	13/16	0.60	3.36		
FELW	Light Blue	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		
FEMB	Blue	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	1.6**	24	15/16	0.60	3.60	FDA/ USDA/ EU	
					2**	30	13/16	0.80	4.50		
					2.5**	35	1¾	1	5.60		
					3**	40	15/8	1.20	6.80		
					4	60	2¾	1.60	9.20		
FEMW	Yellow	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	30	13/16	0.80	4.50	FDA/ USDA/ EU	
					2.5	35	1¾	1	5.60		
					3	40	15/8	1.20	6.80		
					4	60	2¾	1.60	9.20		
					5	80	3½	2.10	11.70		
FEW	White	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2	30	13/16	0.76	4.20	FDA/ USDA/ EU	
					3	40	15/8	1.12	6.30		
					4	60	2¾	1.50	8.40		
FETB	Dark Blue	72A	-40° C to 40° C -40° F to 104° F	1	1.6	10	¾	0.29	1.6	FDA/ USDA/ EU	
					2	13	½	0.36	2		
					3	19	¾	0.55	3		
Reinforced Belts											
FRLB	Blue	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		
FRLW	Light Blue	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	35		
					3	18	11/16	7.50	42		
FRMB	Blue	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	13/8	7	39		
FRMW	Yellow	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	13/16	6.50	36.20		
					3**	35	13/8	7	39		
FRTB*	Dark Blue	72A	-40° C to 40° C -40° F to 104° F	0.20	1.6	8	5/16	2.60	14.90	FDA/ USDA/ EU	

Note: FRTB PF* - Pull Force calculated with Finger-Splice welding. ** Available in 2000mm /80" width.

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		
ITS70	FELB- ITS70	80A	-40° C to 50° C -40° F to 120° F	0.45	1.6		10	3/8	0.24	1.40	FDA/ EU	
					2		12	1/2	0.30	1.74		
IST	FELB - IST	80A	-40° C to 50° C -40° F to 120° F	0.45	2//4***		35	1 3/8	0.40	2.20	FDA/ EU	
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	
	FELW - ITO50				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 1/8	0.74	4.20	
						3		40	1 5/8	0.94	5.26	
						5**		70	2 3/4	1.48	8.40	
	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 1/8	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	0.52	2.94	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 1/16	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		
				4		60	2 3/8	2.40	13.50			
Spikes*	FELB - SP	80A	-40° C to 50° C -40° F to 120° F	0.45	2		20	1 3/16	0.40	2.24	FDA/ EU	
					2.5		24	1 5/16	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		
FEMW - SP					3		50	2	1.20	6.80		
NUBTOP	FEMB-INT	95A/46D	-30° C to 60° C -20° F to 140° F	0.25	2		50	2	0.80	4.50	FDA/ USDA/ EU	
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				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	2	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		

Note: Spikes - *Height of Spikes above base belt is 2.8 mm. **Available in 2000mm /80" width. ***Base=2mm total belt height 4mm.

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	1¼	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	1¼	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
FRLB - ITS70	80A	-40° C to 50° C -40° F to 120° F	0.20	1.6		8	5/16	4	22	FDA/ EU
				2		10	3/8	5	28	

➔ Covered Bottom Flat Belts

Ideal for special applications, for example in bakeries and confectioneries where reinforcement is necessary and hygiene cannot be compromised. The fabric reinforcement is thermally-coated with a thin layer of Volta TPE to provide a seal, preventing both contamination and delamination. As an extra precaution, belt edges can be thermo-sealed or recessed to prevent fraying and the ingress of contaminants.



Fabric Reinforcement coated with homogeneous Volta material.

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	1¼	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	1¼	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	1¼	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	15/8	6.80	38	FDA/ USDA/ EU
FRMB - CEB - C			0.30	3		40	15/8	6.80	38	FDA/ USDA/ EU
FRMB - CB			0.45	3		40	15/8	7.20	40	FDA/ USDA/ EU
FRMW - CEB - C			0.30	3		40	15/8	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/FEMW-SP	FELB-SP	FLB-IST	
Illustration								
Description	Super Grip	Multi Grip	Wood Grip	High Grip	Spikes	Spikes	Saw Tooth	
Hardness	62A	62A	62A	62A	95A	80A	80A	
Size (mm)	Width*	50	50	70	1524	1524	1524	220mm
	Thickness	4	6	4	2/ 2.5/ 3/ 4	2/ 2.5/ 3**	2/ 2.5/ 3**	4
CoF (Steel)	0.98	1.08	1.05	0.95	0.25	0.45	0.55	
Temperature Range	-20° C to +40° C				-30° C to +60° C	-40° C to +50° C	-40° C to +50° C	

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

Aramid Cord Reinforced Belts

A food grade flat belt with special tensioning members hermetically encased in non-porous homogeneous material which has been tested for durability. Used mainly in applications such as loads on long narrow belts with small diameter pulleys.



Aramid Cord Reinforced (ACR) Impression Top Belt										
Product & Color	Shore Hardness	Temperature Range	CoF (bottom) UHMW	Thickness (mm)	Minimum Pulley Diameter		Pull Force: Pretension of 0.2%		Approvals	
					mm	inch	kg/cm width	lbs/in width		
FLB-ITO50-ACR	80A	-40°C to 50°C -40°F to 120°F	0.55	3	25	1	4.6	25.7	FDA/EU	
Aramid Cord Reinforced (ACR) Embossed Bottom Belt										
FELB-ACR	80A	-40°C to 50°C -40°F to 120°F	0.45	2.5	20	1	4.2	23.46	FDA/EU	
Aramid Cord Reinforced (ACR) Impression Top & Embossed Bottom Belt										
FELB-ITO50-ACR	80A	-40°C to 50°C -40°F to 120°F	0.45	2.5	20	0.79	4	22.40	FDA/EU	
FELB-ITO50 ACR RAL 5002	80A	-40°C to 50°C -40°F to 120°F	0.45	2.5	20	0.79	4	22.40	FDA/EU	
FELB-IST-ACR	80A	-40°C to 50°C -40°F to 120°F	0.45	2 // 4*	35	1.38	4.2	23.40	FDA/EU	
Low Temperature (LT) Aramid Cord Reinforced (ACR) Impression Top & Embossed Bottom Belt										
FELB- LT- ITO50-ACR	80A	-40°C to 50°C -40°F to 120°F	0.45	2.5	18	0.70	4	22.40	FDA/EU	
FEMB- LT- ITO50-ACR	95A/46D	-35°C to 50°C -30°F to 120°F	0.25	2.5	40	1.57	4	22.40	USDA/FDA/EU	

Note: *FELB-IST-ACR – Base belt thickness = 2mm // Total belt thickness including Saw tooth impression top = 4mm
Pull force in table relates to a finger splice weld 20x50 mm. The calculation takes into account the weld splice which has strength of 28kg/cm. Note that various finger splice methods and different tools can result in differing belt strengths.
**Available belt width: 1524mm/60inch-standard or 2032mm/80inch.

Endless Splicing Techniques



FT - Electrode Welding System
The FT Welding System provides electrode welding technology.



FBW Flat Butt Welding System
The FBW System performs a butt-weld merging belts edge to edge.

Volta Hinge Lace System

Volta lace is compatible with Volta 'M' material belts from 2.5 to 5 mm thickness. All Volta flat belt materials are easy to clean without removing from conveyor and therefore lace is used only where absolutely necessary. The strength of the belt will be affected at the joint where lace is used.



Corporate Headquarters
Sales and Manufacturing
sales@voltabelting.com

USA
• Tel: +1 973 276 7905
• Fax: +1 973 276 7908
• Toll Free: 1-877-VOLTAUS

EUROPE
• Tel: +31-546-580166
• Fax: +31-546-579508

www.voltabelting.com

Volta Belting makes no warranty with respect to any of its products for a particular purpose. See Volta General Terms and Conditions.

Copyright©2013 Volta Belting Technology Ltd.
CAT504EN00 - Ver. F - April 2015