

TECHNICAL DATA

Belt type & Thickness	Colour	Shore hardness	Maximum work load		minimum pulley diameter		Coefficient of friction (bottom)	Temperature range		1% pull force (2)	
			lb./inch	Kg./Cm	inch	mm		Steel	F°	C°	lb / in

Flat homogenous belts											
FHW-1.5		59D	60	10	2	50	0.28	-5 to 170	-20 to 75	8.40	1.5
FHW-2		59D	80	14	2¾	70	0.28	-5 to 170	-20 to 75	11.20	2.0
FHW-2.5		59D	100	18	3⅛	80	0.28	-5 to 170	-20 to 75	14.00	2.5
FHW-3		59D	120	21	3½	90	0.28	-5 to 170	-20 to 75	16.80	3.0
FHW-4		59D	160	28	4¼	110	0.28	-5 to 170	-20 to 75	22.40	4.0
FHW-5		59D	200	35	5⅞	150	0.28	-5 to 170	-20 to 75	28.00	5.0
FHB-2		59D	80	14	2¾	70	0.28	-5 to 170	-20 to 75	11.20	2.0
FHB-3		59D	120	21	3½	90	0.28	-5 to 170	-20 to 75	16.80	3.0
FHB-4		59D	160	28	4¼	110	0.28	-5 to 170	-20 to 75	22.40	4.0
FMW-2		95A	45	8	1¼	30	0.36	-20 to 140	-30 to 60	6.80	1.2
FMW-2.5		95A	56	10	1⅜	35	0.36	-20 to 140	-30 to 60	8.40	1.5
FMW-3		95A	67	12	1⅝	40	0.36	-20 to 140	-30 to 60	10.10	1.8
FMW-4		95A	90	16	2⅜	60	0.36	-20 to 140	-30 to 60	13.50	2.4
FMW-5		95A	112	20	3⅛	80	0.36	-20 to 140	-30 to 60	16.90	3.0
FMB-2		95A	45	8	1¼	30	0.36	-20 to 140	-30 to 60	6.80	1.2
FMB-2.5		95A	56	10	1⅜	35	0.36	-20 to 140	-30 to 60	8.40	1.5
FMB-3		95A	67	12	1⅝	40	0.36	-20 to 140	-30 to 60	10.10	1.8
FMB-4		95A	90	16	2⅜	60	0.36	-20 to 140	-30 to 60	13.50	2.4

Flat homogenous embossed belts											
FEMW-2		95A	45	8	1¼	28	0.25	-20 to 140	-30 to 60	4.50	0.8
FEMW-2.5		95A	56	10	1⅜	35	0.25	-20 to 140	-30 to 60	5.60	1.0
FEMW-3		95A	67	12	1⅝	40	0.25	-20 to 140	-30 to 60	6.80	1.2
FEMW-4		95A	90	16	2⅜	55	0.25	-20 to 140	-30 to 60	9.20	1.6
FEMW-5		95A	112	20	3⅛	75	0.25	-20 to 140	-30 to 60	11.70	2.1
FEMB-2		95A	45	8	1¼	28	0.25	-20 to 140	-30 to 60	4.50	0.8
FEMB-2.5		95A	56	10	1⅜	35	0.25	-20 to 140	-30 to 60	5.60	1.0
FEMB-3		95A	67	12	1⅝	40	0.25	-20 to 140	-30 to 60	6.80	1.2
FEMB-4		95A	90	16	2⅜	55	0.25	-20 to 140	-30 to 60	9.20	1.6
FELW-2		80A	3.6	2	½	12	0.60	-40 to 125	-40 to 45	0.90	0.4

Flat reinforced belts											
FRMW-2		95A	725 ⁽¹⁾	130 ⁽¹⁾	1 ⁽³⁾	27 ⁽³⁾	0.20	-20 to 140	-30 to 60	33.50	6.0
FRMW-2.5		95A	752 ⁽¹⁾	135 ⁽¹⁾	1¼ ⁽³⁾	32 ⁽³⁾	0.20	-20 to 140	-30 to 60	36.20	6.5
FRMW-3		95A	780 ⁽¹⁾	140 ⁽¹⁾	1⅜ ⁽³⁾	36 ⁽³⁾	0.20	-20 to 140	-30 to 60	39.00	7.0
FRLW-2		80A	670 ⁽¹⁾	120 ⁽¹⁾	¾ ⁽³⁾	10 ⁽³⁾	0.20	-40 to 120	-40 to 50	28.00	5.0

(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) For back bending of reinforced flat belts double Minimum Pulley.
 (4) Standard roll size: width - 60" (1500mm), length - 100 ft. (30m)

For wider and longer belts - Consult VOLTA

SPLICING SYSTEMS

Electrode System

A 22"/500mm wide belt using FG502 tool and a hot air gun takes about 20 minutes to install.



Butt Weld System (with out electrode)

A 20"/500mm wide belt using FBW tool takes about 8 minutes to install.



VOLTA FOOD BELT APPLICATIONS

- Meat Processing
- Fish Processing
- Poultry Processing
- Fruit And Vegetable Canning
- Cheese Processing
- Food Packing And Processing
- Frozen Food Processing
- Bread And Cookies
- Snack Food
- Ice Cream Production
- Chocolates
- Pharmaceuticals
- Cookies

CHARACTERISTICS

- Strong and flexible (without reinforcement)
- Easily installed on job site
- Abrasion resistant
- Cut resistant
- Homogeneous solid polymer (non reinforced)
- non-absorbent
- Moisture resistant
- Oil and Fat resistant
- Easy to clean
- Easy to track
- Non-fraying
- Impervious to most chemicals and solvents
- FDA and USDA accepted
- Smooth finish
- Highly flexibility
- Extended belt life

VOLTA Belting Technology Ltd.
 www.voltabelting.com

YOUR DISTRIBUTOR

ISRAEL	USA	NETHERLANDS
Tel: +972-4-9881270	Tel: +1-973-785-1700	Tel: +31-33-4951800
Fax: +972-4-9889666	Fax: +1-973-785-9899	Fax: +31-33-4951812



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VOLTA FOOD BELTS



VOLTA THE NEXT STEP IN BELTING

Volta is internationally renowned for its unique food quality belts. Volta manufactures homogeneous and reinforced belts with a unique combination of characteristics of high strength, low stretch, cut resistance and flexibility. Volta food belts are approved by the highest and strictest food standards authorities such as USDA/FDA-USA, 3-A Dairy - USA. Volta belts can be made endless in minutes using the special FBW (Flat Butt Welding) tool.



FRLW 2



FEMW 3



FHW 4 with guide underneath



FEMB 3

Simple Installation

Problem: The installation of conventional belts often requires outside technical assistance and the use of expensive and sophisticated tooling.

Solution: Volta has developed a simple and fast splicing system which can be used reliably by in-house maintenance personnel.

Cleanliness

Problem: On conventional belts, fat can build up, bacteria accumulates and cleaning is difficult, due to the porous surface.

Solution: Volta belts can be cleaned easily and do not harbor bacteria. Most sticky products can be removed easily from the non-porous surface of the belts.

Homogeneous and Non Absorbent

Problem: Conventional belts are not homogeneous, the cover often cracks, allowing the product conveyed to penetrate and be absorbed by the belt. Also, delamination may occur and contaminate the product conveyed.

Solution: Volta belts do not absorb oil, remain odorless and will not crack.

Non-Fraying

Problem: When conventional belts are rubbed on the edges or trackoff, the carcass can be damaged causing fraying, with the risk of contamination of the food products conveyed.

Solution: Volta homogeneous belts being of a solid thick polymer, cannot fray. Reinforced Volta belts can be supplied with recessed edges eliminating any edge fray.



FMW 4 with cleats and sidewall 60mm



FHW 5 with VW 22 guide



FEMW 3 with cleats



FHW 4

Quality Fabrications

Problem: Cleats (flights) on conventional belts are most often glued or vulcanized to the top thin layer only. Water, oil and cleaning solution causes cleats to separate or break open at the base. Bacteria will rest and breed in these cavities.

Solution: The cleats (flights) and side walls on Volta are homogeneously welded to the base belt. Welds do not brake open, so there are no crevices in which bacteria can breed. Similarly Volta guides are heat welded on making it virtually impossible to come off.

Hygiene and easy cleaning

Problem: Belts are constantly checked by the quality control / hygiene department for cracks and bacteria accumulation. Conventional belts are often taken off due to too high bacteria counts resulting in down time.

Solution: Volta's smooth and easily cleaned belts, minimizes the potential for bacterial contamination, which results in minimal downtime in production.

Water and Oil Resistance

Problem: In the food and canning industries, water and oil can damage conventional plied belts. The thin top layer wears away and then the textile carcass absorbs the water and oil which leads to premature destruction and failure of the belt.

Solution: Volta homogeneous belts are made of solid Elastomers, with no textile carcass and therefore are not affected by water or oil. The thickness ranges from 2-5 mm.

Cut and Abrasion Resistance

Problem: In meat processing, sharp bones cut into conventional belts, shortening their life and increase the likelihood of contamination.

Solution: Volta belts are highly cut-resistant, remain smooth and bacteria-free.



FEMW 3 with pace lines



perforated FMW 3



FHW 5 with cleats



FHB 3 with CW 17 (Voltrac)

Shelf Life of Final Product

Problem: The shelf life of the final food product is very important to supermarkets. Bacteria picked up from conventional belts can drastically reduce this shelf life.

Solution: Volta is known for the very low bacteria count level giving extra shelf life that is so important for manufacturers today.

Long Life of Belt

Problem: Conventional belt life is affected by cutting, fraying, water absorption, oils and necessary cleaning processes that can be costly and time-consuming.

Solution: Volta belts are designed to withstand all of the above mentioned problems.

Minimum Down Time

Problem: Installation with conventional belts can be complicated and very time-consuming, often involving a lengthy cooling down time before production can be resumed.

Solution: Volta belts can be joined in minutes with no cooling time required and production can be re-started immediately.

Cleaning Cost

Problem: Modular plastic link belts require initial investments in continuous washing and water purifying systems in order to comply with hygiene standards, that can be costly.

Solution: Volta has developed a positive drive Voltrac belt system which gives all the advantages of a modular link belting, but because of its intrinsic cleanliness and cleanability it does not require any costly cleaning processes.