

### Endless Making Techniques

Volta provides you with a choice of tools especially designed to ensure high quality heat welded joints to make all flat belts endless. 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.

#### ➔ FT - Electrode Welding Kit

The FT Welding System is a tool for electrode welded endless making highly suitable for Volta flat belts and SuperDrive™, DualDrive and DualDrive SP. The FT Welding System uses a router to cut the angle 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. When joining up to 2mm thick belts, use the 7mm diameter electrode and for a belt thicker than 2mm, the 9mm diameter electrode is used. This tool is supplied with a built-in adaptor for welding SuperDrive™ belts. When you plan to weld a Dual Drive or Dual Drive SP belt, suitable adaptors must be ordered. The FT tool is capable of joining belts up to a width of 1500mm.



#### ← FBW - Flat Butt Welding Tool

The FBW System was created to butt-weld flat belts making them endless. The FBW Welding System can also be used for SuperDrive™, DualDrive, DualDrive SP and special textured top flat belts. The FBW tool is capable of joining belts up to a width of 2100mm.

#### ➔ Narrow Butt Welding Tool

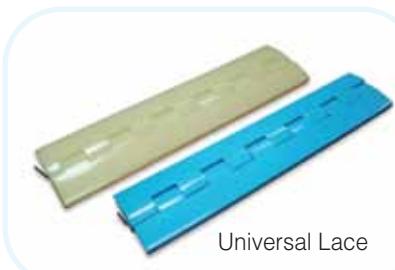
Narrow flat belts can be butt welded simply with the use of the P-100 Pliers suitable for belt widths of up to 100mm and the P-200 Pliers suitable for belt widths of up to 200mm. For best results, Welder W-141/2 are used with the P-100 Pliers and Welder W-241/2 are used with the P-200 Pliers.



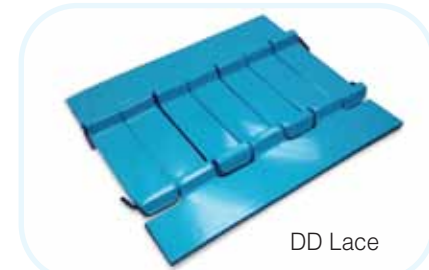
*All reinforced flat belts should be made endless at an angle, this will reduce stretching and strengthen the join area.*

#### ⤵ 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. Specialized lace is available to suit the teeth spacing of the Dual Drive and DD SP belts. All Volta flat belt material is easy to clean without removing from conveyor and therefore we only recommend lace when absolutely necessary.



Universal Lace

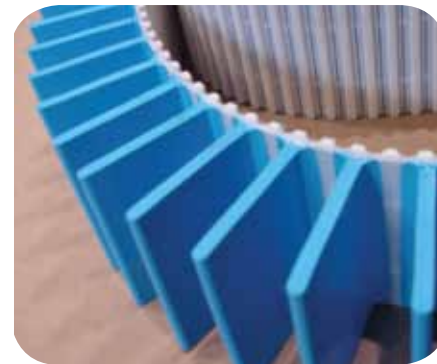


DD Lace



DDSP Lace

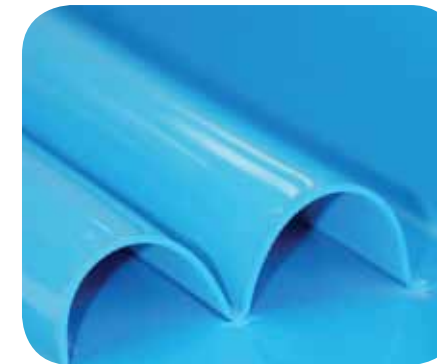
## ⤵ Volta Fabrications - A Professional Solution



Timing belt with cleats



Gusset cleat



Shock absorbers



Baseless sidewall



Funnels



Sidewalls and Guides endless welding



Perforated SuperDrive™



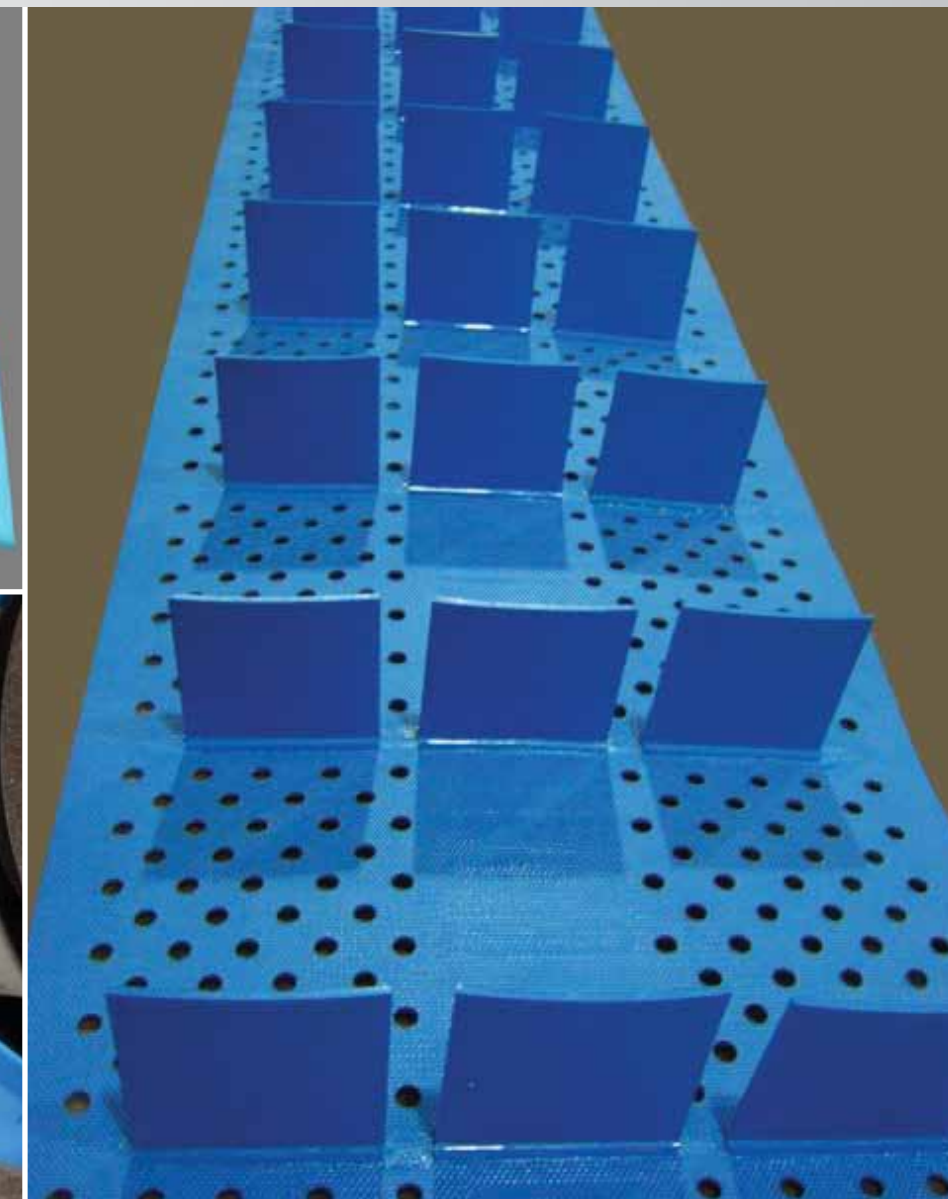
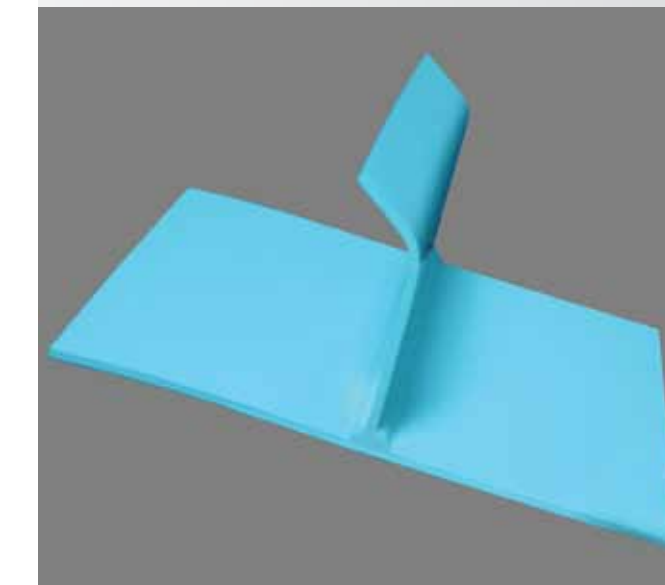
Special Cleats



Longitudinal welding



Conveying Solutions  
The Art of Fabrications



**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](http://www.voltabelting.com)

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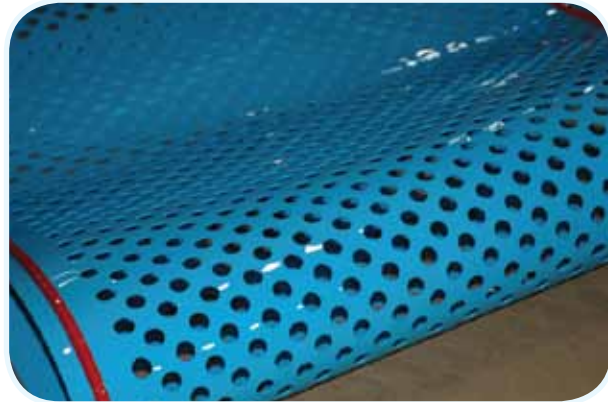
BIRACNOICREATE


The Next Step in Belting

**Volta Belting** has created an outstanding technique and ideal tooling to perform state of the art heat welded fabrications to fit your specific needs, simply. The possibilities are endless.


Fusing of the solid Volta homogeneous flat belt with matching material flights, sidewalls, guides, etc. results in a nearly unbreakable fabrication and high performing belt construction.

*Infinite custom-made fabrications to suit your needs, available upon request.*



 Perforation on Volta flat belts eliminates fraying ensuring a smooth clean hole area highly suitable for fluid drainage or vacuum applications. Perforation pattern can be distinctly defined.



 Pace Lines heat welded into base belt form a totally smooth surface with integrated marks in contrasting colors for permanent striking production line markers in your belt.

## Guides

All Volta guides are heat welded eliminating the use of any adhesive and avoiding the tearing of the guide from the base belt.

The Volta guides provide excellent durability, withstand harsh abrasion and resist oil and industrial chemicals.

Type	CL/CLC	VL/VLB	CM	VM	CW/CWB	VW/VWB	CSB/CSC	VSB/VSC
Shore Hardness	80A	80A	90A	90A	40D	40D	62A	62A
Color	Brown/Clear	Brown/ Blue	Red	Red	White/Blue	White/Blue	Blue/Clear	Blue/Clear
Cogged	Yes	No	Yes	No	Yes	No	Yes	No
Add to Base Belt Minimum Pulley Diameter								
Size (mm) WxH	mm	inch	mm	inch	mm	inch	mm	inch
6x4	NR	25	1	NR	NR	NR	NR	15 9/16
8x5.2	NR	40	1 1/2	NR	60	2 1/2	NR	NR
10x6	35	1 5/8	45	1 3/4	50	2	65	2 5/8
13x8	40	1 1/2	50	2	60	2 1/2	85	3 1/4
17x11.5	60	2 1/2	75	3	85	3 1/2	115	4 1/2
20x12.5	NR	85	3 1/2	NR	125	5	NR	NR
22x14.5	75	3	100	4	110	4 1/4	150	6

**Note:** All guides can be ordered in rolls of 30m. lengths for your in-house use.

## Sidewalls with Base

Type	SW - 20		SW- 30		SW- 40		SW- 50		SW- 60		SW- 80		SW -100	
mm/inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Height	20	13/16	30	1 1/4	40	1 1/2	50	2	60	2 3/8	80	3 1/4	100	4
Base Width	40	1 1/2	40	1 1/2	40	1 1/2	70	2 3/4	70	2 3/4	70	2 3/4	70	2 3/4
Wave Width	18	5/7	18	5/7	18	5/7	34	1 5/16	34	1 5/16	34	1 5/16	34	1 5/16
Minimum Pulley Diameter (Normal Flex)														
Belt Thickness	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
2	95	3 3/4	95	3 3/4	100	4	NR	NR	NR	NR	NR	NR	NR	NR
2.5	100	4	100	4	110	4 3/8	NR	NR	NR	NR	NR	NR	NR	NR
3	105	4 1/8	105	4 1/8	115	4 1/2	125	5	130	5 1/8	150	6	200	8
3.2	105	4 1/8	105	4 1/8	115	4 1/2	125	5	130	5 1/8	150	6	200	8
4	110	4 3/8	110	4 3/8	130	5 1/8	130	5 1/8	135	5 3/8	150	6	200	8
5	120	4 3/4	120	4 3/4	135	5 3/8	130	5 1/8	140	5 1/2	150	6	200	8

Available in Volta Food approved 'M' material, Beige, Blue and Blue Low Temperature and industrial grade 'Z' Green or 'L' Brown material .

**Note:** NR – Not Recommended.

## Baseless Sidewalls

Measurement	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Sidewall Height	30	1 1/4	40	1 1/2	50	2	60	2 3/8	80	3 1/8	100	4	130	5 1/8	150	6
Sidewall Thickness (mm)	1.6		1.6		1.6		1.6		1.6		1.6		2		2	
Wave Width	48mm +/-2mm															
Minimum Pulley Diameter (Normal Flex)																
Belt Thickness	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
2	80	3 1/8	90	3 1/4	100	4	110	4 1/4	NR	NR	NR	NR	NR	NR	NR	NR
2.5	80	3 1/8	90	3 1/4	100	4	110	4 1/4	NR	NR	NR	NR	NR	NR	NR	NR
3	80	3 1/8	90	3 1/4	100	4	110	4 1/4	130	5 1/8	160	6 1/4	210	8 1/4	250	10
4	80	3 1/8	90	3 1/4	100	4	110	4 1/4	130	5 1/8	160	6 1/4	210	8 1/4	250	10
5	100	4	100	4	110	4 1/4	120	4 3/4	150	6	180	7	230	9	280	11

Available in Volta Food approved 'W' White and 'M' Blue material and industrial grade 'Z' Green material .

**Note:** Minimum distance between sidewalls : 300mm/11.9" (center to center) Maximum distance between sidewalls : 2000mm/ 78.5" (center to center). For Reinforced belts add 10% to the table values. NR - Not Recommended

## Flat Sidewalls

Material:	Volta MW, Beige or MB, Blue	Volta LB, Blue
Hardness:	95A/46D	80A
Sidewall Thickness:	3; 4; 5mm	5mm
Sidewall Height:	40 – 100mm / 1 1/2"- 4"	40 – 100mm / 1 1/2"- 4"
Add to Base Belt MPD:	200mm / 8"	175mm / 6 7/8"
Temp. Range:	- 5°C to 60°C / 23°F to 140°F	- 10°C to 50°C / 15°F to 120°F
Certification:	FDA / USDA / EU	

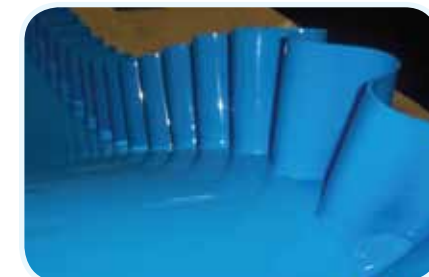
**Note:** MPD (minimum pulley diameter) relates to flat sidewall applied with the HF technique. No back flex is possible. Flat Sidewall can be applied at a minimum distance of 5mm from the belt edges.




 Sidewalls



 Flat sidewalls



 Baseless Sidewalls

## Flights (Cleats)

Volta offers great flexibility and allows you to create the ideal flights to hold your product in place while moving along the production line. MPD should always be considered when choosing the flight type.

### High Frequency (HF) Welded Flights

HF welding will give you the strongest flights joined to the base belt so smoothly that you could almost believe that the flights were extruded in one with the belt. The joint is completely seamless increasing hygiene safety levels.

### HF Welded Specialized Flights:

#### Scoop

Act as a pocket to your produce on incline conveyors. Produced from 3mm to 8mm thick and max.150mm high flat belt material. Scoops can be ordered individually for in-house use.

#### Gusset

Additional support for heavy load conveyors that need the extra strength, made from flight material of 5mm or more. For ultra heavy duty applications flights are made from 8mm thick and max.150mm high flat belt material & welded with double electrodes.

#### Angled

Welded at approx. 70° angle that suits your incline application. Produced from 3mm to 8mm thick and max.150mm high flat belt material.

#### Spaced

Breaking the width of the flight up with spaces for a lighter belt. Produced from 3mm to 8mm thick and max.150mm high flat belt material.

#### Chevron Flights

'V' or round soft profile used to create flights in different patterns. Recommended profile diameter for chevron flights is –up to 17mm for V-profiles and up to 10mm for round profiles.

#### Straight

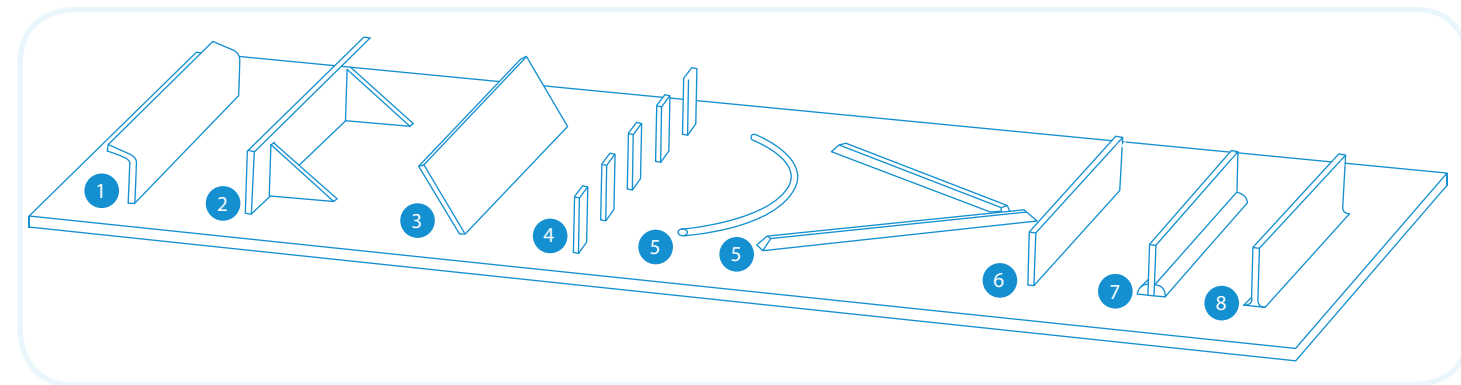
Flights produced from 3mm to 8mm thick and max, 150mm high flat belt material.

#### Electrode Welded Flights

The original double or single electrode welded flights. Electrodes are available in 7mm and 9mm diameter and in various Shore hardnesses to match the base material being used.

#### T-Cleats

Available for your in-house use. A solid wider base strengthens the flight when put under pressure and gives a very smooth transition from the belt onto the flight. Available in beige and blue, heights 25; 30; 40 & 50mm and in white, height 25mm. All T-cleats are 4mm thick and can be ordered in rods of 2.15m lengths.



*Upon request, all flights can be finished with smooth rounded edges to avoid damaging delicate products on sharp corners.*