

## The Next Step in Belting



# The Art of Fabrications

Conveying Solutions



# Volta Belting has created a unique system including tooling to manufacture heat welded fabrications customized to individual needs.

### Guides

All Volta guides are heat welded, eliminating the use of adhesives. This prevents the guide detaching from the base belt. All Volta guides are durable and withstand abrasion, oils and general wear and tear as do Volta base belts.Guides are generally seen in one of three configurations:



**1.** A single center guide on the underside of the belt used to prevent off-tracking.



2. Two parallel guides on, or close to the belt edges on the underside of the belt used on wider belts; common in vegetable processing.



**3.** Two parallel guides on the top side of the belt used in elevators to maintain belt rigidity.

Guides are made from L, M (LT,MD) and H material (for H belts only) as well as special soft guides from 65A Shore TPE which help reduce the MPD of the belt compared to a standard L or M guide. A further reduction of MPD can be obtained by using cogged guides which are coded C in place of the standard V coding (e.g. CLC in place of VLC).

Products		/CL CLC		VL/VLB/ VLC			СМ	VM	CW/CWB		VW/VWB		CSB/CSC		VSB/	vsc
Shore Hardness		80A		80A			90A	90A	40D		40D		65A		65A	
Calar	Brown Blue Clear		Brown	Blue Clear Red		Red	Red	White	White Blue 16		Blue 16	Blue 17	Clear	Blue 17	Clear	
Color																
Cogged		Yes			No		Yes	No	Yes		No		Yes		No	
Certifications		Yes		Yes		No	No	Yes		Yes		Yes		Yes		

Si	ze		Add To Minimum Pulley Diameter														
Width	Height		Add to Minimum Pulley Diameter														
mm	mm	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
6	4	Ν	IA	25		NA		NA		NA		NA		NA		15	<sup>19</sup> / <sub>32</sub>
8	5.20	30	<b>1</b> <sup>3</sup> / <sub>16</sub>	40	1 <sup>5</sup> / <sub>8</sub> NA 60 2 <sup>3</sup> / <sub>8</sub> NA NA		A	NA		25	1 <sup>3</sup> / <sub>8</sub>						
10	6	35	1 <sup>3</sup> / <sub>8</sub>	45	<b>1</b> <sup>3</sup> / <sub>4</sub>	50	2	65	2 <sup>3</sup> / <sub>8</sub>	55	2 <sup>3</sup> / <sub>16</sub>	70	2 <sup>3</sup> / <sub>4</sub>	22	7/ <sub>8</sub>	30	1 <sup>5</sup> / <sub>8</sub>
13	8	40	1 <sup>5</sup> / <sub>8</sub>	50	2	60	2 ³/ <sub>8</sub>	85	2 ³/4	60	2 ³/ <sub>8</sub>	80	3 <sup>1</sup> / <sub>8</sub>	28	<b>1</b> <sup>1</sup> / <sub>8</sub>	35	2 <sup>3</sup> / <sub>8</sub>
17	11.50	60	2 ³/8	75	3	85	3 <sup>3</sup> / <sub>8</sub>	115	3 ³/ <sub>8</sub>	85	3 <sup>3</sup> / <sub>8</sub>	110	4 <sup>3</sup> / <sub>8</sub>	40	1 <sup>5</sup> / <sub>8</sub>	50	2
20	12.50	NA		85	3 <sup>3</sup> / <sub>8</sub>	NA		125	NA	NA		NA		NA		N	A
22	14.50	75	3	100	4	110	4 <sup>3</sup> / <sub>8</sub>	145	4 <sup>3</sup> / <sub>8</sub>	110	4 <sup>3</sup> / <sub>8</sub>	150	5 <sup>7</sup> / <sub>8</sub>	NA		65	2 <sup>3</sup> / <sub>4</sub>

Notes: NA-Not Available.

Special guides: CLC-LT available in 10mm,VLB-LT & VLC-LT available in 10mm,13mm&17mm for Low Temperature (LT) belts; VLB-MD for Metal Detectable (MD) belts.

CLB-not available in 22mm | CLC-not available in 8&22mm. | VWB-not available in 10mm & 22mm.

### Sidewalls

Volta offers a classic "wavy" style sidewall in two versions: Based sidewall wich can be delivered as a stand alone for fabrication by customer and Baseless sidewall which comes welded on the base belt from the factory. In addition, there is a Flat version welded by HF to the base belt.

Туре	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	<sup>25</sup> / <sub>32</sub>	30	<b>1</b> <sup>1</sup> / <sub>4</sub>	40	<b>1</b> <sup>1</sup> / <sub>2</sub>	50	2	60	2 <sup>3</sup> / <sub>8</sub>	80	3 <sup>1</sup> / <sub>8</sub>	100	4
Base Width	40	<b>1</b> <sup>1</sup> / <sub>2</sub>	40	<b>1</b> <sup>1</sup> / <sub>2</sub>	40	<b>1</b> <sup>1</sup> / <sub>2</sub>	70	2 <sup>3</sup> / <sub>4</sub>	70	2 <sup>3</sup> / <sub>4</sub>	70	2 <sup>3</sup> / <sub>4</sub>	70	2 <sup>3</sup> / <sub>4</sub>
Wave Width	18	<sup>5</sup> / <sub>7</sub>	18	<sup>5</sup> / <sub>7</sub>	18	<sup>5</sup> / <sub>7</sub>	34	<b>1</b> <sup>5</sup> / <sub>16</sub>	34	<b>1</b> <sup>5</sup> / <sub>16</sub>	34	<b>1</b> <sup>5</sup> / <sub>16</sub>	34	<b>1</b> <sup>5</sup> / <sub>16</sub>
Minimum Pulley Diameter (Normal Flex)														
Belt Thickness	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
2	95	33/4	95	33/4	100	4	N	NR		R	NR		NR	
2.5	100	4	100	4	110	4 <sup>3</sup> / <sub>8</sub>	N	NR		NR		IR	NR	
3	105	4 <sup>1</sup> / <sub>8</sub>	105	4 <sup>1</sup> / <sub>8</sub>	115	4 <sup>1</sup> / <sub>2</sub>	125	5	130	5 <sup>1</sup> / <sub>8</sub>	150	6	200	8
3.2	105	4 <sup>1</sup> / <sub>8</sub>	105	4 <sup>1</sup> / <sub>8</sub>	115	4 <sup>1</sup> / <sub>2</sub>	125	5	130	5 <sup>1</sup> / <sub>8</sub>	150	6	200	8
4	110	4 <sup>3</sup> / <sub>8</sub>	110	4 <sup>3</sup> / <sub>8</sub>	130	5 <sup>1</sup> / <sub>8</sub>	130	5 <sup>1</sup> / <sub>8</sub>	135	5 <sup>3</sup> /8	150	6	200	8
5	120	4 <sup>3</sup> / <sub>4</sub>	120	4 <sup>3</sup> / <sub>4</sub>	135	5 <sup>3</sup> /8	130	5 <sup>1</sup> / <sub>8</sub>	140	5 <sup>1</sup> / <sub>2</sub>	150	6	200	8

#### Based Sidewalls - SW

Note: NR - Not Recommended. All sidewalls can be ordered in rolls of 100 meter lengths for your in-house use.

#### Baseless Sidewalls - B-SW

Measu	Measurement			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Sidewa	ll Height	30	<b>1</b> <sup>1</sup> / <sub>4</sub>	40	<b>1</b> <sup>1</sup> / <sub>2</sub>	50	2	60	2 <sup>3</sup> / <sub>8</sub>	80	<b>3</b> <sup>1</sup> / <sub>8</sub>	100	4	130	5 <sup>1</sup> / <sub>8</sub>	150	6
Sidewall Thi	ckness (mm)	2		2		2		2	2		2		2	2		2	
Wave	Width	48mm+/-2mm															
			าเทเ	um F	Pulle	y Di	ame	ter	(Nor	mal	Flex	<)					
Belt Type	Belt Thickness	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Homogeneous 95A Shore	2	80	3¹/ <sub>8</sub>	90	31/4	100	4	110	4 <sup>1</sup> / <sub>4</sub>	N	R	N	R	N	R	N	R
or more & all Reinforced Belt Types	2.5	80	3¹/ <sub>8</sub>	90	31/4	100	4	110	4 <sup>1</sup> / <sub>4</sub>	N	R	N	R	N	R	N	R
	3	80	3 <sup>1</sup> / <sub>8</sub>	90	<b>3</b> <sup>1</sup> / <sub>4</sub>	100	4	110	4 <sup>1</sup> / <sub>4</sub>	130	5 <sup>1</sup> / <sub>8</sub>	160	<b>6</b> <sup>1</sup> / <sub>4</sub>	210	<b>8</b> <sup>1</sup> / <sub>4</sub>	250	10
All Belt Types	4	80	3 <sup>1</sup> / <sub>8</sub>	90	<b>3</b> <sup>1</sup> / <sub>4</sub>	100	4	110	4 <sup>1</sup> / <sub>4</sub>	130	5 <sup>1</sup> / <sub>8</sub>	160	<b>6</b> <sup>1</sup> / <sub>4</sub>	210	<b>8</b> <sup>1</sup> / <sub>4</sub>	250	10
	5	100	4	100	4	110	4 <sup>1</sup> / <sub>4</sub>	120	4 <sup>3</sup> / <sub>4</sub>	150	6	180	7	225	8 <sup>55</sup> / <sub>64</sub>	280	11

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 - F-SW

Material	Volta MW, Beige or MB, Blue						
Hardness	95A/46D						
Sidewall Thickness	4mm						
Sidewall Height	40 - 80mm /1 ½" - 3¼8"						
Add to Base Belt MPD*	70mm / 2 ³/₄"						
Temp Range	-5° C to 60° C / 23° F to 140° 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.



**Based 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. Flights increase the MPD of the base belts. Consult before selection.

## High Frequency (HF) Welded Flight:



#### Scoop

Act as a pocket to your produce on incline conveyors with the scoop section angled at 90° or 65°. Produced from 3mm to 8mm thick and max.150mm high flat belt material. Scoops can be ordered individually for in-house use.



#### Spaced

Parallel rows of flights used to permit cutting of product and to allow for support on belt return.

'V' or round soft profile used to

create flights in different patterns.

Chevrons will routinely be made

from V- profiles up to size 17mm and 10mm diameter for round.

**Chevron Flights** 



#### Gusset

Gussets are welded angles added to flights by HF or electrode welding to prevent flights from flexing under heavy loads. Gussets are made from thick material and their bases must be shaped to prevent pressure on the base belt in transition areas.



#### Angled

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



#### Straight

Flights produced from 3mm to 8mm thick and maximum,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 hardness to match the base material being used.



#### **T-Cleats**

Available for your in-house use. The T-shape foot is suited to hand welding with a Leister hot air gun and to correctly designed HF welding molds.

Available in beige and blue at heights 25,30,40 and 50mm. T-cleats are 4mm thick and available in standard strips of 2.15 meters.

On request,all flights/cleats can be finished with rounded edges to avoid damaging delicate products on sharp corners.

## Perforations

Volta is able to offer perforations in almost any pattern and with almost any shape of hole. Most perforations are simple round holes and Volta recommends to stagger alternate rows to avoid weak lines on the base belt. For round holes, perforations must be Ø3.5mm or larger. Other shapes are subject to confirmation. Hole size should be taken into account the product being conveyed and should be small enough to avoid product being trapped in the perforations. Perforations should finish at a distance from the belt edges to maintain material strength and belt ends where the welding joint is located are also left free of perforations.



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## Volta Hinge Lace Systems

Both Volta Universal Lace and Volta Roundflex<sup>™</sup> Lace is a device that allows you to easily open and close 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. The Volta laces are compatible with Volta 'M' Family Flat and Positive Drive belts including 1" pitch MSD & MDD belts from 2.5mm to 5 mm thickness. All Volta belt materials are easy to clean without removing from conveyor and therefore we only recommend lace when absolutely necessary. The strength of the belt will be affected at the joint where lace is used.



Universal Lace



Roundflex<sup>™</sup> Lace

### Volta Fabrications - A Professional Solution



Timing belt with cleats



Special cleats on trough conveyor



Organ meat compartments



Gusset cleats



Baseless sidewalls



Surimi belt



Perforated SuperDrive™



Chevron cleats



Special fabrication on DDSP



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