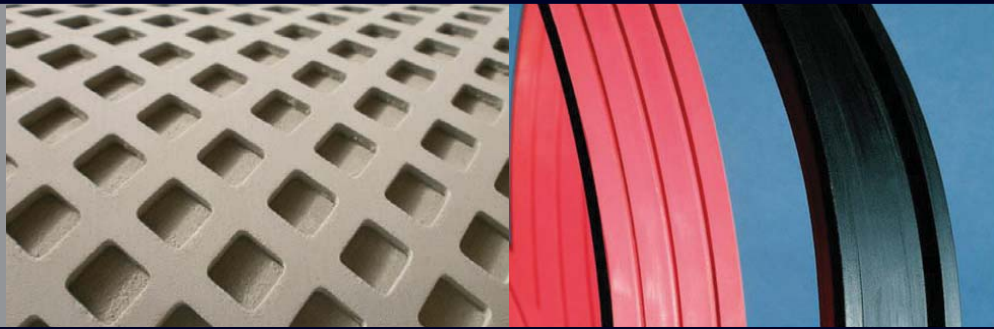


## Belting for the Woodworking Industry



Specialty Belting for Specific Applications

# TIMBEROLL

Rainbow Rubber and Plastics, Inc. is a leading supplier of truly endless belting and rubber accessories for the North American market. Specializing in high wear applications, Rainbow supplies a range of products for the woodworking industry. Working closely with end users and original equipment manufacturers, our family of industry specific rubber components have been proven in durability and reliability. For over 40 years Rainbow has been the leading supplier of original equipment and replacement belting for wide belt sanding, brushing, and planing machines.



# APPLICATIONS

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Timberoll is a truly endless belt designed for conveying and feeding on wide-belt sanding, brushing, or planing equipment. Rainbow belts use natural rubber compounds that ensure the board does not slip or pull, avoiding damaged product and helping to prevent operating hazards.

Wide-belt sanding equipment can be found in the production of:

- ◆ **Hardwood Floors**
- ◆ **Cabinetry**
- ◆ **Finishing**
- ◆ **Edgebanding**



# CONSTRUCTION

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Timberoll Belts are manufactured to be truly endless without seams or splices. The rubber cover is assembled with the textile fabric core in a raw state and then vulcanized. This process creates a single piece belt with greater wear characteristics, high tensile strength, and longer belt life than similar products which have been glued or spliced together.

## **Rubber Compounds**

Our rubber compounds have excellent wear, high abrasion, and are tear resistant. The quality of the rubber compounds have characteristics which allow Timberoll belts to operate without cracking, losing grip, or separation as a result of sawdust and high pressures.

## **Profile and Structure**

Timberoll belts are constructed with tensioned fabric plies, and an internal sliding ply. There are a variety of vacuum profiles available for different sanding/vacuum applications.

\*See Technical Specs

# TECHNICAL DATA

Code	Tensile Plies	Normal <sup>1</sup> Belt Thickness mm	Sliding Ply		Working Load daN/cm	Working Load daN/cm		Recommended <sup>2</sup> applications and characteristics
			Pes	Cotton		1%	1,50%	
ELG	1	7.5 (+1/-0.5)	1	-	12	4-6	7-9	For machines with table length ≤ 1 m and with 1 tooling head. Traction power ≤ 1 KW.
EPQ	2	9 (+1/-0.5)	1	-	20	6-8	12-14	For machines with table length ≤ 2.5 - 3 m and with 2 or 3 tooling heads. More than 1 mm for each step of calibration. Traction power ≤ 2 KW.
EPQP	3	10 (+1/-0.5)	1	-	30	7-9	14-16	The same as EPQ. For machines with table length > 3 m and with 3 or more tooling heads. Traction power ≤ 4.5 KW. Also suggested for machines with vacuum devices.
EPQC	2	9 (+1/-0.5)	-	1	20	6-8	13-15	The same as EPQ
EPQPC	3	10 (+1/-0.5)	-	1	28	7-9	14-16	The same as EPQP
EMQC	2	12 (0/-1)	-	1	20	6-8	13-15	Replaces EPQ for maximum flatness of the belt and very thin material (< 1 mm). SP100 profile.
EMQPC	3	13 (0/-1)	-	1	28	7-9	14-16	Replaces EPQP for maximum flatness of the belt and very thin material (< 1 mm). SP100 profile.
SEM400	1+cord	8 (+1/-0.5)	-	-	40	25	-	For edge and shaping profile sanding machine. With V guide and width ≤ 200 mm. Producible upon request.

## STANDARD RUBBER COVERS

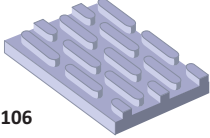
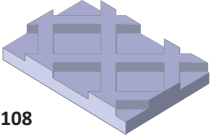
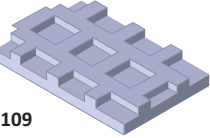
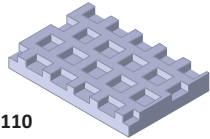
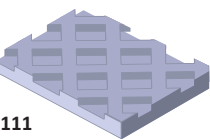
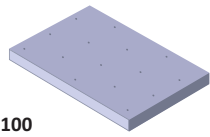
Denomination	Color	Hardness °ShA (±5)	Recommended <sup>2</sup> applications and characteristics
CB	GREY	40, 50, 60, 70	General purpose. Excellent impact strength and tear resistance. Easily resurfaced. Excellent grip to prevent slippage.
CS	BLACK	57	Anti-static rubber. Resists accumulation of dust and static charge from material being sanded.

## SPECIAL RUBBER COVERS

Denomination	Color	Hardness °ShA (±5)	Recommended <sup>2</sup> applications and characteristics
HB	WHITE	65	HYPALON rubber: oil, chemical, wear and high heat resistance.
PA	GREY	40, 50, 60	Super grip and tear resistance.
NC/NCB	BLACK/WHITE	65	NITRILE rubber: very good oil and abrasion resistance.



# TECHNICAL DATA CONT.

STANDARD TOP PROFILE							
Denomination	Dimensions					% Land/void	Characteristics and applications <sup>2</sup>
	I	L	X	i	P		
 SP 106	25	5	4	5	10	40/60 3360 ribs/m <sup>2</sup>	Suitable for wide-belt sanding. Excellent grip on materials and low strain strength.
 SP 108	20	20	4	8	40	49/51 1275 cells/m <sup>2</sup>	High resistance to deformation. High grip on material and excellent for machines using vacuum systems.
 SP 109	15	15	4	7	22	49/51 2220 cells/m <sup>2</sup>	Alternative for SP 108, but with a greater land percentage. Better strain strength and calibrating accuracy.
 SP 110	10	10	4	5	15	49/51 5100 cells/m <sup>2</sup>	Alternative for SP 107. Higher grip on material due to higher land surface.
 SP 111	12	12	3	7	24	60/40 2770 cells/m <sup>2</sup>	Alternative for SP 108 and SP 109. Higher calibrating precision and good grip. Suitable for vacuum systems.
 SP 100	-	-	-	-	-	-	Ground, smooth surface. Used for working on material less than 0.5 mm thickness. (Veneer Sanding)

I = Width    L = Length    X = Height    i = Gap    p = Pitch (All Values in mm)

RECOMMENDED <sup>3</sup> MINIMUM DIAMETER OF THE DRIVING PULLEYS	
Structure	Diameters (mm)
ELG, SME400	90
EPQ, EPQC	120
EPQP, EPQPC, EMQC, EMQPC	150

TOLERANCES		
Inner Circumference	Up to 5000 mm	± 0.5 %
	Over 5000 mm	± 0.75 %
Width		± 5 mm
Thickness		± 1/-0.5 mm
Thickness Uniformity		0.3 mm max
Misalignment of the central guide rib		± 1.0 mm

# DRAGRING

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Truly endless v-belts for edge banding and squaring machines used in the woodworking industry. These belts are resilient and are able to feed the material being processed without deformation. Rainbow has been a supplier of these belts to original equipment manufacturers and the aftermarket for over 40 years.

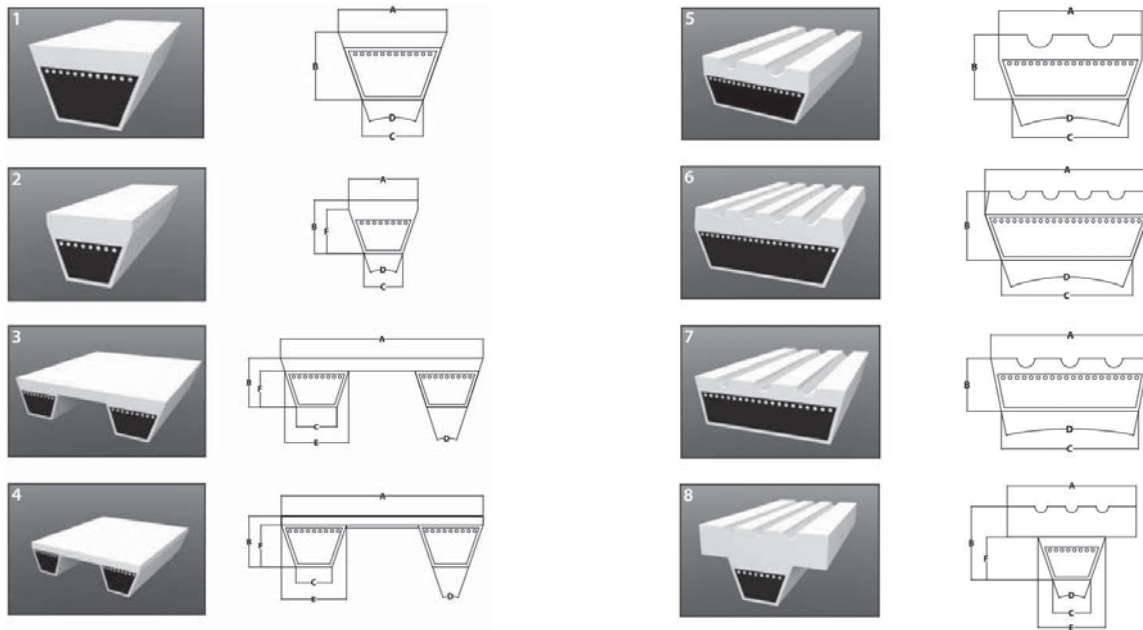


Dragring belts are Truly- Endless V-belts used for edgebanding, tenoning, and squaring machines.

## **Advantages:**

- ◆ **Single Piece construction**
- ◆ **Integrally Molded V-Guides**
- ◆ **Flexible, can round small pulleys**
- ◆ **Will not deform against rollers**
- ◆ **High Speed Functionality**
- ◆ **Truly Endless, no seam or splice**

# DRAGRING PROFILES



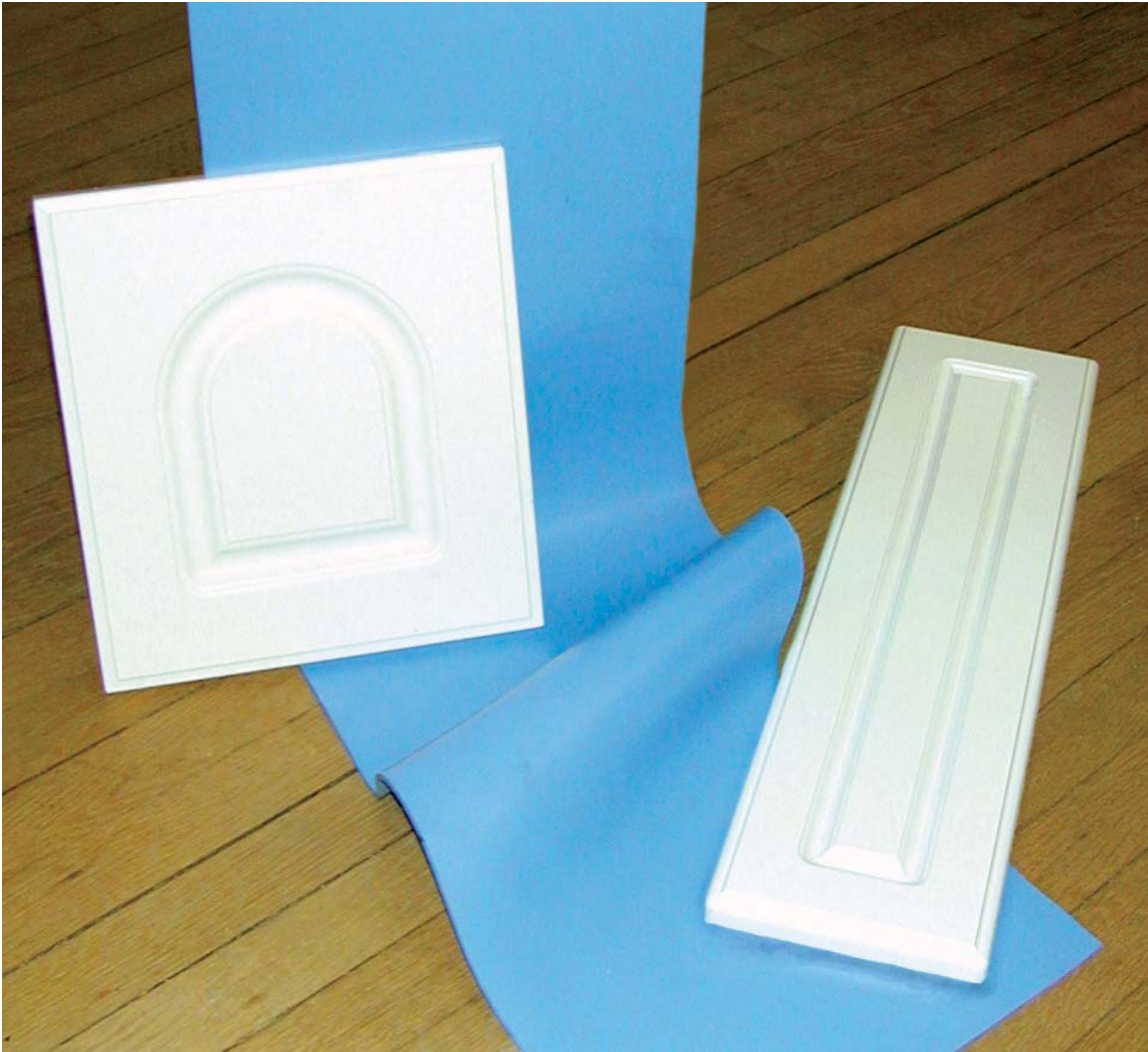
BELT	MACHINE	DIMENSION						PROFILE													
		A	B	C	D	E	F	RA	RB	RO	RR	R1	R2	R3	R4	R5	R6	R15	R16		
1	HOMAG-STEFANI-BIESSE-GABBIANI-CELASCHI	32	20	18	38			X	X	X	X	X	X						X	X	
1	FRIULMAC	32	22	20	40				X					X							
1	HOMAG	25	16	14	38				X	X	X	X	X						X	X	
1	VARI (Several)	22	14		38				X	X	X	X	X						X	X	X
1	VARI (Several)	17	11		38				X	X	X	X	X						X	X	X
1	VARI (Several)	13	8		38				X	X	X	X	X						X	X	X
2	VARI (Several)	10	6		38				X	X		X	X								
2	VARI (Several)	13	8		38				X	X	X	X	X						X	X	X
2	VARI (Several)	17	11		38				X	X	X	X	X						X	X	X
2	VARI (Several)	22	14		38				X	X	X	X	X						X	X	X
3	VARI (Several)	58	20	9	40	17	15					X									
3	EGURKO-ELWOOD	64	20	9	40	17	11										X				
4	IMA	70	19	14	38	22	14	X				X									
4	HOMAG	70	17	14	38	22	14					X									
4	BIESSE-HOLZER-STEFANI-FRIULMAC	67	17	12	38	22	14		X			X									
4	GABBIANI	60	17	12	40	22	14										X				
4	STEFANI	65	23	12	40	22	14					X					X				
4	STEFANI-NARDELLO	65	18	12	40	22	14												X		
4	OCMAC	74	22	11		17	11							X							
4	FRIULMAC	80	22	18	38	32	19														
5	A.COSTA	45	15	40	30									X							
5	TAGLIABUE	40	20	33	30								X								
5	EGURKO	49	20	41	30												X				
5	OLIMPIC	50	15		34									X							
6	GABBIANI	50	19	42	40												X				
6	GABBIANI	50	21	40	40												X				
7	MANEA	45	15	39	25									X							
7	SPANVELLO-A.COSTA	40	12	33	30									X							
7	SPANVELLO-SICAR	60	16	52	25												X				
8	A.COSTA	42	24	12	38	22	14					X		X							
8	TAGLIABUE	30	25	9	38	17	11						X								
8	FRIULMAC	28	25	12	38	22	14					X									

# VENEER PRESS MEMBRANE

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For years membranes have been a trouble spot in the otherwise smooth running operations at veneer and cabinet manufacturing plants. As cycle times decrease, and temperatures increase, membrane problems have become more common. Fortunately, Rainbow Rubber and Plastics has the solution.

Working with veneer and cabinet manufacturers, Rainbow has eliminated many of the problems that occur on Veneer or Rigid Thermofoil presses.



## Advantages:

- ◆ **Seamless membranes up to 120" wide**
- ◆ **Smooth and Matte surfaces**
- ◆ **Resistant to 530° F**
- ◆ **High Elasticity and Memory**

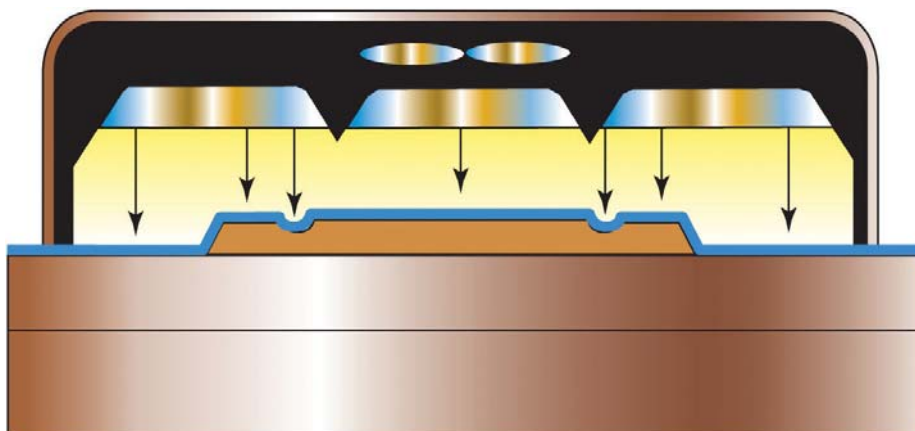


# SPECIFICATIONS

	MEASURE UNIT	VALUES	ACCORDING TO
<b>BLUE</b>	Product Thickness	mm	3.0
	Specific Weight	gr/oc	1.19
	Outside Surface		Smooth
	Inside Surface		Fabric Impression
<b>SILICONE RUBBER</b>	Hardness	Sh.A	50+/-3
	Tensile Strength	Kg/cm <sup>2</sup>	109
	Coefficient at %100	Kg/cm <sup>2</sup>	12
	Coefficient at %200	Kg/cm <sup>2</sup>	17
	Coefficient at %300	Kg/cm <sup>2</sup>	23
	Break Elongation	%	850
	Tear Resistance	Kg/cm	<b>44(*)</b>
	Temperature Resistance	Peak	+280° C
	Temperature Resistance	Continuous	+240° C

	MEASURE UNIT	VALUES		ACCORDING TO
<b>LIGHT RED</b>	Product Thickness	mm	3.8	
	Specific Weight	gr/oc	1.07	DIN 53479
	Outside Surface		Smooth	
	Inside Surface		Light Fabric Impression	
<b>NATURAL RUBBER</b>	Hardness	Sh.A	48+/-3	DIN 53505 (3*)
	Tensile Strength	Kg/cm <sup>2</sup>	280	PSI 3980
	Coefficient at %100	Kg/cm <sup>2</sup>	15	PSI 213
	Coefficient at %200	Kg/cm <sup>2</sup>	28	PSI 398
	Coefficient at %300	Kg/cm <sup>2</sup>	45	PSI 639
	Break Elongation	%	700	700
	Tear Resistance	Kg/cm	110	PI 615
	Temperature Resistance	Peak	+120° C	°F 248
	Temperature Resistance	Continuous	+100° C	°F 212

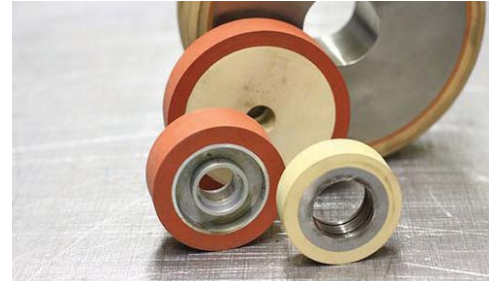
(\*) 30 Kg/cm - ASTM D 624 B



# OTHER WOODWORKING ACCESSORIES

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**Rubber and Metal Rollers:** Sanding, contact rollers, pressure or feed wheels. As well as roller pads, tracks and molded items for edge-banding, squaring, tenoning, and sanding / calibrating machines.



**Sandbelt / Sandroll:** Truly endless pressure belts with felt chevron or strip profile, used as support belts of the abrasive paper in sanding-calibrating machines. Belts are fitted with either diagonal or V-felt stripes.



**Timberbelt:** Open-roll belting. This belt can be vulcanized endless or assembled with mechanical splice. Quick turn-around is available. Same belt that is used on original equipment. Will lay flat on sanding bed, no curling edges, with natural rubber covers.



**Trailroll:** Truly endless feed belts used in slicing and super-surfacing machines, mostly used for the production of veneer, flooring and wooden laminates.



**Woodgrip:** Feed belts for edge and profile sanding machines with an integrally molded v-guide on the inner side. OEM supplier for Delle Vedove, and Makor machinery.



# CUSTOMER SERVICE

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## Rainbow Promise:

Rainbow Rubber and Plastics, Inc. is committed to providing our customers the highest quality products and services. We stand behind our belts 100% and work to meet the individual needs of every customer. Rainbow offers the following services:

- ◆ **In Plant Survey-** Our highly qualified and experienced Rainbow technicians will complete an in plant survey. These in-depth surveys allow us to identify problem areas and offer customized long term solutions.
- ◆ **Store Room Solution-** Our experienced technicians are also available to identify and provide current and future requirements and needs.
- ◆ **Training-** Rainbow technicians offer in-house, customized product training for production, engineering, and maintenance staff. Offering a full range of training programs related to product application, and best practice strategies.



Customer Service and Distribution Center, located in Reading, Pennsylvania.

## **Rainbow supplies belting for the World's Leading Manufacturers of Woodworking Equipment**

- ◆ AMITEC
- ◆ AEM
- ◆ BOERE
- ◆ BIESSE
- ◆ C.B.
- ◆ C.M.S.
- ◆ COSTA LEVIGATRICI
- ◆ DELLE VEDOVE
- ◆ DIMAC
- ◆ DMC
- ◆ EGURKO
- ◆ FERRI
- ◆ FLADDER
- ◆ GRUETZMACHER
- ◆ HOMAG
- ◆ HOUFEK
- ◆ IMEF
- ◆ INFOTRONIC
- ◆ KIMWOOD
- ◆ LESTRO LEDINEK
- ◆ MARUNAKA
- ◆ MIDA
- ◆ POWER MAX
- ◆ QUICKWOOD
- ◆ R.W.T.
- ◆ SCMI
- ◆ STARTMASTER
- ◆ STEINEMANN
- ◆ STEMAC
- ◆ TAGLIABLUE
- ◆ TIMESAVER/SANDINGMASTER
- ◆ VIET



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