

## PRODUCT BROCHURE

2021 —

### Global Rubber Industrial

56/18-19 Moo 7, Rattanathibet Rd., Saothonghin, Bang Yai, nonthaburi 11140 Website :www.globalrubberco.com

### ABOUT US \_\_\_\_

Global Rubber Industrial (GRI) specializes in manufacturing of rubber conveyor belts and other related products. Our conveyor belts are engineered for working conditions and industrial applications that require superb resilience and reliability. GRI is committed to product development and innovation to enhance the productivity of our clients.

## TIMELINE

### 1989

Established as a conveyor maintenance and service company



Opens a manufacturing plant to produce rubber conveyor belts

### **1993**

Added services to design, construct and install conveyor belts



Increasing product line to rubber sheets and mats.

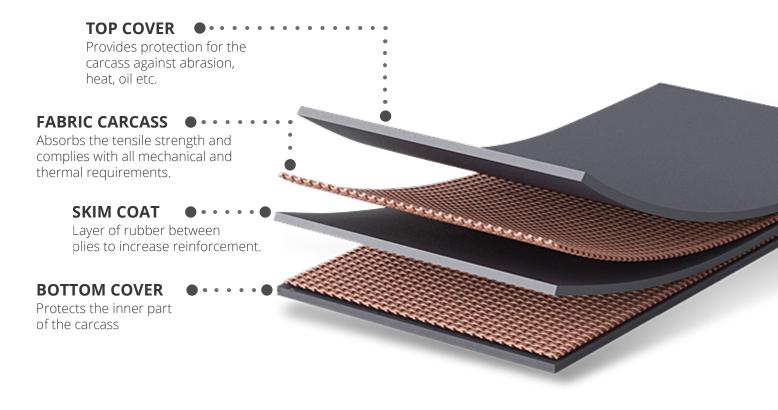
**2020** to present

Increased presence in international markets and expansion into other heavy-duty industries

d

# **GENERAL** SPECIFICATIONS

### CONSTRUCTION OF RUBBER CONVEYOR BELT



### **BELT COVER THICKNESS**

Minimum cover gauge to be used for various applications.

Condition	Non-abrasive	Abrasive	Very abrasive	Extremely abrasive
Material	Wood chips, cement, fine coal	Sand, clay, coal	Limestone, coke, iron	Cullet, slag, ores
Lump size	0-50 mm	50-150 mm	150-250 mm	250-300 mm
Top cover	1.0-1.5 mm	1.5-3.0 mm	3.0-5.0 mm	6.0-10.0 mm
Bottom cover	1 mm	1.5 mm	1.5 mm	2.0-3.0 mm

# **BELT** SELECTION CHART

	Maximum Recommended	Nominal Carcass	Carcass	Pulley Diameters (mm.) **			
Belt Type*	Working ten- sion (KN/M)	Thickness (mm.)	Weight (KG/ M2)	Head Pulley	Tail Pulley	Bend Pulley	
EP 200/2	20	2.3	2.6	250	200	160	
EP 250/2	25	2.4	2.7	250	200	160	
EP 250/3	25	2.7	3.2	250	200	160	
EP 315/2	31.5	3	3.4	315	250	200	
EP 400/3	40	3.2	3.7	315	250	200	
EP 400/4	40	4.1	4.6	400	315	250	
EP 500/3	50	3.6	4	400	315	250	
EP 500/4	50	4.3	5	400	315	250	
EP 400/5	50	5.8	6.5	630	500	400	
EP 630/3	63	3.9	4.3	400	315	250	
EP 630/4	63	4.8	5.3	500	400	315	
EP 630/5	63	5.5	6.2	500	400	315	
EP 800/3	80	4.5	5	500	400	315	
EP 800/4	80	5.2	5.8	500	400	315	
EP 800/5	80	6	6.7	630	500	400	
EP 1000/4	100	6.1	6.8	630	500	400	
EP 1000/5	100	6.5	7.3	630	500	400	
EP 1000/6	100	7.3	8.1	800	630	500	
EP 1250/4	125	7.2	8.3	800	630	500	
EP 1250/5	125	7.6	8.6	800	630	500	
EP 1250/6	125	7.8	8.8	800	630	500	
EP 1400/5	140	8.3	9.3	800	630	500	
EP 1600/5	160	9.1	10.5	1000	800	630	
EP 1600/6	160	9.2	10.4	1000	800	630	

\* The load support of a belt is determined by belt width, tensile strength and bulk material density.
\*\*Pulley diameters apply to belts operating at 60% to 100% of their rated tension. For lower tensions, smaller diameter pulleys may be used.

### CONVEYOR BELT INFORMATION

#### CARCASS CONSTRUCTION

The carcass is available in 2-6 ply synthetic EP fabric (polyester-nylon). EP fabric is impervious to moisture, have long elongation and provide high tensile strength.

#### **BELT WIDTH**

Available in standard widths from 300 up to 1500 mm.

#### BELT EDGES

Belt edges are available in either molded or cut edges.

#### **BELT THICKNESS**

The total belt thickness is the sum of the top and bottom covers plus carcass thickness. Permitted tolerances of the total belt thickness comply with international standards.

#### ELONGATION

Elongation at break in warp: 14%-18%

#### **BELT LENGTH**

The belt length is stated in meters (m), either open or endless.

CARCASS GRADE (EP)										
Grade	200	250	315	400	500	630	800	1000	1250	
2ply	200/2	250/2	315/2	400/2	500/2	630/2	800/2			
3ply			315/3	400/3	500/3	630/3	800/3	1000/3		
4ply				400/4	500/4	630/4	800/4	1000/4	1250/4	
5ply					500/5	630/5	800/5	1000/5	1250/5	
6ply						630/6	800/6	1000/6	1250/6	

### ABRASION RESISTANT CONVEYOR BELT

Heavy duty abrasion belts that provide high splice strength and excellent mechanical characteristics. The belts consist of synthetic EP fabric reinforced with layers of high-quality rubber compound.

#### **GRADES**:

**DA –** High resistance to abrasion from coarse materials such as sand, earth, clay, gravel and timber.

**DS** – Super resistance to abrasion and impact from materials such as coke, sinter, limestone and iron ore.

**DE –** Extra resistance to abrasion and impact from sharp and heavy materials such as glass cullet, limestone slag and sharp gravel.



Applications: Mining, steelworks, foundries, cement and concrete plants, ore processing plants etc.

- Available in standard widths from 300 to 1500 mm
- · Belt edges available in molded or cut

#### **Standards for Abrasion Resistance Quality**

	GRI			Comparative Norms							
Cover Grade				TS547		TS 4464	TS 4464 UNI 3718		DIN 22102		
	DA	DS	DE	А	А	А	А	В	А	A	
Tensile Strength (Mpa)	=>20	=>18	=>25	=>25	=>17.5	=>25	=>25	=>20	=>25	=>17.5	
Elongation (%)	=>400	=>450	=>450	=>450	=>400	=>450	=>550	=>500	=>450	=>400	
Abrasion (mm <sup>3</sup> )	<=150	<=90	<=120	<=150	<=225	<=150	-	-	<=150	<=200	

Note: Mostly natural rubber-based covers, Max 70 °C working temp

### OIL RESISTANT CONVEYOR BELT

The rubber cover is designed to resist vegetable oils, mineral oils, animal fats, and petroleum derived grease.

#### GRADES:

**OR 1 –** Superior resistance to swelling caused by materials such as grains, feed, rice, sugar and soybean.

**OR 2 –** Superior resistance to swelling caused by materials such as timbers, fertilizers, wood chip and asphalt.

**Applications:** Pulp and paper plants, sawmills, feed and grain handling plants, rice mills, sugar mills, fertilizer plants etc.

Available in standard widths from 300 to 1500 mm

· Belt edges available in molded or cut

### **Standards for Oil Resistance Quality**



Cover Grade	GRI		COMPARATIVE NORMS				
	OR1	OR2	TS 4464 O	TS 4464 O			
Tensile Strength (Mpa)	=>15	=>15	=>10	=>10			
Elongation at Break (%)	=>400	=>400	=>300	=>300			
Abrasion (mm <sup>3</sup> )	<=200	<=200	<=300	<=300			

Note: Mostly nitrile-based covers, Max 90 °C working temp







### HEAT AND FLAME RESISTANT CONVEYOR BELT

The heat and flame-resistant belts are designed to resist cracking and hardening caused by hot materials like hot pellets, sintered ore and fertilizer granules.

#### STANDARDS:

HA 125 °C – High resistance to hot materials such as fertilizer granules and hot pellets.

HS 150 °C – Superior resistance to very hot materials such as ore powder, slag and glass waste.

**HE 175 °C –** Maximum resistance to extremely hot materials such as sintered ores, cokes and cement clinkers.

**K** – Flame resistance to materials such as coal, grain, oil.

Applications: Steelworks, cement plants, lime kilns, foundries, glass-recycling plants, smelters etc

- Available in standard widths from 300 to 1500 mm
- · Belt edges available in molded or cut

Cover Crode		G	RI		COMPARATIVE NORMS		
Cover Grade	HA	HS	HE	К	TS 5470	TS 4464 O	
Tensile Strength (Mpa)	=>15	=>15	=>15	=>15	=>25	=>17.5	
Elongation (%)	=>400	=>400	=>400	=>350	=>450	=>400	
Abrasion (mm <sup>3</sup> )	<=200	<=200	<=200	<=150	<=150	<=225	

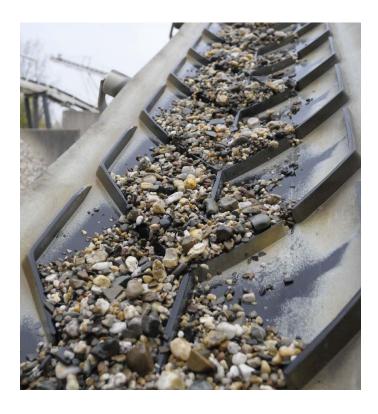
Note: Mostly EMP/EPDM based covers, material temp 100 - 300 °C

## **CHEVRON BELT**

Our incline belts are designed to carry sand, fine coal and grain materials by using steep inclines. Chevron belts increase the quantity of materials carried in incline applications.

#### Available in 3 cover grades:

- Abrasion resistant
- Heat resistant
- Oil resistant



AVAILABLE STANDARD CONSTRUCTIONS									
Belt width	Profile	Cleat dimensions							
Deit Width	Tronie	Width	Height	Pitch					
400	CST 780/13	330	14	250					
400	C 390/15Z	390	15	335					
500	C 330/14	330	14	250					
500	C 430/16	430	16	250					
600	C 530/16	530	16	250					
650	C 530/16	530	16	250					
650	V 580/15	580	15	300					
800	V 580/15	580	15	300					
800	CST 780/13	780	13	250					
1000	CST 780/13	780	13	250					
1200	CST 780/13	780	13	250					

Note: Other dimension available per request





### ELEVATOR CONVEYOR BELT

GRI elevator belt provides efficient and reliable vertical conveyance of bulk solids and various other materials. The number and capacity of buckets can be customized to meet the customers' requirements.

**Applications:** Grains, pellets, rice, feed and other soft materials.

#### Available in 3 cover grades:

- Abrasion resistant
- Heat resistant
- Oil resistant

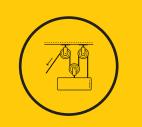




### CONVEYOR BELT SERVICING



Our service team can perform mechanical splicing or vulcanization splicing to maintain the integrity of the conveyor belt and the entire convey or system.



### **Pulley lagging**

Lagging is applied to extend the life of the shell by providing a replaceable wearing surface and to improve the friction between the belt and the pulley.



### CONSTRUCTION AND INSTALLATION OF CONVEYOR SYSTEMS

GRI offers a complete conveyor solution to ensure your production plant is operating at maximum efficiency. We distribute a wide variety of machines and equipment to complement your rubber conveyor belt. Our technicians will perform on-site inspections, installations and monitor your production lines.

## List of machines and equipment we provide:

- Hoppers
- Feeders
- Jaw crushers
- Clone crushers
- Vibrating sieves
- Grinding balls
- Gears
- Motors
- Chain systems

### **QUALITY CONTROL**

162 163 164

24

All conveyor belts are subjected to rigorous testing before sent off to customer. This step is extremely important to ensure customers get a long lasting and reliable product. Every product is manufactured according to DIN standards.

- Rheometer test
- Tensile test
- Adhesion test
- Abrasion test
- Oil test
- Fire and heat test

### **OTHER PRODUCTS**



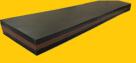
RUBBER SIDEWALL

Molded to conveyor belt, increasing material capacity up to 4 times.



RUBBER SHEET

Used in various applications, solid resistance to oil, acids and alkalis.



RUBBER SCRAPPER

Cost effective solution to belt cleaning and long belt lifespan.



#### CONVEYOR PULLEY

Engineered for high demand applications, available in several sizes.





Improves belt efficiency and prevents slipping.



IMPACT BAR

Preventing damage to the belt at loading points.



#### IMPACT ROLLER

Designed to resist and absorb pressure from material impacts.





Effectively reducing frictional resistance of the conveyor belt.



### **CONTACT US**



56/18-19 Moo 7, Rattanathibet Rd., Saothonghin, Bang Yai, nonthaburi 11140



8/1 Moo 3, Sor Watroman, Phachakacham Rd., Sampran, Nakornpatom 73110



0-2595-4199 0-2926-6195-6

