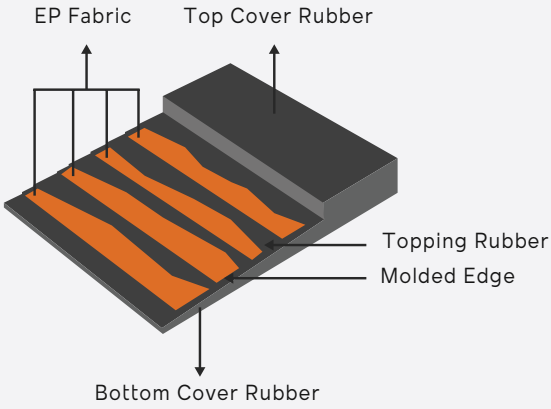
BANDO

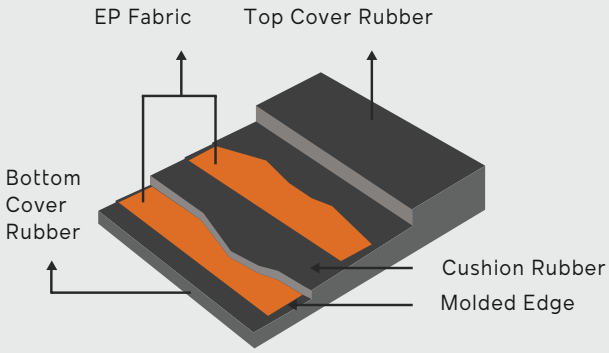
Fabric Belt (EP-Belt)

Belt Construction

Suncon (Multi-Ply)



Sunlon (Less-Ply)



Features :

- Superior Fastener Holding Ability
- High Impact Resistance
- Small Pulley Diameter
- High Bending Resistance
- Complete Moisture & Mildew Protection
- Deep Trough

Selection of Fabric by Service Conditions

Fabric	Features and Service Conditions
NN Nylon-Nylon	▪ High Impact Resistance ▪ High Bending Resistance
EP Polyester-Nylon	▪ Short Take-up Travel ▪ Heavy Duty ▪ Deep Trough ▪ High Tension ▪ High Speed ▪ Long Span ▪ Tear Resistance ▪ Impact Resistance ▪ Complete Moisture & Mildew Protection

General Cover Rubber (Wear Resistant)

Grades And Applications	
JIS-L	for conveying low abrasive materials
JIS-G	for conveying medium abrasive materials
JIS-S	for conveying abrasive materials
Grade M	superior abrasion resistance and cut-and-gouge resistance
UIP (Ultra Impact Protection)	superior in impact resistance as well as cut-and-gouge resistance
SAR (Super Abrasive Resistant)	very high abrasion resistance
Equivalent RMA, DIN, BS, AS, etc. standards available.	

Size Code

Example 1 : Overall belt strength

900	x	EP 400	/	4P	x	5.0	x	1.5	x	200, Grade M
A		B C		D		E		F		G H

Example 2 : One Ply strength

900	x	EP 100	x	4P	x	5.0	x	1.5	x	200, Grade M
A		B C		D		E		F		G H

A : Belt width (mm)
B : Type of fabric (EP = Polyester-Nylon)
C : Tensile strength (kgf/cm)
D : Number of plies
E : Top cover rubber thickness (mm)
F : Bottom cover rubber thickness (mm)
G : Belt length (meter)
H : Cover rubber grade

Heat Resistant

Item	Main Polymer	Max Belt Surface Temp	Max Material Temp
HC513	SBR	Lump : 100 ˚C Powder : 40˚C	Lump : 150 ˚C Powder : 70˚C
HC730 (White color)	EPR	Lump : 100 ˚C Powder : 40˚C	Lump : 150 ˚C Powder : 60˚C
HC710	EPR	Lump : 180 ˚C Powder : 70- 130 ˚C	Lump : 400 ˚C Powder : 180˚C
HC770	EPR Superior in abrasion	Lump : 180 ˚C Powder : 70 - 130 ˚C	Lump : 450 ˚C Powder : 180˚C

Flame Resistance (BANDO Heat & Fire Resistant Lineup (World New Introduction)

- **Application**
  Coal, Cokes, Hot Clinker, Sintered Ore, Pellets

- **Features**

Heat Resistance Max. 400˚C (Material Temp.) × **Fire Resistance Complies with the JIS K6324**

Temp.	Item Name	Max Belt Surface Temp	Max Material Temp.
Mid Temp.	FR7500	Lump : 100 ˚C Powder : 40˚C	Lump : 150 ˚C Powder : 70˚C
High Temp.	FR7700	Lump : 180 ˚C Powder : 70 - 130 ˚C	Lump : 400 ˚C Powder : 180˚C

Oil Resistant Conveyor Belts

If ordinary belts are used to convey goods containing oil (mine ral, animal or vegetable oil), the oil causes swelling in the c rubber, offset, meandering or reverse warping may occur. The belt may become disabled or service life may be shortened. We recommend oil-resistant conveyor belts even if only a small amount of oil is present in the goods being conveyed.

Types and applications

Type	Kind of rubber	Major features and applications
Oil-resistant 110 black Oil-resistant 130 white	CR (Chloroprene)	Well-balanced mechanical properties with light resistance to oil. Used in applications where these features are required or where light resistance to oil and moderately high heat resistance are required.
Oil-resistant 210 black Oil-resistant 230 white Oil-resistant 240 green	NBR (Nitrile)	Highly resistant to aromatic solvents (benzole, toluene, etc.), halogenated hydrocarbons, ketones, vegetable and mineral oils, except esters. Used in applications where large amounts of oil are present.
Oil-resistant 220 black	NR + NBR (Natural rubber plus nitrile)	Greater cold resistance than other belts, with mild oil resistance. Suitable for the conveyance of wood chips, frozen fish and grains.
Oil-resistant 300	PVC + NBR (Vinyl chloride plus nitrile)	Used in applications where high oil resistance is required, or in the light-duty conveyance of not-ready-to-eat foods that directly contact the belt. Standard belts have one side white and the other side green.
Oil-resistant 310 black Oil-resistant 330 white Oil-resistant 340 green	PVC + NBR (Vinyl chloride plus nitrile)	Oil-resistant 300 belts in made-to-order colors.

Note: For problematic applications, such as those involving mixed oils, the proper belt will be determined after examining the previous belt(s) test samples, and oil resistance testing.

Oil resistance test examples

Volume change rate (%)
Condition: Immersion at 70°C for a week

	JIS-G	Oil-resistant 11	Oil-resistant 210	Oil-resistant 220	Oil-resistant 300
Soybean oil	70	41	2	50	-3
Anti-corrosive oil	60	40	1	48	-5
Whale oil	175	51	22	66	10
Volatile oil	142	65	25	98	6

Volume change rate (%) JIS K 6258-1993

$$\frac{\text{(Weight in the air after immersion} - \text{weight in the water afterimmersion)} - \text{(weight in the air before immersion} - \text{weight of the water before immersion)}}{\text{Weight in the air before immersion} - \text{weight of the water beforeimmersion}} \times 100$$