



CONVEYOR BELT

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INTRODUCTION



Zenith Rubber has been at the forefront of manufacturing industrial rubber products since 1965.

Zenith Industrial Rubber Products Private Limited, has been a leading manufacturer and exporter of high-quality industrial rubber sheeting products since its establishment in 1965. Over the years, Zenith has achieved remarkable success in the global market and has become recognized as a trusted supplier.

With a strong focus on delivering excellence, Zenith offers a Diverse Range of Textile Conveyor Belts such as General Purpose, Heat Resistance, FDA, Fire Resistance, Oil Resistance, Cold and Frost Resistance and its Components like Wear Resistance Rubber Lining Sheeting, Zen Star Pulley Lagging, Ceramic Lagging, Impact Bars, Skirt Rubber and Conveyor Repair Patches and Strips.

Zenith's dedication to quality & compliance is evident through its status as a government-recognized export house. This recognition highlights the company's commitment to upholding industry standards and ensuring customer satisfaction. With an installed **capacity of 90 tons of rubber compound per day**, Zenith continues to strengthen its position in both domestic and international markets.

CONVEYOR BELT SPECIFICATIONS

Standard Width	Upto 2100 mm without longitudinal joint
Type of Fabric	Standard textile fabrics - EP / NN. Specific textile fabrics available upon request/availability.
Standard Belt Rating	200 KN/MTR to 2000 KN/MTR
No. of Plies	1 to 5
Rubber Cover Thickness	1mm (1/25") to 25mm (1")
Edge	Cut and Molded
Splicing Method	Hot / Cold / Mechanical
Single Roll Length	Standard Length: 100 - 300 meters depending upon total belt thickness
Standard Packing	Wrapping in HDPE sheets with Strapping. (Wooden Crate / Metal Crate packing is available on request)
Belt Identification Number	A unique BIN (Belt identification number) at every 10 meters (33')

CONVEYOR BELT

SELECTION CHART FOR CONVEYOR BELT

Strength Rating	Recommended Maximum Belt Tension (RMBT)	Nominal Carcass Thickness	Nominal Carcass Weight	Maximum belt width (mm) for satisfactory load support for material bulk density upto (t/m ³)			Minimum Belt Width (mm) for Adequate Troughing of Empty Belt			Minimum Pulley Diameter (mm) (60 to 100% belt rated tension)		
* Rating	(kN/m)	(mm)	(kg/m ²)	1.0	1.6	2.5	20° idlers	30°/ 35° idlers	45° idlers	Drive	Snub	Bend
200/2	20	1.58	1.96	650	500	400	400	500	600	200	160	125
315/2	31	2.22	2.35	800	650	500	450	500	700	250	200	160
400/2	40	2.52	2.62	1000	800	650	500	600	750	315	250	200
315/3	31	2.83	3.56	1000	800	650	500	600	750	315	250	200
400/3	40	3.43	4.14	1000	800	650	600	750	900	400	315	250
400/4	40	3.86	5.41	1200	1000	800	600	750	900	500	400	315
500/3	50	3.74	4.07	1200	900	800	600	750	900	400	315	250
500/4	50	4.84	5.92	1400	1200	1000	750	900	1050	630	500	400
630/3	63	4.17	4.56	1200	1000	800	700	750	900	500	400	315
630/4	63	5.20	5.94	1400	1200	1000	750	900	1050	630	500	400
630/5	63	5.94	7.58	1800	1600	1400	750	900	1050	800	630	500
800/3	80	4.79	5.10	1600	1400	1200	750	900	1050	630	500	400
800/4	80	5.78	6.57	1600	1400	1000	750	900	1050	800	630	500
800/5	80	6.70	7.80	1800	1600	1400	900	1050	1200	800	630	500
1000/3	100	5.30	5.61	1600	1400	1200	900	1050	1200	630	500	400
1000/4	100	6.94	7.68	1800	1600	1400	900	1050	1200	800	630	500
1000/5	100	7.45	8.62	1800	1800	1600	900	1050	1200	1000	800	630
1250/4	125	7.37	8.03	1800	1800	1600	900	1050	1200	800	630	500
1250/5	125	8.55	9.39	2000	1800	1800	1050	1200	1400	1000	800	630
1400/4	140	8.40	8.92	1800	1800	1600	1050	1200	1400	1000	800	630
1400/5	140	9.58	10.10	2000	1800	1800	1050	1200	1400	1250	1000	800
1500/5	150	9.11	10.20	2000	1800	1800	1050	1200	1400	1250	1000	800
1500/6	150	10.60	11.86	2000	2000	1800	1200	1400	1600	1250	1000	800
1600/4	160	8.51	9.00	2000	1800	1600	1050	1200	1400	1000	800	630
1600/5	160	9.89	10.29	2000	1800	1800	1050	1200	1400	1250	1000	800

*Zenith reserves the right be to amend / discard above information without notice in line with company's R & D.



CONVO TRAVERSE CONVEYOR BELT



Zenith Convo Traverse Belt are designed for diverse bulk material handling, offering superior cut, gouge, and wear resistance. Zenith Convo Traverse Conveyor belt is prominent in general-purpose use with specialized cover grades, tailored to meet specific performance requirements, like DIN X, DIN Y, and DIN Z, Super ABRA, ULTRA ABRA, making it ideal for materials like crushed rock, coal, and iron ore and various other bulk materials.

ZENITH CONVO TRAVERSE CONVEYOR BELT (GENERAL PURPOSE)

Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm ³)
DIN X	DIN 22102	25	450	120
SANS-M	SANS 1173	24	450	120
ISO-H	ISO 10247	24	450	120
AS-M	AS 1332	24	450	125
IS-M-24/ BS M-24	IS 1891	24	450	150
SUPER ABRA	Zenith	20	450	70
DIN Y	DIN 22102	20	400	150
ULTRA ABRA	Zenith	18	600	60
DIN-W /HAR/ SANS-A	DIN 22102/ SANS 1173	18	400	90
ISO-D	ISO 10247	18	400	100
AS-A	AS 1332	17	400	70
IS-N-17/AS-N/SANS-N	IS 1891/AS 1332/ SANS 1173	17	400	200
ISO-L	ISO 10247	15	350	200
DIN-Z	DIN 22102	15	350	250

FEATURES :

- ✓ Excellent tear resistance and strong bonding between covers and plies ensure protection and durability
- ✓ Optimal flexibility with impact resistance.
- ✓ Grade selection varies depending on specific abrasion resistance.

APPLICATION :

- ✓ Stone crushing and Mining industry.
- ✓ Cement and Paper Industry.
- ✓ Warehousing and Distributions.
- ✓ Ports and terminal operation.

*The information provided above is intended solely as a guideline. For detailed technical information, please contact a Zenith representative.



HEAT SHIELD CONVEYOR BELT



Zenith Heat Shield Conveyor Belt are designed to handle materials at elevated temperatures without compromising performance or durability. Zenith Heat Shield cover grade HR (T-1) and HR (T-3) ensure conveyor belts maintain their structural integrity and performance while transporting hot materials, making them suitable for various industrial applications where heat resistance is crucial.

Our continuous evolution allows rubber covers to withstand temperatures up to 200°C, resisting cracking and hardening for prolonged operation. This prompts a revaluation of reinforcement materials, ensuring ongoing enhancements in thermal integrity.

ZENITH HEAT SHIELD CONVEYOR BELT (HEAT RESISTANCE)

Cover Grades	Applicable Standards	Resistance to Temperature for lumps	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Heat Ageing temperature
HR (T-1)	ISO- 1891/ ISO – 4195	120 ☐	12.5	350	100 °C
HR (T-2)	ISO- 1891/ ISO – 4195	150 ☐	12.5	350	125 °C
HR (T-3)	ISO – 4195	200 ☐	12	300	150 °C
HR (T-4)/UHR	Zenith	220 ☐	12	300	180 °C ☐

FEATURES :

- ✓ Enhanced Thermal Stability to maintains structural integrity at elevated temperatures.
- ✓ Zenith HR conveyor belts endure temperatures up to 200°C, lowering maintenance demands.
- ✓ Designed to dissipate heat efficiently, reducing the risk of overheating.
- ✓ Exhibits low elongation and minimal shrinkage under high temperatures

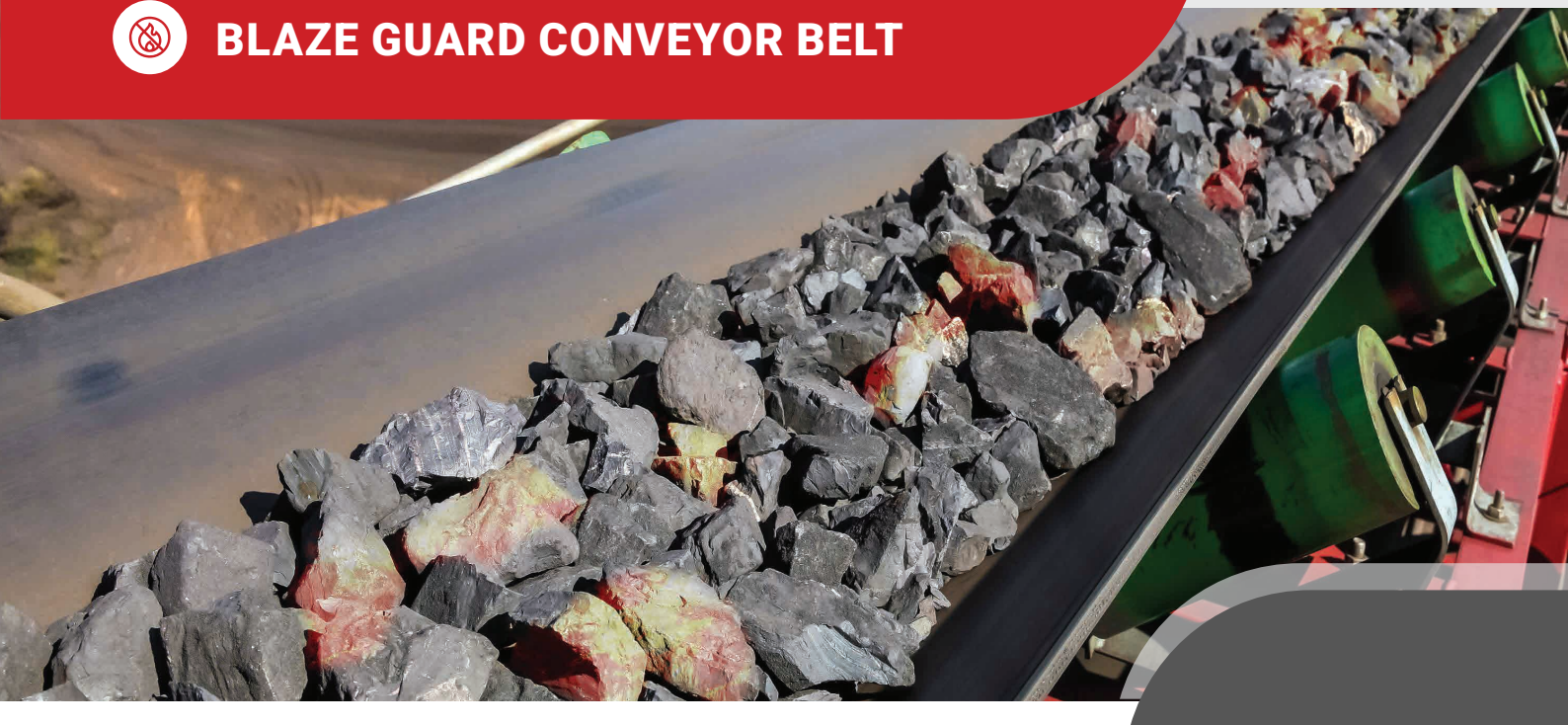
APPLICATION :

- ✓ Metal Processing
- ✓ Power generation facilities.
- ✓ Glass manufacturing facilities.
- ✓ Ceramic Industries.

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BLAZE GUARD CONVEYOR BELT



Zenith Blaze Guard Conveyor Belt are crafted for extreme heat conditions, that often involves induction of fire and accelerate its propagation in various stages of production. Zenith Blaze Guard Belt are meticulously engineered from high-quality flame-resistant polymer conforming to fire grades like FR-CAN, FR-DIN K, FR ISO-340 and FR-UG (Underground mines).

ZENITH BLAZE GUARD CONVEYOR BELT (FIRE RESISTANT)

Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm ³)
FR-AS-F	AS 1332	14	300	200
FR-CAN-C	CAN CSA	14	500	160
DIN K/DIN S	DIN22102	15	350	200
FR-HR-OR	Zenith	15	450	150
FR-IS	IS-1891-Part 5	17	350	200
FR-SANS-F	SANS-971	17	350	200
FR for Underground Mines	AS 4606	18	460	145

FEATURES :

- ✓ Conforms to international safety standards for fire retardancy.
- ✓ Dissipates static electricity to prevent sparking.
- ✓ Prevents propagation of fire over its surroundings.
- ✓ Belts can be offered with better than Industry abrasion resistance.

APPLICATION :

- ✓ Thermal Power Plant.
- ✓ Sulphur & Coal Handling.
- ✓ Steel and Metallurgical Industries.
- ✓ Underground mines.

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Zenith Petro Shield Belt is a specialized line of conveyor belts designed to confront the challenges exhibited by oils, greases, & other petroleum-based substances. Zenith Petro Shield Conveyor Belt is infused with premium oil-resistant compounds and fortified with high-strength materials to epitomize exceptional performance and longevity in environments vulnerable to oil contamination.

Zenith Petro Shield Conveyor Belt utilizes grades such as OR, DIN G, and PVC Nitrile Cover to minimize the risk of oil infiltration, which can lead to swelling, distortion, and operational issues such as tracking, steering, and premature wear. To minimize swelling and distortion from oil, it's crucial to use Zenith's Petro Shield conveyor belts that are resistant to oil and other allied chemicals.

ZENITH PETRO SHIELD CONVEYOR BELT (OIL RESISTANT)

Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm ³)	Maximum Swelling in Fuel B @ 72 Hrs (%) max
OR	IS-1891-Part 3	12	250	NA	75
DIN-G	DIN ISO 14890	15	450	160	75
White PVC Nitrile Cover	DIN22102	15	450	100	37

FEATURES :

- ✓ Superior resistance to oils, preventing softening, and premature wear.
- ✓ Improved environment safety.
- ✓ High resistant to chemicals.
- ✓ Minimize swelling and distortion caused by oils and greases.

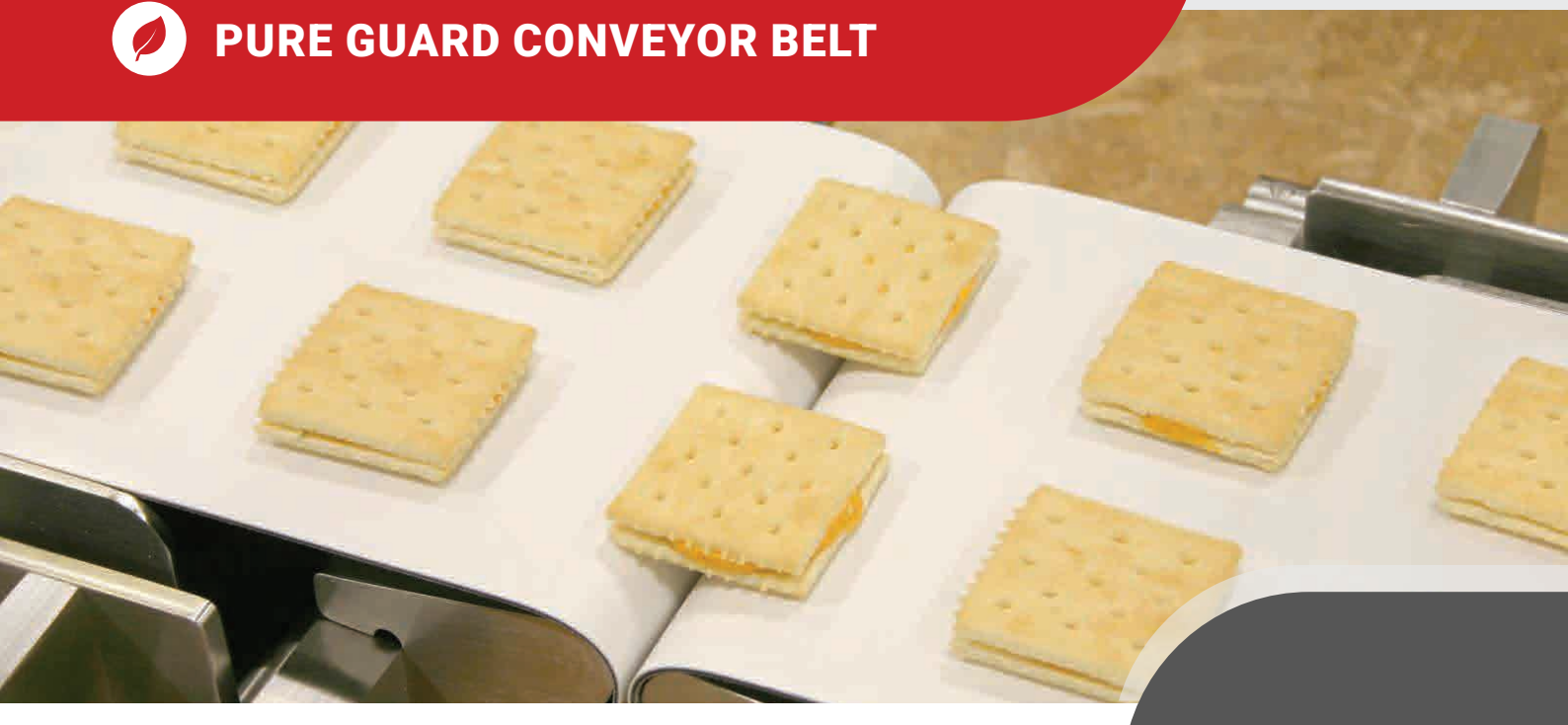
APPLICATION :

- ✓ Food processing Industry,
- ✓ Chemical and Fertilizers,
- ✓ Wood Processing Industry.
- ✓ Recycling Industry.

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PURE GUARD CONVEYOR BELT



Zenith Pure Guard Conveyor Belt is specifically designed to prevent contamination of food and facilitate the efficient, clean, and safe transportation of food products through various stages of processing and packaging. These belts are made from materials that comply with FDA regulations.

Zenith Pure Guard Conveyor Belt caters to Pharmaceutical Industry. It ensures no harmful substances are introduced to sensitive pharmaceutical products during processing and packaging. Zenith Pure Guard Conveyor Belt resist absorption of oils, fats, and other substances commonly found in meat and poultry processing, reducing the risk of microbial growth.

ZENITH PURE GUARD CONVEYOR BELT (FOOD GRADE)

Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm ³)	Maximum Swelling in Fuel B @ 72 Hrs (%) max
FG WHITE HYG	IS 1819-IV	10	400	270	NA
White PVC FG Nitrile Cover	DIN22102	15	450	100	37
FRAS OR FDA, CE	DIN22102	12	250	200	10

FEATURES :

- ✓ Compliance with FDA standards
- ✓ Odourless and Non-Toxic.
- ✓ Chemical resistant.
- ✓ Antimicrobial.

APPLICATION :

- ✓ Food Processing and Packaging.
- ✓ Meat and Poultry.
- ✓ Cosmetic Industry.
- ✓ Pharmaceutical Industries.

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FROST ARMOR CONVEYOR BELT



Zenith Frost Armor Conveyor Belt are specially designed to operate efficiently in extremely low-temperature environments, where standard conveyor belts will brittle, crack, or lose flexibility. Zenith Frost Armor Belt utilizes grades such as M-CFR, DIN-K-CFR, DIN-S-CFR, and FRX-CFR, which are essential for industries that require reliable material handling in cold climates or sub-zero environment.

Zenith Frost Armor Conveyor Belt features high performance polyester fabrics. Zenith Frost Armor Conveyor Belt offer high elasticity, and efficient performance at -45°C.

ZENITH FROST ARMOR CONVEYOR BELT (COLD AND FROST RESISTANT)

Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm ³)	Temperature Range
M-CFR	IS-1891-Part1	24	450	150	-45°C
FR-ISO 340-CFR /DIN-K-CFR	ISO-340	17	400	175	-40°C
FR-ISO 340-CFR /DIN-S-CFR	ISO-340	17	400	175	-40°C
FRX-CFR	SANS-971	14	400	175	-25°C

FEATURES :

- ✓ Longevity in extreme low temperature.
- ✓ Reliable performance in temperature as low as -45° C.
- ✓ Preventing stiffness or rigidity
- ✓ Resistant to thermal shock.

APPLICATION :

- ✓ Frozen foods processing.
- ✓ Winter Construction Projects.
- ✓ Industrial Gas Processing.
- ✓ Arctic Mining Operations.

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APPLICATION GUIDE ZENITH CONVEYOR BELTS



*Customized compounds with various combinations of the above mentioned cover grades

Zenith Rubber enjoys the leadership status
with their wide Presence & Network
across the globe



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