ZENITH™ ZENITH INDUSTRIAL RUBBER PRODUCTS PVT. LTD.

Quality Rubber Solutions

CONVEYOR BELT

www.zenithrubber.com

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 Resistance and its Components like Wear Resistance Rubber Lining Sheeting, Zen Star Pulley Lagging, Ceramic Lagging, Impact Bars and Skirt Rubber.

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.

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/m³)			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/m2)	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

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

CONVEYOR BELT

CONVEYOR BELT SPECIFICATIONS	
Standard Width	Upto 2000 mm(78")
Type of Fabric	EP / NN / PP
Standard Belt Rating	200 N/mm (110 PIW) to 3200 N/mm (1800 PIW)
No. of Ply's	1 to 6
Rubber Cover Thickness	1mm (1/25") to 25mm (1")
Edge	Cut and Molded
Splicing Method	Hot / Cold / Mechanical
Single Roll Length	Standard Length : 200 to 250 meters
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')

GENERAL PURPOSE BELTS

Zenith conveyor belts, expertly designed for diverse bulk material handling, exhibit superior cut, gouge, and wear properties. Tailored for materials like crushed rock, coal, iron ore, etc., Zenith belts excel in general-purpose use. Addressing unique user needs, we offer specialized covers for distinct applications. Prioritizing longevity, our compounds protect against wear, tear, aging, and flex properties. Renowned for high adhesion, low elongation, and outstanding field performance, Zenith conveyor belts reflect our dedication to quality and consistency. Contact us for tailored solutions to elevate belt performance and lifespan.

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

HEAT RESISTANT BELTS

Manufacturing processes involve heat generation or conveyance of hot material, with belt selection often underestimated. Harsh operating conditions and material limitations lead to belt failure. Zenith HR conveyor belts uniquely designed for superior heat resistance. 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.

HEAT RESISTANT BELTS					
Cover Grades	Applicable Standards	Resistance to Temperature for lumps	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Heat Ageing temperature
HR (T-1)	IS-1891-Part2	120	12.5	350	100 °C
SHR (T-2)	IS-1891-Part2	150	12.5	350	125 °C

FLAME RESISTANT BELTS

Mining and allied industries are crucial for economic growth, safety assessments are vital for risk management. Belts in conveyors, inherently combustible, require special consideration. Zenith FR conveyor belts tackles these risks with innovative fire-resistant belts, using advanced technology to curb fire propagation without sacrificing wear life. Zenith's fire-resistant belts comply with international standards, ensuring safety across various applications.

FLAME RETARDANT BELTS				
Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm³)
FR-AS-S	AS 4606-2012	14	300	250
FR-AS-F	AS 1332-2000	14	300	200
FR-CAN-C	CAN CSA	14	500	160
DIN K/DIN S	EN 12882 -2A/2B	15	350	200
FR-HR-OR	ZENITH	15	450	150
FR-IS	IS-1891-Part 5	17	350	200
FR-SANS-F	SANS-971-2003	17	350	200
FR for Underground Mines	AS 4606:S	18	460	145
FR-MSHA	CFR-30-Part 14/75	20	500	110

OIL RESISTANT/FDA

Oil infiltration in rubber leads to swelling and distortion, causing serious tracking, steering, & premature wear issues. Most conveyor belt manufacturers offer a single oil-resistant compound, but Zenith OR conveyor belts provides resistance from vegetable, animal oils, fats, resins & Minerals oil boasting exceptional wear resistance. Zenith OR conveyor belts are cold & oil resistance for protection against various chemicals with optional addition of Zenith FR option.

OIL RESISTANT/FDA					
Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm³)	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
FG WHITE HYG	IS 1891-IV	10	400	270	NA
White PVC Nitrile FG Cover	DIN22102	15	450	100	37

COLD & FROST COVER GRADES

Zenith cold & frost Resistant belts feature superior EP canvas (as carcass), & nylon canvas finishes. Utilizing a blend of NR / SBR cover rubbers, they offer high elasticity, and efficient performance at -40°C. Ideal for conveying materials outdoors in freezing areas or to cold storage, Zenith cold & frost conveyor belts have a cored structure, combining ordinary & reinforced SBR. With advantages like impact resistance, cold-proof design, & suitability for various materials, they operate effectively in sub-zero temperatures, ensuring reliable performance in cold environments.

COLD & FROST COVER GRADES					
Cover Grades	Applicable Standards	Min. Tensile Strength (MPa)	Min. Elongation at Break (%)	Max. Abrasion Loss (mm³)	Temperature Range
M-CFR	IS-1891-Part1	24	450	150	-45°C
FR-ISO 340-CFR /DIN-K-CFR	ISO-340-2013	17	400	175	-40°C
FR-ISO 340-CFR /DIN-S-CFR	ISO-340-2013	17	400	175	-40°C
FRX-CFR	SANS-971-2013	14	400	175	-25°C

*Please get in touch with Zenith technical representative for any specific application or specific cover grade properties.

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