



(AN ISO 9001:2015 CERTIFIED COMPANY)

# JK Conveyor and Transmission Co.

JK CONVEYOR & TRANSMISSION CO. is one of the leading organizations engaged in the field of Industrial Conveyor belts. Situated at Kapurthala (pb) India, we have recorded a positive growth and trajectory of success under the supervision of High Tech Team. Due to years of experience in the industrial field we offer superior range of products which fulfill the requirements of various industries.

Our range includes- Conveyor belt, Rough top belt, Chevron belt, Conveyor accessories, Fertilizer grade belt, Foundry grade belt, Side wall conveyor belt, Industrial adhesive, Pully lagging rubber sheet (Diamond profile), etc. (Belt width range 400 mm - 2400 mm)

## **Contact Us Today**

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## **JKON Belt Selection Chart**

Belt Rating	*MRBT,N	Nominal Carcass	Nominal Carcass	Minimum Pulley Diameter(mm)			Minimum Belt Width (mm)		
EP/NN	/mm	Thickness (mm)	Weight (kg/m²)	Drive	Snub	Bend	20° idlers	35° idlers	45° idlers
200/2	20	1.6	2	200	160	125	400	500	600
250/2	25	2	2.25	250	200	160	350	450	600
315/2	32	2.2	2.35	250	200	160	450	500	700
315/3	32	2.8	3.6	315	250	200	500	600	750
400/2	40	2.6	2.7	315	250	200	500	600	750
400/3	40	3.4	4.05	400	315	250	600	750	900
400/4	40	3.9	5.25	500	400	315	600	750	900
500/2	50	2.9	2.95	315	250	200	600	750	900
500/3	50	3.7	4.2	400	315	250	600	750	900
500/4	50	4.7	5.8	630	500	400	750	750	900
500/5	50	5.1	6.7	630	500	400	900	1050	1200
630/3	63	4.3	4.7	500	400	315	700	750	900
630/4	63	5	5.5	630	500	400	750	900	1050
800/3	80	4.7	5.1	630	500	400	750	900	1050
800/4	80	5.2	5.7	800	630	500	750	900	1050
800/5	80	5.6	6.2	630	500	400	900	1050	1200
1000/3	100	5.3	5.5	630	500	400	900	1050	1200
1000/4	100	6.8	7.6	800	630	500	900	1050	1200
1000/5	100	7.6	8.8	1000	800	630	900	1050	1200
1000/6	100	7.7	9.7	1000	800	630	1050	1200	1400
1250/3	125	6.8	6.7	800	630	500	900	1050	1200
1250/4	125	7.3	7.8	800	630	500	900	1050	1200
1250/5	125	8.3	9.3	1000	800	630	1050	1200	1400
1400/4	140	8.4	9.2	1000	800	630	1050	1200	1400
1500/4	150	8.8	9.5	1000	800	630	1050	1200	1400
1500/6	150	10.6	12.05	1250	1000	800	1200	1400	1600
1600/4	160	8.6	9	1000	800	630	1050	1200	1400
1600/5	160	9.7	10.5	1250	1000	800	1050	1200	1400
1800/3	180	9.9	11.2	1250	1000	800	1050	1200	1400
1800/4	180	9.4	9.8	1250	1000	800	1200	1400	1600
2000/4	200	10	10.3	1250	1000	800	1200	1400	1500
2000/5	200	11	11.5	1250	1000	800	1400	1600	1800

- MRBT reflects a minimum 10:1 safety factor. With the appropriate fastener selection and installation, joint strength will be 4 times the belt tension.
- When in doubt, please contact your **JKON** representative for selection guidance.
- Add the cover gauge to carcass gauge to obtain the nominal belt thickness.
- For Calculation of Belt weight, consider weight of 1.0 mm thick rubber =1.25 kg/m for M grade and for FR grade 1.35 kg/m .
- **JKON** reserves the right to change these values without notice, in tune with technical development.

## **JKON Cover Grade Selection Chart**

Cover Grade	Minimum Tensile Strength(Mpa)	Minimum Elongation at Break(%)	Maximum Abrasion Loss(mm)	Application Characteristics	
DIN Z	15	350	250	Suitable for conveying moderately	
RMA2	14	400	200	abrasive material	
N-17	17	400	200	abiasive iliateriai	
M24	24	450	150		
RMA1	17	400	200		
BS-N17	17	400	150	sutiable for conveying large	
DIN Y	20	400	150	lumps,sharp edged rugged	
SAR-125	17	400	125	materials	
DIN-X	25	450	120		
DIN-W	18	400	90	High cut & gouge property	
SAR	17	400	110	high cut & gouge property with super abrasion resistance	

LIKE: IS1891:P.I | IPSS 2-03-006-95 | BS 490 (P-I) 1990. | DIN 53516













## **JKON Fire Resistance Belt**

These belts are recommended for use in coal and such types of mines where the ambient temperature may not be high but there is a distinct hazard of the belts being enveloped in fire. Rubber covers are Fire Resistant and Antistatic. Range of belts are complying or have certification for major Fire resistant standards across markets

like: DIN 22103 | IS 1891: Part 5 | CAN CSA M422-12 | ISO-340



Fire Resistant Test compliance to Standard	Minimum Tensile Strength (MPa)	Minimum Elongation at Break (%)	Maximum Abrasion 3 Loss (mm)	Reference Material
				Coal Mines, Ore mines, Ports
FR DIN K	17	400	175	Thermal Power
				Plants,
FR IS 1891	17	400	175	Coal Prep Plants
FR-DIN S	17	400	175	Coal , Ore Mines

Note: For any specific cover grade requirement outside the chart, kindly contact JKON Technical service division

Rubber Covers Thickness : 1.5 mm to 25 mm

Edge : Cut/Moulded Edge

Splicing Method : Hot/ Cold/ Mechanical

Belt Identification : Unique Product Identification Number at every 10 Mtr

## JKON Heat Resistance Belt

Several manufacturing processes involve heat generation or conveyance of hot material. While belt selection may be made on the basis of certain design criteria by the end users, it is often the case that due to process variables, the actual ambient conditions that belts are exposed to are much more than originally estimated. Due to the severity of the operating environment and the intrinsic limitations in the material properties, belts tend to fail due to: Cover hardening Ply delamination Belt deformation Joint failure Correct product selection is essential to ensure the continued uptime of a conveyor and thereby of the belt.



Heat Resistant Cover Type	Type of Rubber	Working Temperature °C	Maximum Peak Temperature °C	Belt Surface Temperature °C	Minimum Tensile Strength (MPa)	Minimum Elongation at Break (%)	Maximum Abrasion Loss (mm )	% Change in Tensile Strength and Elongation at Break after heat ageing at	Product Characteristics
HRT1	SBR/NR BASED	80-100	120	60-100	12.5	450	150	100°C,72 hrs; -25%,-40%	High Abrasion Resistance , suitable at low to medium temperature for carrying Coke, Lime Stone, Casting Sand etc.
SHRT2	SBR based	80-125	150	60-125	12.5	450	150	100°C,72 hrs; -35%,-50%	Good Abrasion Resistance, suitable for medium temperature used to carry Coke, Lime Stone, Casting Sand etc.
SHRT3	EPDM / SBR based	80-150	180	60-150	12.5	450	150	100°C,72 hrs; -35%,-50%	Extreme Heat Resistance, designed to carry hot load of material like Cement, Clinker, Lime Stone, Clay etc. This belt has non-cracking property.
UHR	EPDM based	80-180	220	60-180	10	450	150	100°C,72 hrs; -45%,-55%	Extreme Heat Resistance, non hardening and non cracking, designed to handle Hot Sinter, Hot Clinker, Hot Chemicals, Phosphates, Fertilizers etc.

#### Note: We are providing as per buyer specification.

While conventional rubber covers had limited heat resistance, with the continuous evolution and development at JKON, we have reached a stage where the rubber covers are capable of withstanding elevated temperatures of +200° C and resist cracking and hardening for a much longer period in operation. This necessitated a relook at the thermal integrity of various reinforcement materials so that further improvements in this field would be undertaken.

#### **Carcass Types**

It is a fact that most failures in high heat applications commence with rubber covers ageing prematurely and this is followed by fabric plies giving way. This is due to limitations in the thermal properties of conventional polyester and nylon fabrics which tend to soften and melt when the core of the belt reaches temperatures exceeding 150°C. At these temperatures there is a sharp drop in the strength of the belt and blow holes and joint failures are witnessed.

## JKON Oil Resistance Belt

Oil Resistant conveyor belts are manufactured using specially tailored rubber compounds and are suitable for conveying a wide range of materials which may either contain, or are coated with oil. Some applications demand a certain degree of oil resistance. However, general purpose belts while suitable for abrasion and wear, are not designed to withstand a higher level of oil resistance. As a result, the covers tend to swell when they come into contact with petroleum based oils, greases, animal or vegetable fats etc. The resultant swelling of the rubber leads to failure of the belt due to reverse troughing, cover delamination or joint separation. To address this challenge, we offer the largest range of Oil Resistant belts in the industry and can virtually customise the belt construction and cover type to suit your needs



Oil Resistant Cover Type Standard & Grade		Minimum Tensile in Fuel B(%)	Minimum Elongation at Break (%)	Maximum Swelling (mm)	Product Characteristics
Oil Resistant	JKON-OR	12	250	75	Carry material like oil treated fertilizers, crude petroleum, oil coated products etc.
Oil Resistant	JKON-IS-OR, AS-Z, DIN-G	12.5	350	70	Materials like light oil coated sand, food grains, oil seeds etc.
Moderate Oil Resisatant	JKON-MOR	12.5	350	110	Materials like oil seeds, wood chips, vegetable oil coated products etc.
Heat & Oil Resisatant	JKON-SOR-HR	12	300	70	Heat resistant upto 123°C, used for hot asphalt handling
High Heat & Oil Resisatant (Moderate)	JKON-SHR-SOR	12	300	55	Moderate heat resistant upto 100°C, for handling tar coated material
High Abrasion & Oil Resistant	JKON-HAR	12	300	60	High wear resistant (100mm max.) meant for handling oil coated abrasive material
Oil, Heat and Fire Resistant	JKON-OR-HR-FR	12	300	60	Soya grain handling terminals, anti static & fire resistant

Note: We are providing as per buyer specification.

### Benefits of JKON:

- Designed to convey oily materials, thereby resulting in higher belt life
- Also have a high degree of chemical resistance
- Unique properties to prevent material build up
- Availability of various grades to suit end use requirements (refer table)
- Eliminates the occurrence of reverse troughing of belts

**Product Application:** Coated fertiliser products | Refineries for handling pet coke | Scrap recycling and compost handling | Soya and grain handling facilities | Hot asphalt / hot mix plants | Metal turnings

#### **Product Characteristics:**

- Common belt Widths: 500 mm to 2400 mm for EP/NN
- Carcass Variety Available : EP/NN, JKON.
- Common Belt Rating: 200 to 2000 kN/m (110 to 1800 PIW)
- No. of Plies: 1 ply to 7 ply
- Rubber Cover Compounds : Refer table for detailed properties
- Rubber Cover Thickness: 1.5 mm to 25 mm (1/16" to 1") or Bare Back
- Edge : Cut/Moulded Edge Splicing Method : Hot/ Cold/ Mechanical Belt Identification : Unique Product Identification Number at every 10 Mtr

## **JKON Hygienic Belt**

covers requirements for rubberized canvas hygienic conveyor belting intended for handling foodstuffs and other products which require hygienic handling

**HYGIENIC** 10 MPA 350 MPA 200 MPA

**PVC/ HYG** 10MPA 350 MPA 150 MPA

LIKE: IS 1891 (P-IV)

