TEK SOLUTIONS AND CONSULTANTS

TSC Portable Hydraulic Operated Vulcanizing Machines are made of light weight, high strength Aluminium alloy for easy transportation and quick assembly. Equipments are available for fabric and steel cord belts that are designed as per DIN/IS Maximum belt width 2400mm. Modular design combination helps vulcanizing different belt widths and splice lengths. Spot (Patch)/ Edge repair are also manufactured.

MAJOR COMPONENTS

TSC Heating Plates

- Frame type construction made of lightweight aluminium alloy
- Rhombic shape with bias angle 16°42', 22°, 26.5°, Rectangular 90°
- Special Electrical connection with tubular heating element
- Minimum temperature tolerance over entire area
- Maximum heating Temperature 180°C
- Temperature regulation through PT 100
- Optimum pressure and temperature distribution
- Air cooled

TSC Hydraulic Cross Beams:

- Special Profile for cross beams made of lightweight aluminium alloy
- Maximum safety by passing the clamping bolts through within the beam profile
- Compact lightweight Hydraulic cylinders for uniform surface pressure
- Built in protection against hose breakage
- Easy pressure build-up by Hydraulic Pump

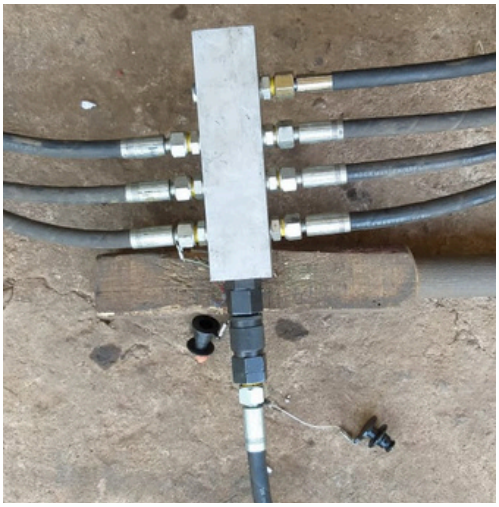
TSC Electronic Control Unit:

- Adjustable digital temperature display
- Electronic Temperature display
- Provision for Auto/ Manual control
- With suitable cables

Manual Hydraulic Pump:

- Maximum pressure limited to 450 bar
- Automatic switchover from high discharge at low pressure to low discharge at high pressure

Hose Distribution:



Matches with number of cross beams of the equipment

Accessories:

Edge clamp - for steel cord belt

Edge bar - for steel cord belt

DETAILS REQUIRED TO QUOTE

Belt Width

Belt Type- FABRIC/ STEEL CORD

EP/Fabric

Belt Rating

Number of plies

Steel Cord

ST Rating

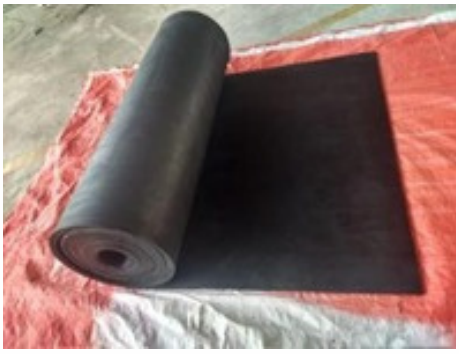
Other Products

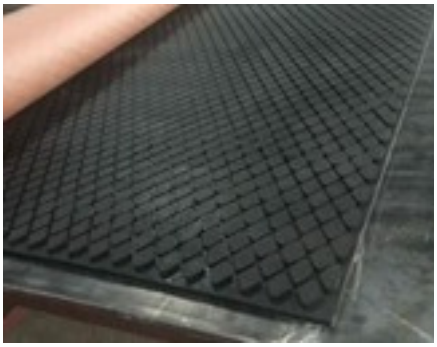
Hot Vulcanizing Solution: A solution prepared as a medium suitable for rubber and metal bonding purposes - M24 grade, HR grade, SHR grade, UHR grade and Steel Cord Kits.

Cold vulcanizing Solution: A solution to splice the two ends of the belt without the help of a press - M24 grade, HR grade, SHR grade.

Lagging Sheets: Plain sheets, Diamond Grooved, Ceramic, Vessel Lining sheets

Frog Clamps (Belt Vise)





Conveyor Belts

Length	Open or Endless
Ply	1 to 14 Ply
Thickness	2mm to 40mm
Types of Synthetic Carcass	General Duty (GD), extra duty (ED) & Heavy duty (HD)
Edges	Cut edge or Molded edge
Breaker Ply	Breaker is provided on the face, back & edges as per requirement
Fabric	Cotton/cotton, Cotton/Polyester & Synthetic Fabric like Nylon/nylon and Polyester/Nylone(EP), Polyester/Polyester (EE)(EH)

UNMATCHED ADVANTAGES

A perfect combination of quality materials, modern technology, experienced manpower and elaborate quality assurance measures, ensure that these conveyor belts have the following unmatched advantages

HIGH ADHESION LEVELS

Special chemical bonding techniques ensure very high adhesion levels between cover to ply and ply to ply, achieving superior belt consolidation and higher peel resistance.

OUTSTANDING IMPACT RESISTANCE

High adhesion levels and presence of thick rubber cushions between plies provides outstanding impact resistance and eliminates cover stripping and ply to ply desalinization.

SUPERIOR TOUCHING & FLEXIBILITY

Higher transverse flexibility of these belts allows deeper touching, improving volumetric transfer capacity of conveyors. At the same time, higher longitudinal flexibility allows use of smaller pulleys diameter and reduces flex fatigue.

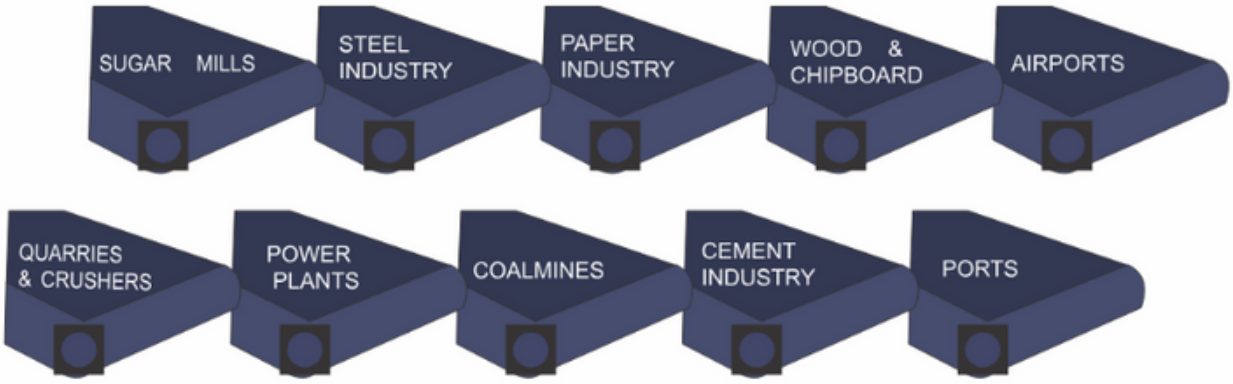
CONVEYOR BELT

Specification and technical data of multi-ply nylon conveyor belt

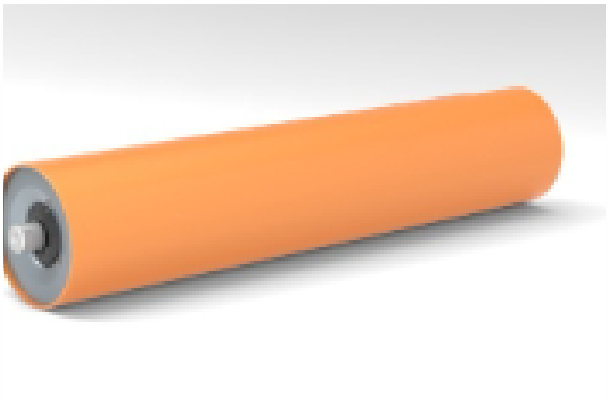
Fabric type	Fabric structure		Fabric type	Fabric Thickness (mm/p)	Strength series					Cover rubber Thickness		Width (mm)	Length (m)
	Warp	Weft			2ply	3ply	4ply	5ply	6ply	Upper	Lower		
Nylon (NN)	Nylon (N)	Nylon (N)	NN-100	0.45	200	300	400	500	600	0-10	0-10	100-2000	<400
			NN-150	0.65	200	450	600	750	900				
			NN-200	0.85	300	600	800	1000	1200				
			NN-250	1.05	400	750	1000	1250	1500				
			NN-300	1.25	500	900	1200	1500	1800				
			NN-350	1.45			1600	2000	2400				
			NN-400	1.65			2000	2500	3000				

PULLEY LAGGING

Drum or pulley lagging are applied to drive pulleys to prevent belt slippage, reduce wear from abrasive materials and build-up of dirt in pulleys. Pulley lagging is a lagging of high quality that is mounted on the drive drum of rubber conveyor belt installations. Even in extremely wet and polluted circumstances, the high friction coefficient guarantees an excellent grip, maximizing the functionality of your conveyor. Next to characteristics such as high wear resistance, heavy duty design, insensitivity to humidity, long life expectancy, non-flammable, the operational temperature range between minus 40° and 120° degrees Celsius; it also offers the possibility to reduce the tensioning of the belt, increasing the life expectancy of the belt itself.



Rollers



Carrying Rollers

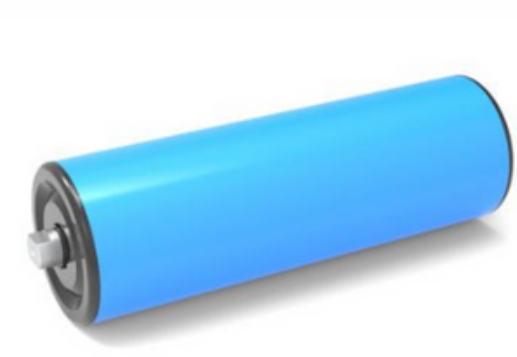
They are used as a means to support the conveyor belt. The diameter range of the Steel Rollers is between 76mm to 219mm. Steel Rollers includes multi-labyrinth sealing, high quality bearing & being greased and sealed for lifetime.

Impact Rollers

We have a complete range of light, medium & heavy duty impact rollers. Impact discs are made up of premium quality natural rubber with shore A hardness. Impact Rollers are used in conveyor loading & transfer point application to protect the belt where lump material is dropped from height which cause damage to the belt

Rubber Lagged Rollers

Rubber Disc Return Roller offers a maintenance free solution in areas where Return Rollers are failing regularly due to carry back and shell wear. Rubber Disc Return Rollers are a good alternative to plain Steel Rollers on the return side

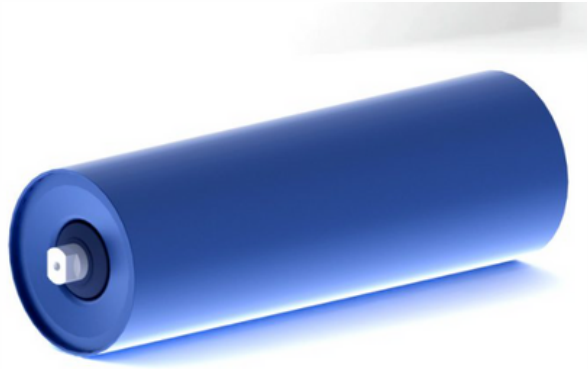


HDPE Roller

Used for low-noise applications wherein they are strong, lightweight, and suitable for high tonnage applications and conveyor belt systems greater than 1600mm wide. Minimizes the potential for manual handling injuries from during installation and change-outs. Achieves low operating self-noise output compared to standard steel rollers, and ideal for use in noise-sensitive environments.

Self-Cleaning Roller

Effective in cleaning up the debris that gets collected under the belt conveyor. It has high wear and rust-resistant steel with a hard coating on the surface for extended bearing life and noise reduction. Helps in avoiding sticky or gummy carry-back material on the belt. Beneficial in belt tracking and ensures there is no need to stop machinery for any maintenance. Designed for the toughest of applications with its strengthened frame construction. The robustness in its design reduces belt tensions and lowers the power requirements hence incurring lesser operational costs, and no production time is lost.



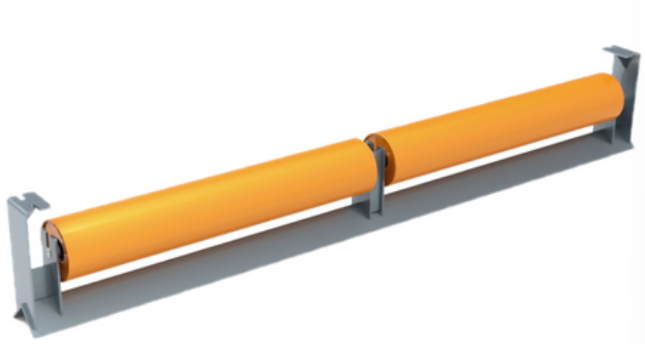
Flat Return Rollers

Flat return rollers are designed to be used as carrying idlers and support the conveyor belt from below in a flat belt situation. They provide support to the returning conveyor belt as they are usually installed on a conveyor’s underside. Flat return rollers have a low friction coefficient and high wear resistance. They are lightweight, have low maintenance, possess efficient mechanical properties, are easy to install, have an extended life, and have stability in their operations.

Idlers

Return Bracket

Base Mounted Idlers consists of a single or double steel idler mounted on the two drop brackets. These drop brackets are also known as the return brackets. Among the single or dual steel idlers, the single design is more prevalent in use. Two brackets are secured to either side of the belt conveyor support structure. It` is lightweight but still capable of supporting the belt. It ensures no stretching, sagging, and failure of any kind during the idler's regular functioning. This idler is dustproof and highly durable due to its material constituents. Base Mounted Idler requires less maintenance and low operating cost.

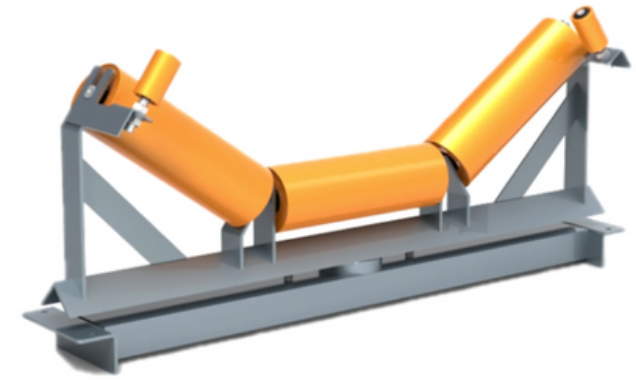


Flat Return Bracket

As far as the return side of a conveyor is concerned, the flat return idler is the most common idler. Flat return idlers support the belt in order to prevent stretching, sagging, and failure. These idlers contain a single steel roll mounted on two drop brackets.

Galvanized Machined Idler

In the galvanizing process, the zinc coat is applied on the idler's surface to improve its life and durability quite considerably. This process helps in providing the anti-static elements and preventing corrosion in the idlers. Vital in the conveying process in many industries. Support the belt, so the material is conveyed along its full length while preventing the belt from stretching, sagging, and failing.

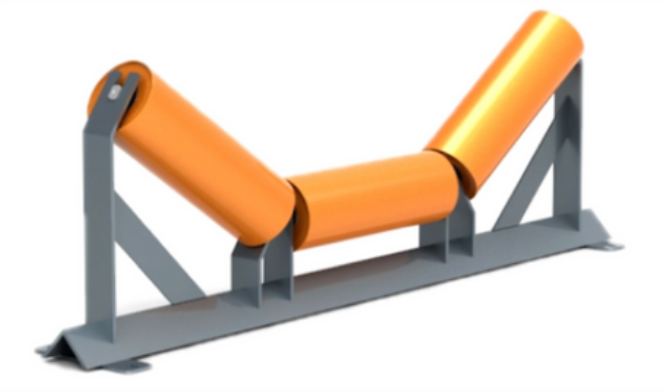


Self Aligning Carrying Idler

The most expensive part of a conveying system is often the conveyor belt. It’s of prime importance to make sure that the belt is fully functioning and free from damage. That’s what a self-aligning carrying idler does. It ensures that the conveyor belts stay on track, thereby minimizing the chance of severe belt corruption. Self-aligning carrying idlers are concave in shape and restrain the belt from running up and over the conveyor. They also reduce the friction between the idler and belt.

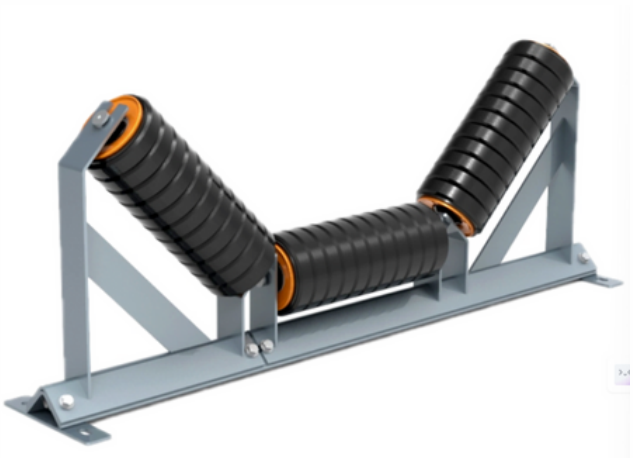
Self Cleaning Idler

Effective in cleaning up the debris that get collected under the belt conveyor. It has high wear and a rust resistant steel with the hard coating on the surface for long bearing life and noise reduction. Helps in avoiding sticky or gummy carry-back material on the belt. Helpful in belt tracking and also makes sure that there is no need to stop machinery for any maintenance. Designed for the toughest of applications with its strengthened frame construction. The robustness in its design reduces belt tensions and lowers the power requirements hence incurring lesser operational costs, and no production time is lost.



Carrying Idler

Carrying idlers contain three or more idlers, which then guide the conveyor belt. They are installed along the entire length of the conveyor and found on the carrying-side of the belt. Carrying idlers work so that they keep the belt in the same configuration all along its length. It helps maintain the same cross-sectional area as the belt carries mined materials from their source to the drop-off point. Carrying idlers helps maintain the shape consistency of the belt throughout its journey, thereby improving the stability and carrying capacity.



Impact Idler

Impact idlers are used to load areas of the belt where the belt damage is expected owing to the falling material and consistent impacts. They help in absorbing impact forces, thereby preventing damage to the conveyor belt, idler frame, and surrounding structure. Impact idlers help avoid damage to the belt, which is essential since the belts cost a lot to repair and replace. Therefore, they decrease maintenance costs and improve productivity.

CONTACT

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