

CONVEYOR COMPONENTS



BSK OVERSEAS INC.

A House of Conveyor Components



Heavy Duty Bearings



Rollers



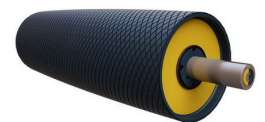
Belt Cleaning System



Trough Roller Frame



Pillow Block Bearings



Conveyor Pulley



BSK OVERSEAS INC is one of the leading Exporters of Conveyor Components throughout the world with the magnificent quality at economical prices according to the customer requirements. Our aim is to maintain uncompromising control on quality by following norms of the standards during production process to produce upgraded Products with the latest technology. Moreover, our quality assurance department issue a unique identity number for its certification.

Further our overseas offices are situated in **USA** and **Canada** working independently for prompt support and supply to the customer.

A brief brochure presents BSK portfolio of Conveyor Components for your ready reference & to generate inquiry.

For more information/range of our products, please contact us:- info@bskoverseas.com

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Conveyor Roller

Carrying Roller

Carrying rollers are used to support the conveyor belt and are installed on the groove shape frame, Groove shape forward inclined idler frame and transition idler frames. Rollers include high quality bearing, multi-labyrinth sealing, greased and sealed for life and critical specifications essential for high performance.

Features & Specifications

- Rollers are designed for smooth rotation, low noise, and long service life.
- Diameter range: 75mm to 219 mm, other diameters available on your request.
- Pipe length: 180mm to 3500 mm.
- Water proof and dust proof.
- Each roller come out through strict inspection and test to ensure high level quality.
- Roller Surface Colour : Any colour as per customer request.



Impact Roller

Impact rollers are used as carrying rollers instead of normal steel rollers at a loading point. On steel roller there are rubber rings assembled, side by side, to absorb the weight and impact of material falling onto the belt. At the same time impact rollers reduce the shock and vibration through the steel structure.

Features & Specifications

- Absorbs weight and shocks.
- High loading capacity.
- Roller diameter: 75-219 mm
- Shaft diameter: 20mm,25mm,30mm,35mm,40 mm
- Roller length: 150 - 2800 mm



HDPE Roller

- HDPE pipe with Reinforced Skeleton
- Light Weight for Power Saving and Worker Safety
- Smooth, Noiseless operation, Recyclable
- Anti-Alkaline/Anti-Acidic/Anti-Static Formulation
- Suitable for Corrosion Environment



Return Roller

The straight tracking of the belt may be compromised by the type of conveyed material, especially when this material is sticky and thereby adheres easily to the belt surface.

In this case, material is also deposited on the return rollers that support the belt, adding an irregular addition of scale to the roller itself.



Features

As a consequence, not only wear and tear of the belt occurs, but forces are brought into play to move the belt away from its correct track.

Return rollers with spaced rubber rings contribute largely to eliminating the build up of scale that forms in certain conditions on the belt surface. The rings are pointed, assembled at intervals, in the central part of the roller, where they have the scope to break up the scale which normally is present at the belt centre; meanwhile flat rings mounted in groups at the extremities of the belt, support and protect the belt edges, also in cases of limited belt wandering.

Return rollers with rings should not be used as belt tensioning devices.

UHMW-PE Roller

UHMWPE is an outstanding plastic with the best self lubrication, impact absorbing properties and the highest resistance to abrasion, impact and chemicals of any thermoplastics polymer. It is regarded as an amazing material, and the new material will grow fast and be widely used.



Features

- Abrasion and Chemical resistance
- Impact resistance and Impact energy absorbing
- Water proof and dust proof.
- Light weight and energy saving
- Reduced belt damage
- Noise reduction
- Long Life
- Could not be stucked by any material.

Belt Cleaning System

Belt cleaners are an integral part of your belt conveyor system because of their ability to remove carryback from your belt. Carryback is a leading issue on many conveyors, requiring frequent clean-up while wearing our conveyor components prematurely and causing other conveying problems like belt mistracking. Reducing carryback can improve worker safety, increase operating efficiency, and enhance productivity.

PRECLEANER OR PRIMARY BELT CLEANER

Precleaners are belt cleaners that are designed to scrape material off the conveyor belt. Precleaners are mounted to the head pulley, below the material flow. They are ideal for removing large pieces of material – typically about 60-70 percent of initial carryback. BSK precleaners are available in a variety of widths and blade types that can tackle even the toughest materials.



SECONDARY BELT CLEANER

Secondary cleaners are belt cleaners that are built to scrape materials left on the belt beyond the head pulley. Secondary cleaners are located just past where the belt leave the head pulley, and anywhere else down the beltline. Secondary cleaners are especially good at removing fines and can increase cleaning efficiency to more than 90 percent. BSK secondary cleaners handle a variety of applications, with polyurethane, carbide, and brush options available.



WHY PRECLEANER AND SCONDARY CLEANER ?

Some operators want their belts as clean as possible; others are comfortable with a certain amount of renegade material. BSK recommends a precleaner and one or more secondary cleaners to achieve maximum cleaning efficiency and form a comprehensive cleaning system. In some cases, a single cleaner can be mounted to target a specific area like the head pulley, for the greatest effect.

From precleaners and secondary cleaners to specialty cleaners developed for select applications, we have many options to help you minimise carryback and keep your conveyors running as consistently and efficiently as possible. The combination of innovative designs, superior engineering, and industry expertise has developed from spending a lot of time in the field working alongside our customers to understand their belt cleaning needs. In fact, we pioneered many of the advanced features that have since become industry standards.

Conveyor Gearboxes

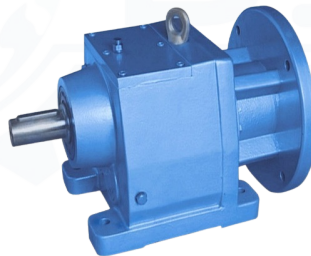
It's said that the gearbox is the heart of the conveyor. If it's working well, so too will the conveyor. But if it's not, that's going to translate to downtime, repair costs and lost productivity, which can eat into profit margins. The main role of the gearbox is to speed or slow down the conveyor belt. It does so by controlling the amount of torque that is delivered. Furthermore, gearboxes also help belts work better for longer.

Types of speed reducer gearbox operating styles include the following:

- Bevel
- Concentric
- Helical
- Right/90 Degree angle
- Parallel
- Worm
- Inline
- Planetary
- Shaft
- Vertical



Bevel Gearbox



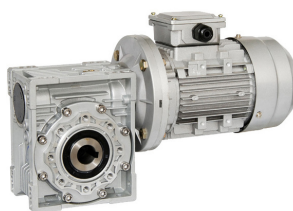
Helical Gearbox



Parallel Gearbox



Inline-Helical Gearbox



Worm Gearbox



Right angle Gearbox

Conveyor Geared Motor

- A geared motor is a component whose mechanism adjusts the speed of the motor, leading them to operate at a certain speed. Geared motor have the ability to deliver high torque at low speeds, as the gearhead functions as a torque multiplier and can allow small motors to generate higher speeds.
- A geared motor can also be defined as a gear reducer because essentially, it is a combination of a speed reducer with a motor typically functioning as a gearbox, to reduce speed making more torque available.
- Geared motor can be classified based on the motor they are paired with, including bevel, helical, hypoid, spur and worm gears.
- Each of these gears have advantages and disadvantages. For example, helical gears possess more torque capacity than spur gears, hence, generating less noise. Worm gears work efficiently in the low torque angel and are good for high speed reductions.

Geared motors can be classified based on different elements. The two most common geared motor types are **right angle geared motor** and **inline geared motor**.

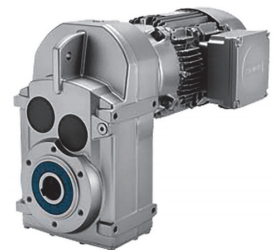
- **Right-angle geared motor use worm, bevel or hypoid gearing.**
- **Inline geared motor typically use spur gears, helical or planetary gear sets.**
- **Parallel shaft geared motors type helical gears**



Right-angle geared motor



Inline geared motor



Parallel shaft geared motors

Conveyor Bearings

A conveyor roller bearing is a specialized bearing which presses into the ends of a conveyor belt roller, allowing the rollers to rotate smoothly. Typically, this conveying belt moves materials along a manufacturing or food processing production line. In this context, smooth operation allows for optimal performance and component lifespan.

As the name suggests, conveyor roller bearings have a cylindrical shape and are designed to carry heavy loads, since the weight is evenly distributed over a large surface area. Also referred to as cylinder rollers, this bearing type can easily handle radial (but not thrust) loads. For a good fit, we always recommend choosing a conveyor roller bearing with the largest diameter at the shortest length in order to minimize roller deflection. For tight spots, needle bearings (a close cousin to roller bearings), offer a very small diameter design envelope



Heavy Duty Bearings



Deep Groove Ball Bearing



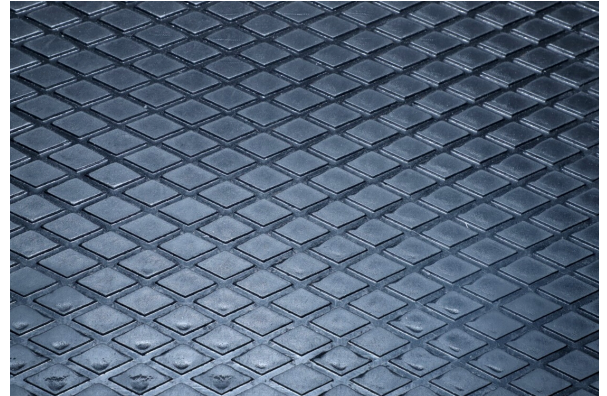
Angular Contact Ball Bearings



Right-angle geared motor

Pulley Lagging Sheet

Rubber Sheet are specially made sheet of best quality raw material and are widely used all across various industries. Rubber sheet are used for pulley laggings over the pulleys so as to avoid slippage of belts. Pulley lagging is done best of the skilled worker with perfection which will reduce the chances of slippage of belts from the pulley.



Pulley Lagging sheet is designed to increase transmission power from the drive pulley to the belt. Slippage between a conveyor belt and a bare drive pulley causes low transmission of power due to the following reasons:

- Low coefficient of friction
- Acute wrap angle
- Low pre-tension of the belt

Advantages of Pulley Lagging Sheet

- Increases **Friction Coefficient**
- Helps **self-cleaning** of belts
- Maintains **belt tension**
- Improves **belt tracking**
- Enhances **belt life** by reducing wear
- Reduces **Noise levels**

Technical sheet for Pulley Lagging Sheet

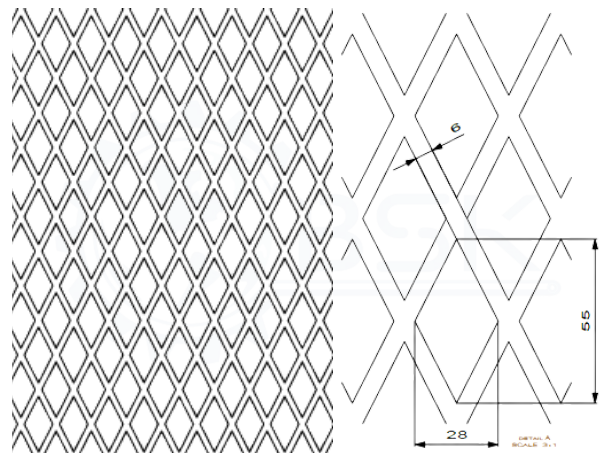
DIAMOND RUBBER PULLY LAGGING

MOLD WIDTH= 1800 MM

MOLD LENGTH= 2000 MM

DAIMOND CUT HEIGHT = 5.0 MM

*EFFECTIVE LAGGING WIDTH UPTO 1600 MM



Note: For any other Technical diagram outside the chart, kindly contact BSK Technical service division

Bucket Calculation

There are numerous types of bucket which are used by different industries to make maximize results.

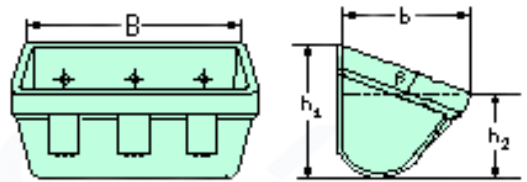
Types of buckets :-

- D-type
- J-type
- Z-type
- A-type
- C-type
- B-type



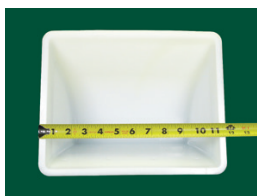
Recommendation for selecting bucket Dimension by BSK

Width of Bucket B, mm	Projection of Bucket b, mm	Depth of Bucket h1, mm
108	79	79
133	105	105
159	105	105
184	105	105
181	130	133
206	130	133
232	130	133
238	156	156
264	156	156
289	156	156



Depth of bucket, $h1 = 156.00$ mm
 Projection of Bucket, $b = 156.00$ mm
 Width of Bucket, $B = 238.00$ mm

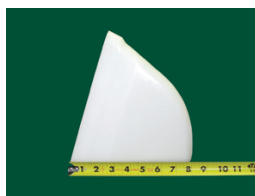
How to measure a bucket ?



With elevator bucket back laid flat, measure overall length



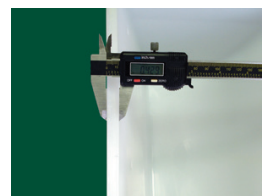
With elevator bucket back laid flat, measure the horizontal projection



With elevator bucket back laid flat, measure the back depth



With elevator bucket back held vertical, measure front depth to front lip

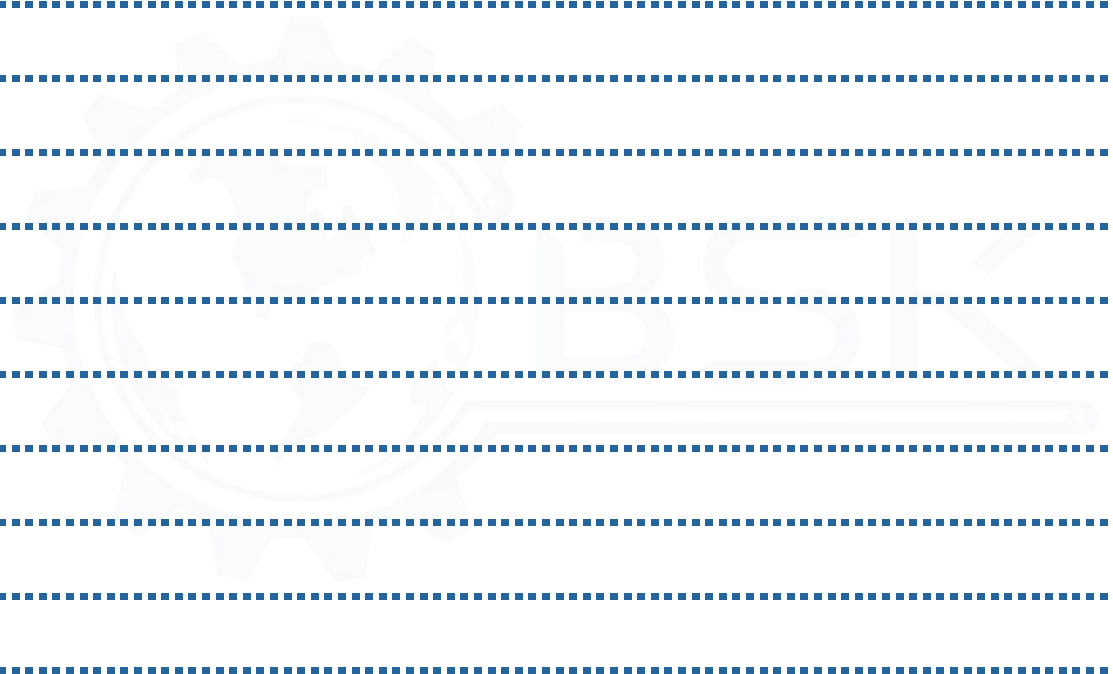


Using a caliper, measure the thickness of the bucket



Notes....

A series of horizontal dashed lines for taking notes, spanning the width of the page.



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