

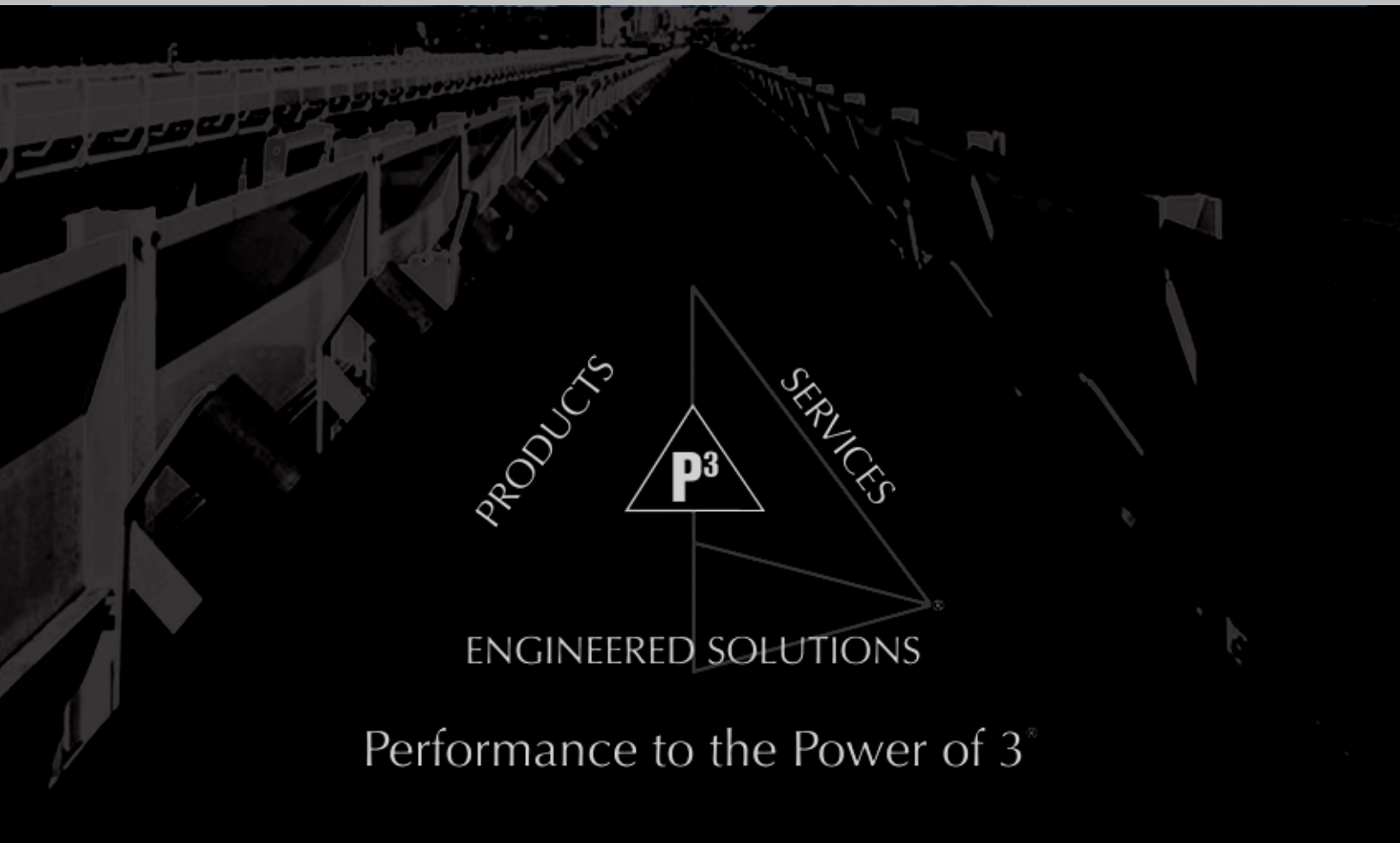
FENNER DUNLOP

CONVEYOR SERVICES

Belt Cleaners • Idlers • Drive Systems • Pulley Lagging • Belt Scanning & Condition Monitoring • Conveyor System Design and Installation • Conveyor Belt Installation & Vulcanized Splicing • Training Programs • Belt Cleaners • Idlers • Drive Systems • Pulley Lagging • Belt Scanning & Condition Monitoring • Conveyor System Design and Installation • Conveyor Belt Installation & Vulcanized Splicing • Training Programs



Idlers





Since 2001, Fenner Dunlop Classic Conveyor has supplied high quality idlers and components to the bulk material handling industry, consistently manufacturing a complete range of CEMA class idlers from CEMA B to CEMA F. Our composite idler rolls, aluminum idler rolls and low-weight steel idlers have been supplied for installations in underground mining, pipe conveyors, long-high capacity overland conveyors, ship-loading terminals and in-plant conveyors.

Fenner Dunlop Classic Conveyor has successfully supplied idlers for large conveyor systems in North and South America. Our idlers utilize a centrifugally sealed roller, which has been used successfully throughout the world since the 1960's.

We utilize the latest design and manufacturing technology, together with on-going programs that ensure the highest quality components, including AUTOCAD design facilities, laser alignment and measuring equipment. Research & development includes monitoring selected underground and surface installations over a number of years, while in-house test rigs and specialized monitoring equipment are used to improve the quality of our products. Manufacturing tolerances are continually monitored and new manufacturing techniques consistent with the latest technology are implemented.

Our employees pride themselves on carrying out the high demands of export planning, production and delivery. A network of distributors and agents has been established, ensuring supply and after-sales service for all products.

In addition to idlers, Fenner Dunlop Classic Conveyor manufactures high quality products including belt scales, belt cleaners, conveyor pulleys, drives and conveyor structure used in mining, quarrying, agriculture, ship loading, utility, material and bulk solids handling industries.

Fenner Dunlop Classic Conveyor Idlers... Made in the USA!

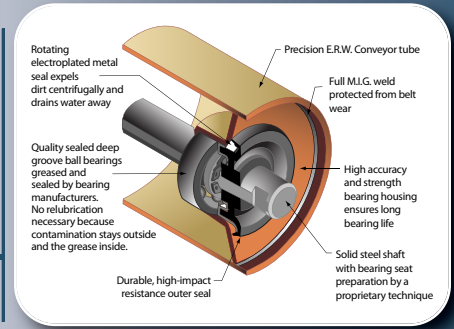
Fenner Dunlop Classic Conveyor manufactures idlers and conveyor structure in-house. Production facilities house machine and press shops, dedicated painting facilities, robotic welding and a state-of-the-art steel fabrication plant.

A full range of idler roll types are manufactured:

- ▲ steel
- ▲ rubber disc impact and return
- ▲ aluminum
- ▲ HDPE or polyurethane sleeved
- ▲ HDPE

Idlers (Steel Rollers)

Fenner Dunlop Classic Conveyor idlers utilize centrifugal self-cleaning seals, which ensure that bearings reach their designed life. Grease-free sealing elements result in much lower friction values than conventional designs.



Specifications

Bearings: Deep groove double sealed bearings are used, allowing for a larger amount of angular misalignment at the bearing than other bearing designs and classes.

Steel Tube: Only high quality tube specially manufactured for conveyor rollers is used and conforms to ASTM A-513-07. Shell ends are machined to prevent belt wear.

Steel Shaft: Manufactured from steel which complies with the requirements for grade ASTM A108-07 (CR1018). The shaft diameter tolerance is as recommended by bearing manufacturers and ensures a js6 fit. Shaft end slots are machined to customer standards.

Hollow Shaft: Stepped lightweight hollow steel shafts, equivalent in strength and rigidity to solid shafts, are available on request.

Bearing Housing: Manufactured from deep-drawing material ASTM A-1011-08DSB. Housings are pressed and MIG-welded to the inside of the tube.

Corrosion Protection: External coat of gray powder coated paint, unless otherwise specified.

Circular Movement Tolerance (TIR): TIR does not exceed Classic specifications when measured at a distance of 1 inch (one) from the roller center face. Please refer to TIR Table for Classic specifications. Actual TIR values are less and can be verified by reference to historical data.

Idler Running Friction: Fenner Dunlop Classic Conveyor Idlers have frictionless seals.

Idler drag is due to bearings only and is, therefore, easy to predict. Drag is dependent on factors, such as loading, rpm, bearing type, characteristics and temperature. Consult Fenner Dunlop Classic Conveyor for friction values.

Typical friction values for three roll carry idlers at rated load running at 500 rpm can be found on our website, www.fennerdunlopconveyorservices.com/products.

TIR TABLE

Roller Face Length	CEMA Specifications		Classic
	TIR		Not to Exceed
	D ≤ 5"	D > 5"	
Up to 21 1/8"	0.0197	0.0236	0.015
23 1/16" - 38"	0.0276	0.0354	0.023
39 1/8" - 57 1/16"	0.0512	0.0630	0.048
63 1/16" - 99 1/8"	0.0748	0.0906	0.070

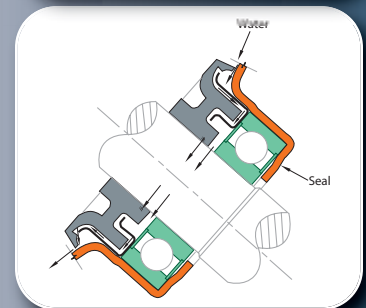
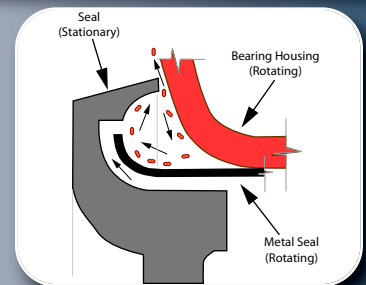
Seal Design

Primary Sealing The success of the primary sealing area is due to dirt ESCAPING after it enters. The metal seal collects dirt and flings it outward in a radial motion caused by centrifugal force (3-9 times gravitational).

Secondary Sealing Dirt which enters secondary sealing area is again propelled outwards by centrifugal force. All sealing surfaces are clean and free from contact and do not require packing with grease. The sealing arrangement is designed so that water drains out of the seal when the idler is stationary.

Most secondary seals on the market are the labyrinth type and centrifugal force actually helps keep dirt in the sealing area where it can work its way back to the bearing.

Bearing Sealing Bearing seals form the final barrier against dirt ingress. These bearings are greased for life, complete with seals on both sides.



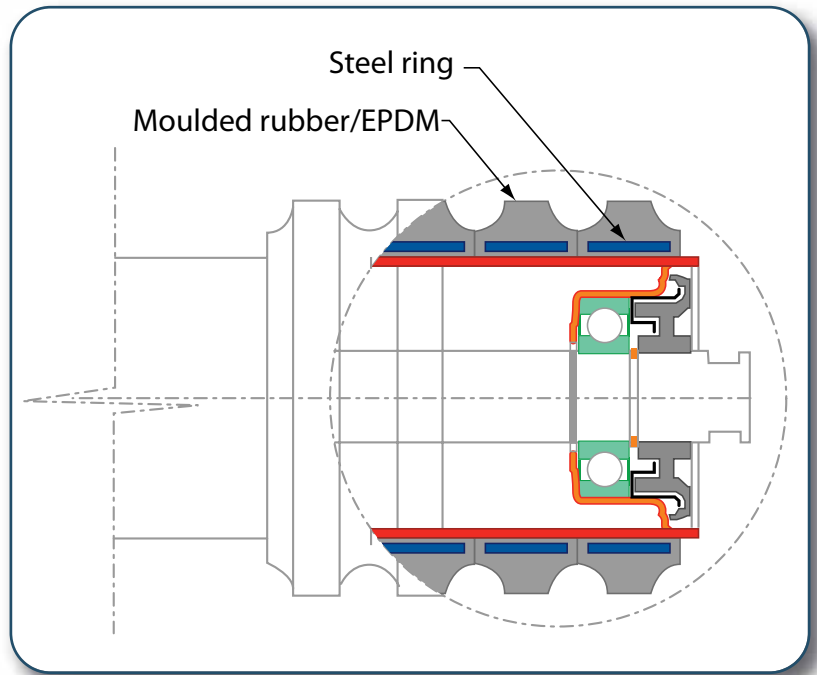
Idlers (Impact & Rubber Disc Rollers)

Impact and rubber disc rolls consist of steel reinforced rubber impact discs press fitted onto a conventional steel roller body. Each rubber disc is positively located and there is no possibility of rubbers moving due to impact loads. Spacers and end-stops are not required.

Apart from the rubber discs, the same components and seals are used for the steel rollers.

Load Ratings - CEMA

Classic Idlers exceed CEMA ratings.



CLASSIC CONVEYOR COMPONENTS

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www.fennerdunlopconveyorservices.com/products



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CONVEYOR BELTING WORLDWIDE