



# About the Company:

We take pride in introducing ourselves as one of the leading manufacturers of Belt Conveyor Idlers & Idler Sets in India. Entvent's dedicated service to the Conveyor industry started in the year 1971. For over 4 decades now, Entvent has been manufacturing and supplying Belt Conveyor Idlers & Idler Sets to various industries to provide efficient & economic operation. The company is managed by highly qualified and trained team of engineers, who strive hard to maintain and a high level of quality and with a vision to constantly improve the same. Our manufacturing facility is equipped with sophisticated machinery with to ensure high finish product quality. Our manufacturing facility has an installed capacity, to produce 5000 Idlers / month.

Entvent Idlers are in regular service in various Mines, Thermal power plants, Ports, Cement plants and various other places that require conveyance of bulk material.

## Unique features:

Minimum rolling weight of Idlers requires low horse power, thus saving power and energy.

Guaranteed lowest possible dynamic friction, for smooth rotation.

Idlers are Water / Dust proof, hence can be used in any type environment.

All Idlers are factory sealed requiring no maintenance, making them very economical.

# **Design & Capacity:**

Entvent Idlers & Idler Sets can be designed & manufactured to your exact requirement. Entvent Idlers & Idler Sets are available for a wide range of Belt Conveyor application. The range includes Fixed Carrying type, Fixed Return type, Fixed Impact type, Self Aligning type, Transition type, Garland Troughing type (Festoon type), Garland Return type and Garland Impact type for belt widths up to 2400mm

Entvent has rich experience of more than 40 years in designing and manufacturing Idlers & Idler sets for various load capacities and belt widths. Entvent designs Idlers & Idler Sets for light duty load capacity like 5 Metric Tonnes / hour to extra heavy duty for handling load up to 20000 Metric Tonnes / hour. Entvent Idlers are manufactured with a minimum bearing size of 6204 / 420204 and maximum bearing size of 6318. The minimum pipe OD size used for Entvent Idlers is 60.3mm and the maximum size is 219.1mm. Entvent Idlers are designed to handle belt speed up to 5.2 m/sec.

Festoon type Idler sets are a specialty at Entvent. Festoon Idlers (garland type) have been designed and manufactured for 2000mm and 2400mm wide belt conveyor for handling 11000tonnes/hr and 20,000tonnes/hour of overburden/lignite for Neyveli Lignite Mines. These Idlers and Idler Sets have been amply tested and have proved excellent in real working conditions.



# **Main Features**

#### Idler Shell:

The Idler shell is made from ERW/Seamless Tubes with close tolerance ensuring smooth, shock-free, and eccentric-free running with least diametric run out (TIR). The Idler shell is machined in single setting to ensure concentricity in both the ends of housing seating area. Care is taken in maintaining low rotating weight. Smallest rotating weight of Idlers requires low horse power thereby conserving power and energy due to lowest possible dynamic friction.

#### **Idler Housing:**

The Idler end housing are made from deep drawn quality steel / Forged Steel and fitted with calibrated ball bearing seal with high accuracy. Pressed steel / Forged steel end housings are completely welded to either end of the Idler shell in single setting by an automatic welding machine. This completes a Mono-bloc design, extremely strong and capable of taking heavy impacts. Due to the light weight of the Idler ends, the rotating mass is reduced, resulting in less starting torque and increased life.

#### Shaft/Axle:

The shaft / axle is made from bright drawn steel bars and the ball bearing seating area on either side of the shaft is ground on a single setting to precision accuracy, usually within -10microns. Shaft ends, which are located on the frame, are machined depending on the type of frame / linking arrangement.

#### **Ball Bearings**:

Entvent Idlers are fitted with precision ball bearings having optimum internal clearance and double side shield. Idlers can be supplied with Spherical and Taper Roller bearings depending on design requirements.

### Sealing:

A special universally tested multi-stage sealing arrangement keeps dust, moisture and dirt away from the bearings without affecting the smooth rotation of the Idlers. A Rain Cap is provided on the extreme outside of the Idlers to prevent the water/dust from entering along side the shaft. Double side shielded ball bearing is preferred to ensure longer rotating life of the Idler. A Multi-lip labyrinth system is provided in front of the ball bearing. A back seal prevents dust from entering inside the Idler. The sealing system is found to be very successful even under stiff and difficult operating conditions.

#### Accessories:

All Idlers are supplied with complete set of accessories such as rubber rings for impact/feed Idlers, connecting links, suspension units, and other similar spares required for the conveyor system.

### **Testing Facilities:**

All Idler components are subject very strict process quality check. The final Idler is checked for ingress of water/dust and for friction factor with the special machine / fixture at our factory. It is guaranteed that the dynamic friction of the Idler is as low as possible. PDI is very strict to ensure the best customer satisfaction.

