

Basic Design Principles

All of the Limberoller series, troughing and return idlers, utilize only two bearings per idler. One bearing is located at each end of the central shaft.

The troughing idler is suspended from these end mounted bearings, so that it forms a catenary that uniformly supports the conveyor belt. As the belt moves

over the idler, the friction between the belt and the rubber causes the idler to revolve on its own axis.

Bearings are placed in metal housings, that can be sealed or lubricated externally, at the user's option. The sealed metal housing helps protect vital moving parts from contaminants.

Limberoller Troughing Idlers

The Limberoller Troughing Idler consists of a steel wire rope that is completely encapsulated in rubber. The elastomer is molded to the rope, under heat and pressure, so that a virtually impervious sheath of rubber completely covers the rope. This basic design varies depending on belt width, by configuration of the molded rubber jacket.

There are four series of Limberoller troughing idler assemblies: 100, 150, 300 and 350. The 100 and 150 Series utilize double-row ball bearings. The bearing housing for the 100 and 150 Series idlers are slotted so that they will fit into a rigid mounting.



LR-100 SERIES IDLER



LR-150 SERIES IDLER

The 300 and 350 Series feature tapered roller bearing in a trunnion type housing that fits into an oarlock type support. This oarlock and trunnion design gives the idler freedom of motion in the direction of belt loading and travel.



LR-300 SERIES IDLER



LR-350 SERIES IDLER

Limberoller Return Idlers

The Limberoller Return Idler consists of a solid steel shaft that is completely encapsulated in rubber by the same means as the troughing idler. This design varies, depending on belt width, by the configuration of the molded rubber jacket.

There are three series of Limberoller return idlers: 106, 107 and 307. They use a double row ball bearing at each end of the shaft.

The bearing housing of all bearing series are slotted so that they will fit in specially designed hanger and support brackets.



LR-106 RETURN



LR-107 RETURN



LR-307 RETURN