



STEEL IDLER ROLLERS

STANDARDS
SANS 1313, DIN, CEMA

OPTIMAL SEALING

LOW BREAKAWAY MASS

LOW RUNNING RESISTANCE

LOW TIR

Melco steel idler rollers are suited to belt conveyor and pipe conveyors. Rollers incorporate a sealed for life bearing and seal assembly that is designed for optimal sealing and lowest possible drag.

Rollers are manufactured to SANS 1313 standards which determine size and performance standards. Alternative standards such as CEMA or DIN (or other required standards) can also be referenced where required.

Alternative configurations

A variety of options are available

Lagged rollers:

In standard rubber, FRAS rubber or Polyurethane.

Weigh Class:

Rollers are machined to 0.3 mm TIR and dynamically balanced to G16 to ISO 1940 to ensure weigh class quality.

Special paint:

In high corrosive environments multi-part paint options are available.

Anti-Runback:

Unidirectional rollers to prevent runback if belt snaps on inclined conveyors.

Roll construction

Shell:

ERW tubing in accordance with SANS 657 Part 3 (Conveyor Tube)

Bearing Housing:

Rollers are manufactured with "turnback" bearing housings which aids roll assembly and improves TIR.

Sealing system:

Standardized contactless and hermetic multi-part sealing system options

Bearings:

Deep groove ball bearings as standard. Open, ZZ or 2RS bearings can be used in variety of bearing brands. LFD as standard, other quality brands on request.

Shaft:

Deep drawn according to BS 970-1 (EN3A) or stainless steel on request.

Design of the roller, shaft diameter and bearing specification is determined by the load experienced on the roller. The shaft deflection at the bearing must be limited to specifications from bearing manufacturers to ensure that the appropriate L10 bearing life is achieved.

Rollers can be manufactured in any choice of face lengths with variety of end shaft designs, as per client requirements.



Hermetic Sealing system

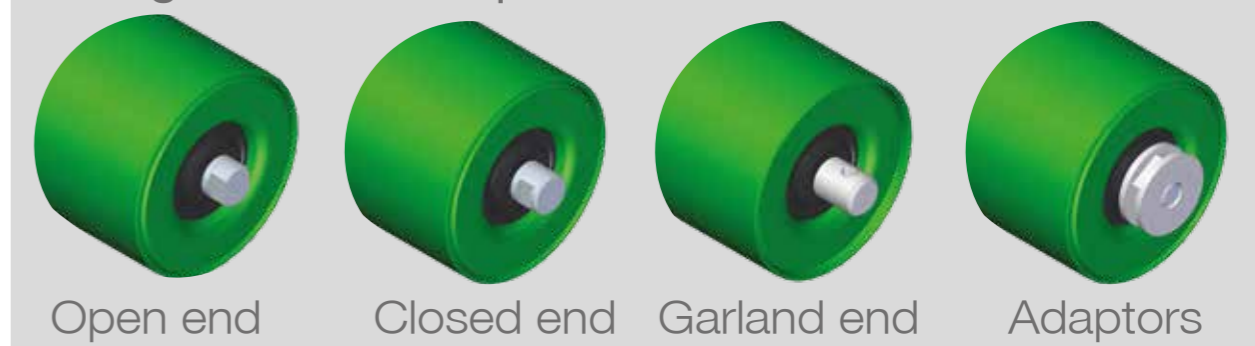
Excellent seal with optimal drag for wet and dirty conditions

Contactless sealing system

Lowest drag and breakaway mass ideal for long conveyors

Shaft ends

Rollers can be supplied with a range of shaft end configurations as required for installations.



Reduction in noise

Conveyor noise is an environmentally sensitive issue.

Rollers have been tested in dedicated acoustic chamber at Rulmecca in Germany.

	152 diam	127 diam
Belt speed	Steel (dBA)	Steel (dBA)
4,2 m/sec	78	74,6
3,2 m/sec	73,5	67,3
1,2 m/sec	54,5	53,6



Corrosion Protection

Rollers painted in the following options:
Standard Paint for protection during transportation and initial site storage.
Special Paint for marine and corrosive environmental conditions or long term storage is also available.

Flinger seals

Additional sealing can be provided in applications with high water and dirt. EPDM deflector seals can be retrofitted to rollers.



Sasol Syferfontein South Africa (Coal)



Ravensthorpe Australia (Nickel)



Foundation USA (Coal)



Ambatovy Madagascar (Nickel)