



Introduction

Robor has long been recognised as a leading manufacturer of steel tube for conveyor idlers, with its products being used worldwide. The very tight tolerances achieved on this product range result in very low run-out, low noise and long life, and has earned Robor the informal title of the “silent conveyor”. The range of conveyor idler tube is supplemented by precision cutting and bevelling facilities.

Other products and services offered to the conveyor industry include a full range of structural tube for stringers and support structures and strip steel for the manufacture of end caps, steel sheet, plate and structural profiles. Hot dip galvanizing of components is also available.

Heavy Duty Conveyor Idler Tube

Robor manufactures conveyor idler tube to the South African national standard SABS SANS 657 Part 3 or applicable international specifications, allowing these products to be used for the manufacture of conveyor idlers to SABS SANS 1313-1 and major international specifications including CEMA.

Tube Size Range and Dimensions

Conveyor idler tube is produced in a range of sizes from 63.5 to 219.1mm and wall thicknesses of 2.0 to 6.4mm.



Manufacturing Size Range

Outside Diameter [mm]	Nominal Wall Thickness [mm]												
	Light Duty		Heavy Duty										
	2.0	2.5	3.0	3.2	3.5	3.8	4.0	4.5	4.8	5.0	5.5	6.0	6.4
63.5													
76.2													
88.9													
101.6													
114.3													
127.0													
133.0													
139.7													
141.3													
152.4													
165.1													
168.3													
177.8													
193.7													
219.1													

Material Specification

Steel with controlled chemical properties is used to ensure excellent weldability. Conveyor tubing is supplied in grades 250 and 350 with the following minimum mechanical properties:

Grade	Min Yield Strength [MPa]	Min Tensile Strength [MPa]	Min Elongation [%]
250	250	325	15
350	350	450	18

Scarfig

All conveyor tubing is internally and externally scarfig.

Straightness

Conveyor tubes are manufactured with a maximum deviation from straight of 1mm in 1000mm, measured at the centre of a length. 1mm in 2000mm straightness is also available.

Ovality

Ovality is the most critical parameter of conveyor steel tube to be used for the manufacture of conveyor idlers. SANS 657-3 tolerances for ovality range from 0.4 to 0.6mm depending on diameter. This becomes even more important as the operating speed of the conveyor system increases - controlled ovality system ensures low vibration, low noise and a long useful life.

Finish

Precision conveyor tubing is supplied off mill, with plain ends, uncoated or coated in black or clear water-based holding primer. Precision cut and bevelled idler body shells are available to user requirements.

Other Complementary Conveyor Solutions offered by the Robor Group

Light duty conveyor idler tube, structural members, hot dip galvanizing.

Quality and Traceability

All Robor conveyor tube is produced in ISO 9001 and ISO 14001 accredited manufacturing facilities. Raw material is accompanied by Test Certificates.

