

# Pulleys and Rollers

143 - 149

- 10.1 Conveyor Pulley
- 10.2 Drive Pulley
- 10.3 Snub Pulley
- 10.4 Tail Pulley
- 10.5 Impact Roller
- 10.6 Carrying Roller
- 10.7 Troughing Impact Idler
- 10.8 Troughing Carrying Idler
- 10.9 Flat Return Idle
- 10.10 Enquiry Sheets

### 10.1 - Conveyor Pulley

Conveyor pulleys are the main elements providing the transmission of torque from the drive and ensuring that belts remain taught.



Belt Width (mm)	Face Width (mm)	Pulley Diameter (mm)
300	400	200, 250, 315, 400
400	500	200, 250, 315, 400, 500
500	600	
650	750	200,250, 315, 400, 500, 630
800	950	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1400
1000	1150	200,250,315,400,500,630,800,1000,1250,1400
1400	1400	
1600	1600	200,250,315,400,500,630,800,1000,1250,1400,1600
1800	1800	
2000	2000	200,250,315,400,500,630,800,1000,1250,1400,1600
2200	2200	
2400	2500	500, 630, 800, 1000, 1250, 1400, 1600, 1800
2600	2800	
2800	3000	800, 1000, 1250, 1400, 1600, 1800
2800	3200	

Remarks: Special Types and Dimensions on Request

### 10.2 - Drive Pulley

Drive pulley is the main part for conveying bulk materials, which located at the discharge side of the conveyor. It provides the driving force for the conveyor.



Belt Width (mm)	Pulley Diameter (mm)	Pulley Length
500	500	Pulley face length on Client's request
650	500, 630	
800	500, 630, 800	
1000	630, 800, 1000	
1200	630, 800, 1000	
1400	800, 1000	

Remarks: Special Types and Dimensions on Request

Drive Pulley is located at the discharge terminus of the conveyor. It provides the driving force for the conveyor. In order to increase pulley life and traction, it often has a larger diameter than other pulleys and has different lagged surface.

### 10.3 - Snub Pulley

Snub Pulley tightens the belt giving more surface contact between the belt and pulley surface and is located immediately behind the drive pulley. Snub pulleys also utilised in gravity take up units.



Belt Width (mm)	Pulley Diameter (mm)	Pulley Length
500	250, 315, 400, 500	Pulley face length on Client's request
650	250, 315, 400, 500	
800	250, 315, 400, 500, 630, 800, 1000	
1000	250, 315, 400, 500, 630, 800, 1000	
1200	250, 315, 400, 500, 630, 800, 1000	
1400	250, 315, 400, 500, 630, 800, 1000	

Remarks: Special Types and Dimensions on Request

The surface treatment of the Snub pulley can be smooth steel and plain rubber lagging.

### 10.4 - Tail Pulley

Tail Pulley at the tail of the belt conveyor opposite the normal discharge end.



Belt Width (mm)	Pulley Diameter (mm)	Pulley Length
500	250, 315, 400, 500	Pulley face length on Client's request
650	250, 315, 400, 500	
800	250, 315, 400, 500, 630, 800, 1000	
1000	250, 315, 400, 500, 630, 800, 1000	
1200	250, 315, 400, 500, 630, 800, 1000	
1400	250, 315, 400, 500, 630, 800, 1000	

Remarks: Special Types and Dimensions on Request

### 10.5 - Impact Roller

Impact rollers are used as carrying rollers instead of normal steel rollers at a loading point. On steel roller there are rubber rings assembled, side by side, to absorb the weight and impact of material falling onto the belt. At the same time impact rollers reduce the shock and vibration through the steel structure.



#### Features and values

Absorbs weight and shocks.  
High loading capacity.

#### Specifications

Roller diameter: 63.5 - 219 mm  
Shaft diameter: 20mm, 25mm, 30mm, 35mm, 40 mm  
Roller length: 150 - 3500 mm

### 10.6 - Carrying Roller

Carrying roller are used to support the conveyor belt and are installed on the groove-shape frame, groove-shape forward inclined idler frames and transition idler frames. A full range of steel rollers are available from our ROLLKING range of idler rollers. Rollers include high quality bearings, multi-labyrinth sealing, greased and sealed for life and other critical specifications essential for high performance. For diameter range from 76mm to 219mm, for belt ranges between 450mm to 2500 mm in width.



Diameter of Tube		Length of Tube mm	Bearing Type	Tube Wall Thickness (mm)
(mm)	inch			
63.5	2 1/2	150-1500	6204	3.0-3.75
76	3	150-1500	6204 6205	3.0-4.0
89	3 1/2	150-1500	6204 6205	3.0-4.0
102	4	150-1500	6204 6205 6305	3.5-4.0
108	4 1/4	150-1500	6204 6205 6305 6306	3.5-4.0
114	4 1/2	150-1500	6204 6205 6305 6306	3.5-4.5
127	5	150-1500	6204 6205 6305 6306	3.5-4.5
133	5 1/4	150-1500	6205 6206 6207 6305 6306	3.5-4.5
140	5 1/2	150-1500	6205 6206 6207 6305 6306	3.5-4.5
152	6	150-1500	6205 6206 6207 6305 6306 6307 6308	4.0-4.5
159	6 1/4	150-1500	6205 6206 6207 6305 6306 6307 6308	4.0-4.5
165	6 1/2	150-1500	6207 6305 6306 6307 6308	4.5-6.0
177.8	7	150-1500	6207 6306 6307 6308 6309	4.5-6.0
190.5	7 1/2	150-1500	6207 6306 6307 6308 6309	4.5-6.0
194	7 5/8	150-1500	6207 6307 6308 6309 6310	4.5-6.0
219	8 5/8	150-1500	6308 6309 6310	4.5-6.0

#### Features:

- Diameter range: 76 mm-219 mm, other diameters available onrequest.
- Pipe length: From 150 mm - 1500mm
- Material: Pipe, Q235 equal to S235JR(DIN); Shaft, 45# STEEL (GB) equal to C45(DIN)
- Bearing: deep groove ball and double sealing bearing 2RZand 2Z with C3 clearance
- Sealing: multi-stage labyrinth seals achieve waterproof and dust proof
- Lubrication: Grease is Lithium soap type grease with Rust Inhibitors, grease is permanent lubricant.
- Color: roller surface could be painted any color as per customer request.
- Each roller would be through strict inspection and test to ensure every out coming roller is of true high quality.

### 10.7 - Troughing Impact Idler

Used under loading points where material impact (lump size, density, height) could damage the belt if no cushion.

Impact Idler fitted with rubber rings made from natural / Synthetic / Neoprint material. The fixing arrangement and dimension of rings are suitably design for easy replacement and interchangeability which protect the belt by absorbing impact at loading point. 20°, 35° and 45° Trough Angle.



### 10.8 - Troughing Carrying Idler

Troughing idlers are use for conveying bulk materials, and are designed and manufactured with Troughing angels of 20°, 35°, 45°, and any other angle are also manufactured as per customer's design and drawings.



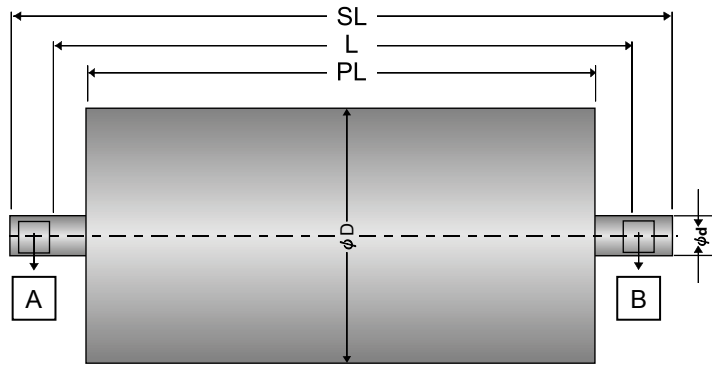
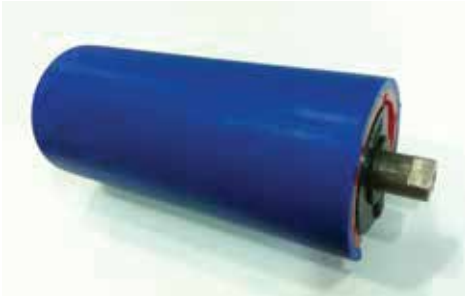
### 10.9 - Flat Return Idler

The return idlers which carry the weight of the empty belt in the return side or the lower side of the conveyor are mostly single roller straight idler.



## ROLLER - ENQUIRY SHEET

<b>Customer Name:</b>	<b>Tel No.</b>
<b>Company:</b>	<b>Fax No.</b>
<b>Inspection Date:</b>	<b>E-mail</b>



Please fill in both A & B if different shaft detail.

TYPE 1	TYPE 4	TYPE 7
TYPE 2	TYPE 5	TYPE 8
TYPE 3	TYPE 6	TYPE 9

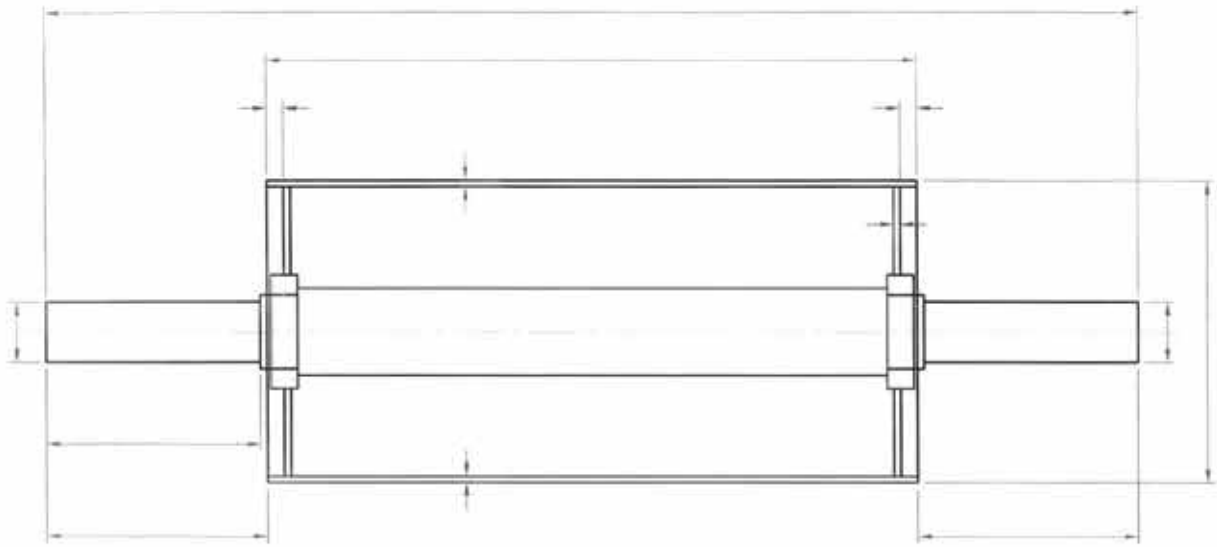
TYPE NO.	$\phi D$	PL	L	SL	$\phi d$	S	W	C	Q'ty	Remark
Example	89	950	958	980	20	15	14			

**Bahrain**  
P. O. Box 18596, Seef,  
Kingdom of Bahrain  
☎: +973 17 582550 📠: +973 17 582551

**Sultanate of Oman**  
P. O. Box 347, 322, Sohar Falaj Al Qabail,  
Sultanate of Oman  
☎: +968 26 753095 📠: +968 26 753096

**State of Qatar**  
Gentech-FaBa, P.O. Box 8960, Doha,  
State of Qatar  
☎: +974 44868100 📠: +974 44866445

## Conveyor Head Tail Snub Drums



**Note :**

1. All Dimensions are in mm
2. Shaft Material EN-08
3. State shaft fixing arrangement required, welded or taper lock assembly.

**Bahrain**

P. O. Box 18596, Seef,  
**Kingdom of Bahrain**  
☎: +973 17 582550 📠: +973 17 582551

**Sultanate of Oman**

P. O. Box 347, 322, Sohar Falaj Al Qabail,  
**Sultanate of Oman**  
☎: +968 26 753095 📠: +968 26 753096

**State of Qatar**

Gentech-FaBa, P.O. Box 8960, Doha,  
**State of Qatar**  
☎: +974 44868100 📠: +974 44866445