About Us

Remove the Google reviews

These need to be orange(underlined)

Welcome to Bosworth

Bosworth was founded by the late Walter Bosworth in 1943 and has since become a Global Leader in conveyor pulley manufacturing. We produce high-quality conveyor pulleys, idlers/rollers, and conveyor scrapers, and offer comprehensive services, including pulley refurbishing, plate rolling, and belt repair solutions. Our products are supplied to material-handling projects around the world. Delivering reliable and durable engineering for a wide range of industries.

LET'S TALK

Today Bosworth is still the largest conveyor pulley manufacturer in South Africa with a substantial international client base. The Forge is still in operation and Bosworth continues to produce high quality product for the mining and industrial markets.

BOSWORTH IS A DIVISION OF HUDACO TRADING PTY LTD.

Mission Statement

Bosworth is committed to inspiring confidence and delivering excellence in every customer interaction. Through clear communication, proactive support, and strong collaboration, we create positive experiences and empower our people to perform at their best. By embracing innovation, operational precision and continuous improvement, we ensure that every order and every touchpoint reflect our dedication to quality, trust and value.

Quality

We have been a proud CMA (Conveyor Manufacturers Association of South Africa) member since 1992. SANCERT certified to ISO 9001, 14001, and 45001 standards for quality, environmental, and safety excellence. Bosworth has both NC (Numerically Controlled) and conventional machines operated by skilled artisans. 100% of long and circumferential welds are UT (Ultrasonic Test) tested according to AWS 1.1 to ensure quality.

Vision Statement

Our vision is to be a trusted partner known for reliability and excellence. To strive to create an environment where customers, colleagues and partners feel valued, informed and supported. By leading with integrity and building lasting relationships, we deliver the right solutions at the right time. At Bosworth, quality is more than a standard; it is a shared passion that inspires pride, drives growth and shapes a future where every team member contributes to our collective success.

Remove Services

GENERAL ENQUIRIES

Phone:+27 11 864 1643

Email: pulleys@bosworth.co.za

CONTACT US

SERVICES

Steel Service

Conveyor Services

STAY IN TOUCH

Delivering conveyor systems that meet global industry standards

Chat with us on WhatsApp

Bosworth

PRODUCTS SERVICES CASE STUDIES CONTACT US

Product Category

With decades of expertise, Bosworth supplies high-quality Conveyor Pulleys, Conveyor Idler/Rollers, Conveyor Scrapers, Impact Beds, Plate Rolling Services and Repair Solutions to mining, industrial, and material handling projects worldwide.

Conveyor Pulleys

Conveyor Idlers

Conveyor Scraper

Impact Beds

Plate Rolling

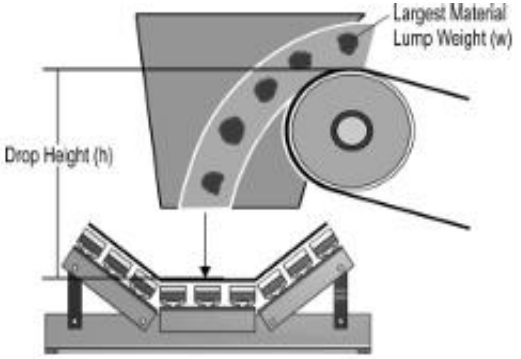
Repair Solution

Rename to: Conveyor Idlers & Accessories

Impact Bed is incorrect

Idlers & Accessories

Impact Bed




1943 Year
The Company Was Established.
20+
50 + Clients
Who are happy across the world.
50 +
20 +
Years of experience in the industry.
30 +
Successfully completed projects.

improvement, ensuring full compliance with internationally recognised materials handling accreditations.

Read More

1943 Year
The Company Was Established.

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Successfully completed projects.

We're Ready When You Are!

Talk to our team to find out more

Get In touch

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STAY IN TOUCH

Delivering conveyor systems that meet global industry standards

Remove the Enquiry sheet from here

Remove the background on all the Pulleys

Example

Types of Pulleys

- **Turbine Pulley**: Most suited for low to medium duty applications, with shaft diameters typically smaller than 200mm.
- **T-bottom Pulley**: Designed for heavy-duty applications where a high torque transmission is demanded and supplied with shaft diameters >= 200mm
- **Grease filled / Static Shaft Pulley**: For non-driven applications only, these pulleys may be mounted on the conveyor structure in various ways.
- **Lagging**: Various types of lagging are available such as rubber, ceramic paste, ceramic tiles and rubber backed ceramic tiles. These are available in a variety of thicknesses as per requirements.

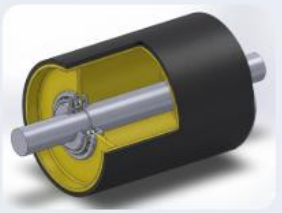
Enquiry Sheet

Turbine Pulley

Most suited for low to medium duty applications, with shaft diameters typically smaller than 200mm. The shafts on these pulleys may be removed for easy replacement, thus reducing possible repair costs. The hubs are designed to allow for flexion, thereby preventing high-stress loads on the locking assemblies or welds.

T-bottom Pulley

Designed for heavy-duty applications where a high torque transmission is demanded and supplied with shaft diameters >= 200mm depending on the torque requirements. With a face-welded pulley, the shell to hub weld is located outside the high-stress area within the end plate.



GREASE FILLED / STATIC SHAFT PULLEYS

The "grease filled" pulley is fitted with internal bearings and a stationary shaft in order to protect the bearings in very dirty operating conditions. These are available in non-driven applications only. These pulleys are mounted on the conveyor structure in various ways on the stationary shaft.

GREASE FILLED/ STATIC SHAFT PULLEY

These pulleys are used in specialised situations and conditions where dirty conditions require a protected bearing.

Sizes limitation with a 400mm shaft and 360mm diameter bearing.

BELT FILTER PULLEY

The L-Bottom end disc, locking element and stub shaft, make for a large pulley that is light weight. Specifically for Belt Filters and similar applications.

conveyor structure in various ways on the stationary shaft.

The lagging needs to take you to the lagging types details when you click on it. Not a catalogue.
Right after this “Lagging”, add the Enquiry details, then the Enquiry Sheet (see next slide/page)

Lagging

Bosworth manufactures pulleys with a range of lagging solutions as per client requirements and for the requirements of the application. Various types of lagging are available such as rubber, ceramic paste, ceramic tiles and rubber backed ceramic tiles. These are available in a variety of thicknesses as per requirements.

View Product Details

Key Features

- Robust Construction
- Precision Machining & Balance
- Lagging Options for Grip & Protection
- Versatile Configurations
- Shaft & Hub Design for Easy Maintenance

Applications

- Mining
- Quarrying
- Aggregate handling
- Bulk Material Handling Plants
- Power Generation
- Agriculture & Grain Handling

Benefits

- **THDS Housings**: Pulleys are fitted with THDS style housings for use in screw tensioned pulleys.
- **Crownings**: Pulleys may be crowned as required in order to improve belt tracking.
- **Speed Tabs**: Speed Tabs can be fitted usually on tail pulleys to work with encoder sensors.

Guideline for Conveyor Pulley Sizing

BELT(a)	FACE(b)	SABS 1669
450	550	
500	600	1050
600	700	1150
750	900	1350
900	1050	1550
1050	1200	1700
1200	1350	1850
1350	1500	2050
1500	1700	2300
1650	1850	2450
1800	2000	2600
2100	2300	2900
2400	2600	3200
2401+	a+200	b+600

TYPICAL PULLEY DIMENSIONS

Standard Shaft diameters @ Locking Element	40	50	60	65	70	75	80	85	90	100
	110	120	130	140	150	160	170	180	190	200
	220	240	260	280	300	320	340	360	380	400
Standard Bearing Journal Diameters	222 Series Bearings		40	45	50	55	60	65	70	75
			80	85	90	100	110	115	135	140
	231 Series Bearings		150	160	170	180	200	220	240	260
			280	300	320	340	360	380	400	410

Enquiry Sheet

The Enquiry Sheet PDF must ONLY include the Enquiry diagram

BELT(a)	FACE(b)	SABS 1669
450	550	
500	600	1050
600	700	1150
750	900	1350
900	1050	1550
1050	1200	1700
1200	1350	1850
1350	1500	2050
1500	1700	2300
1650	1850	2450
1800	2000	2600
2100	2300	2900
2400	2600	3200
2401+	a+200	b+600

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Standard Shaft diameters @ Locking Element	40	50	60	65	70	75	80	85	90	100
	110	120	130	140	150	160	170	180	190	200
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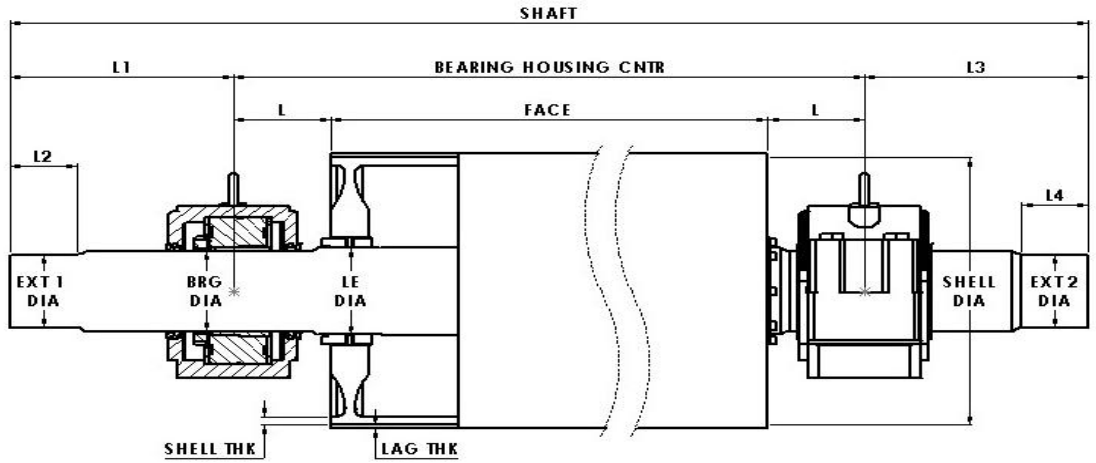

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LAGGING TYPE	CODE
RUBBER DIAMOND	DIA
RUBBER PLAIN	PL
FLAME RETARDANT - RUBBER DIAMOND	FR-DIA
FLAME RETARDANT - RUBBER PLAIN	FR-PL
CERAMIC PASTE	CER PA
CERAMIC TILES DIMPLED	CER-S
CERAMIC TILES PLAIN	CER-P
CERAMIC RUBBER BACKED	RBC

CONVEYOR	PULLEY	SHELL DIA	PULLEY	FACE	SHELL THK	SHAFT	LE DIA	BRG HOUSING CNTR	L	BRG DIA	LAG TYPE	LAG THK	L1	L2	EXT 1 DIA	L3	L4	EXT 2 DIA

Swap these

Key Features

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Submit your preferred specifications below.

Roller diameter: A / mm

Face length: B / mm

Shaft diameter: C / mm

Gauge length: D / mm

Total shaft length: E/ mm

Shaft ends: Closed / Open or Hole / Other

Across flats: F / mm

Slot Width: Slot Width G / mm

SANS Sizes: ○ Yes ○ No

Belt Width: mm

Types: Carry / flat return or v-return?

Upload image/specification: Choose File No file chosen

Other: Comment

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Conveyor Idlers Solutions

Conveyor Idlers Overview

High-Performance Idlers for Maintenance-Free Operation

Bosworth manufactures conveyor idlers and accessories to standard industry dimensions. Bearings are of the highest quality and are sealed for life, using a 3-piece triple labyrinth arrangement that is further protected by an LDPE dust flinger.

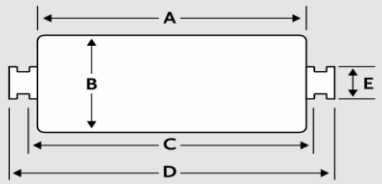
Using high quality materials and fabricated under strict qualitycontrol protocols, Bosworth idlers are supplied with a 3-piece triple labyrinth seal arrangement, further protected by an LDPE dust flinger. Bearings are sealed for life.

Product Range

- Troughing rollers
- Return rollers
- Garland rollers
- Extended return rollers
- Troughing frames
- Drop brackets
- Impact rollers
- Rubber disk return rollers
- Anti-runback rollers
- Belt saving frames
- In-line frames
- Impact beds

The Idler guideline needs to be added after the product range, NOT with the Enquiry Sheet. See next slide/page

Guideline for Conveyor Idler/roller Sizing



A - Face length
B - Roll diameter
C - Gauge length
D - O/A length
E - Shaft diameter
F - Across flats
G - Slot width

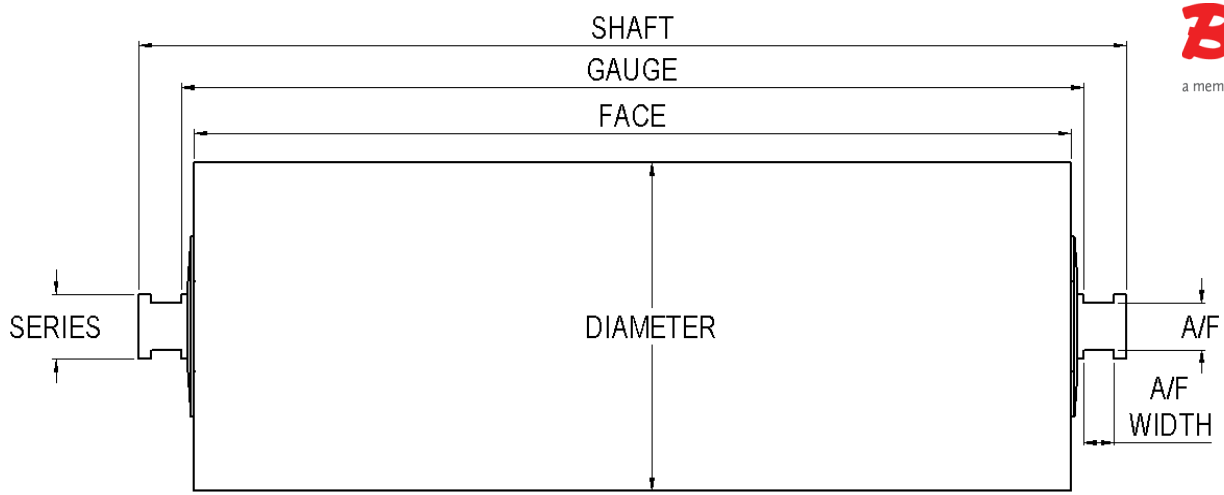
GUIDELINE ON ROLLER LENGTHS BASED ON BELT WIDTH AND TYPE OF CONSTRUCTION REQUIRED

Belt width	Layout						
	2 Roll	3 Roll	5 Roll	2-Roll V return	Flat return	Centre picking	Extended return
400	240	170			484		
450	290	190			536		
500	340	200			586		
600	390	240		300	688		770
750		290		400	840	536	922
900		340		475	994	688	1075
1050		390	240	560	1146	840	1226
1200		450	270	635	1298	994	1378
1350		500	300	720	1450	1146	1532
1500		560	340	800	1602	1298	1678
1650		610	370	885	1754	1450	1828
1800		660	400	965	1908	1602	1978
2000		740	450	1075	2110	1754	
2100		765	475	1146	2212	1908	
2200		800	490	1185	2310	2110	
2400		870	536	1298	2518	2212	

Items in red also available as impact idlers

	Idler Roll Diameter				Impact Rolls	
Diameter	89	101	127	152	133	152
Series	20	20	20		20	20
	25	25	25	25	25	25
			30	30		30
				40		

The Enquiry Sheet PDF must ONLY include the Enquiry diagram, use this one (removed document number)



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CONVEYOR	BELT WIDTH	DIAMETER	FACE	GAUGE	SHAFT	SERIES	A/F	A/F WIDTH	ROLL QTY		FRAME TYPE	TROUGH ANGLE	FRAME QTY

Rollers

- Troughing rollers
- Impact rollers
- Return rollers
- Rubber disk return rollers
- Garland rollers
- Anti-runback rollers

Frames

- Belt saving and angle section frames
- Drop brackets
- Special frames
- All frames supplied as galvanized or painted

Benefits

- Improved Belt Support & Stability
- Reduced Wear & Extended Belt Life
- Increased System Reliability
- Versatility Across Applications
- Improved Material Handling Efficiency

Swap these

Submit your preferred specifications below.

Roller diameter: A / mm

Face length: B / mm

Shaft diameter: C / mm

Gauge length: D / mm

Total shaft length: E/ mm

Shaft ends: Closed / Open or Hole / Other

Across flats: F / mm

Slot Width: Slot Width G / mm

SANS Sizes: Yes / No

Belt Width: mm

Types: Carry / flat return or v-return?

Upload image/specification: Choose File No file chosen

Other: Comment

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Before Primary Scraper, add a short description of our scrapers

We have a scrapers Catalogue add “ view catalogue” right after the description.

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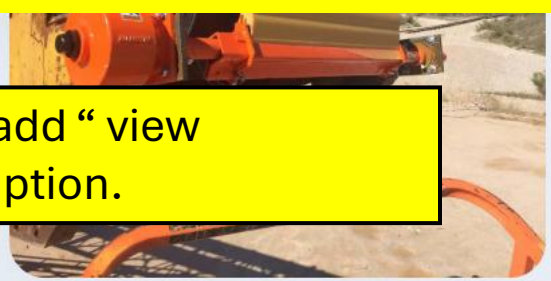
Conveyor Scraper & Spillage Control

We provide compact, high-efficiency conveyor scrapers designed to extend blade life and minimise friction between the scraper and belt. The scrapers include a sealed internal spring system that protects against water, dust, and harsh environmental elements. Our scrapers are engineered for rapid installation.



Efficient Material Removal – Right at the Head Pulley

Bosworth’s Primary Scrapers are designed to remove the bulk of material at the discharge point of your conveyor system. Mounted directly onto the front of the head pulley, these scrapers feature a quick-release poly-composite blade for reduced maintenance and fast servicing.

View Product Details

Secondary Belt Scrapers

Deep Cleaning After the Head Pulley – Engineered for Performance & Protection

Bosworth’s Secondary Scrapers serve as the second line of defense in your conveyor belt cleaning system—targeting the fine, sticky, or residual material that gets past the primary scraper. Mounted just after the head pulley, these scrapers follow the direction of belt travel, enabling them to glide over splices and imperfections without damage.

View Product Details

Chat with us on WhatsApp

Impact Stations

Heavy-Duty Impact Absorption for Loading Zones

Bosworth's Impact Stations (Impact Beds) are designed to absorb high-impact forces at conveyor loading zones, protecting your belt, structure, and minimizing spillage. These units use specially engineered impact bars made from rubber and polyurethane to dampen shock while maintaining a low-friction surface.

Proven across mining and industrial sites in South Africa, Bosworth's impact beds help extend belt life and reduce downtime due to misalignment or structural wear.

Please see slide/page 4 for Impact bed

Technical Features and Specifications

- **Heavy-Duty Construction:** Made with reinforced steel and engineered to withstand extreme material impact.
- **Impact-Absorbing Technology:** Designed to reduce belt deflection and absorb impact energy, preventing deformation.
- **Customizable Padding Options:** Choose from a range of impact-absorbing materials (rubber, polyurethane, etc.) to suit your application
- **Adjustable Frame:** Allows for precise positioning and ease of adjustment as the system wears.
- **Mounting & Installation Options:** Available in a variety of mounting configurations for different conveyor setups.
- **Sizes:** Custom sizes available to fit conveyor systems from **600mm to 2200mm**.

Plate Rolling Solutions

Plate rolling Overview

High-Performance Idlers for Maintenance-Free Operation

Bosworth provides steel rolling services using both cold and hot roll processes according to client's requirements. Various steel grades are rolled and welded and tested as required. Maximum material thickness of 70mm. Maximum width of 3000mm.

Bosworth Plate Rolling operates 4 sets of modern plate rollers with a capacity ranging from 4 mm to 80 mm depending on width of steel plate.

All cylinders are rolled, re-rolled and checked to obtain maximum accuracy.

Product Range

The below indicates the range of cylinders that can be rolled

- Special thick-walled pipes
- Hydraulic Rams
- Pulley Drums
- Curved plates
- Road Roller
- Special purpose cylindrical segments
- Cylinders
- Winch Drums
- Cones
- Tanks · Silos
- Drums etc.

Remove cones

PLATE ROLLING

Add the below Plate Rolling Types

Steel Rolling Types:

Roll Only

Roll & Tack

Welding

Re-Roll

Grinding

Rolling Range:

- Special thick-walled pipes
- Special-purpose cylindrical segments
- Cylinders
- Curved plates
- Hydraulic Rams
- Tanks · Silos
- Winch Drums
- Road Roller
- Pulley Drums
- Drums etc

QUALITY MANUFACTURING

Bosworth manufactures pulleys in an ISO 9001:2015 accredited factory ensuring that the requirements and quality standards of the client and the application are met. Bosworth uses both NC (Numerically Controlled) and conventional machines operated by skilled artisans.

ULTRASONIC (UT) TESTING 100% of long and circumferential welds are UT tested according to AWS 1.1 quality.

Cable Resin

Cost effective Conveyor Belt and Pulley Lagging Repair kit

Our professional resin system is a heavy-duty solution designed for demanding cable joint applications.

View Product Details

See next slide/page for notes on Pulley Refurbishment.
I will send pictures of Pulley Repair.
Add view product details

Bosworth refurbishes all pulley brands to their original specifications. All components are inspected thoroughly, followed by detailed recommendations and a quotation for refurbishment. Lagging, bearings and shafts may be replaced and salvaging and reusing the pulley shell and hub. This approach ensures cost-effectiveness while maintaining pulley quality and integrity.

CONVEYOR PULLEY REFURBISHMENTS

Bosworth refurbishes all pulley brands to their original specifications. All components are inspected thoroughly, followed by detailed recommendations and a quotation for refurbishment. Lagging, bearings and shafts may be replaced, and the pulley shell and hub may be salvaged.

Common Mining Failure Modes Symptom Likely Cause One-sided lagging wear Tracking issue Action Align system Glazing Deep grooves Chunking Diagonal wear Rapid wear Slip Poor cleaning Increase friction/tension Adjust scrapers Impact/tramp metal Upgrade lagging Misalignment Laser align Wrong compound Review spec.

CONVEYOR PULLEY MAINTENANCE GUIDE

In mining operations, conveyor pulley maintenance is not just about replacing lagging — it's about preventing belt failure, fire risk, structural damage, and unplanned shutdowns.

Drive Pulley Critical Checks

Slip Detection Signs:

- Glazing
- Rubber smell
- Heat build-up
- Polished chevron pattern Action:
- Check take-up tension
- Verify wrap angle
- Inspect for contamination
- Review start-up torque conditions

Bearing & Shaft Maintenance

Check:

- Temperature
- Vibration levels
- Grease quality
- Seal integrity In mining

Practical Mining Advice

Most pulley failures in mining are caused by:

- Poor tracking
- Inadequate cleaning
- Incorrect lagging selection
- Structural misalignment
- Improper tension.

Tail Pulley Maintenance

Tail pulleys suffer from:

- Fine material packing
- Abrasion
- Carryback Key Maintenance
- Clean regularly
- Inspect cleaners for proper tension
- Check for grooving
- Monitor return belt condition

Lagging Replacement

Replace lagging when:

- Rubber thickness is worn
- Steel shell visible
- Ceramic tile loss > 10–15%
- Bond failure detected
- Slip begins under normal load

If problems repeat:

- Upgrade to rubber-backed ceramic
- Increase wrap angle (snub pulley)
- Improve belt cleaning system
- Install alignment trainers
- Install slip detection sensors
- Review drive calculations