

NOV 2023

## Lorbrand Composite Rolls



Lorbrand Australia Composite Rolls utilise our unique proprietary shell material, delivering exceptional performance in all conveying applications.

### KEY BENEFITS:

- Light Weight
- Low Noise
- Excellent abrasion resistance
- Friction Welded

## Safety & Operational Benefits

- Weight reduction up to 60% of a steel roller. Less roll maintenance requirements.
- Lighter weight construction will reduce the potential for lifting (back) and pinch point injuries.
- Fire Resistance and Anti-Static Compliance for use in underground applications.
- Smart design reduces heat build-up and friction.
- Up to five times longer operational life over steel rolls.
- Substantial reduction in energy consumption
- Ave 10dB drop in sound emissions over steel rolls.
- Longevity of composite rolls will dramatically improve conveyor uptime and productivity.
- Smart component configuration has improved overall operational performance over competitive rolls.

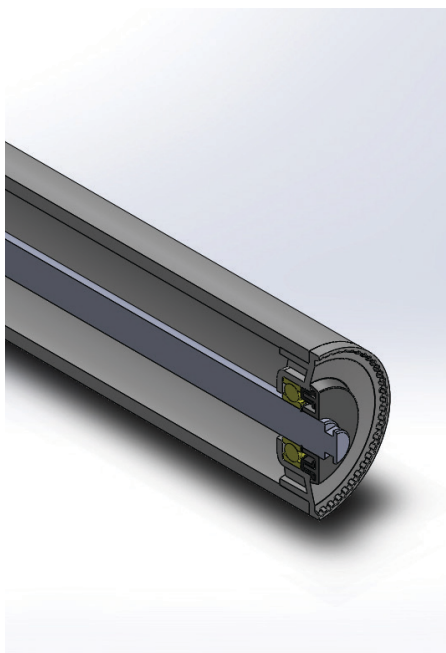
### MATERIALS AVAILABLE:

- Nylon
- Fire Resistant/Anti-Static
- High Density Polyethylene (HDPE)
- Ultra High Molecular Weight Polyethylene (UHMWPE)
- \*Dual Layer HDPE, UHMWPE & Nylon



\*Lorbrand Australia Dual Layer is uniquely manufactured using a non-coextrusion method.

## Design Benefit



**Lorbrand Australia Composite Rolls are the original composite idler using friction welded technology and hollow shafts on heavy rolls.**

### Friction Welding

- Eliminates the risk of end cap separation
- Increases roll load bearing capacity
- Eliminates fatigue and stress points in the conveyor roll.

### Hollow Shaft Technology

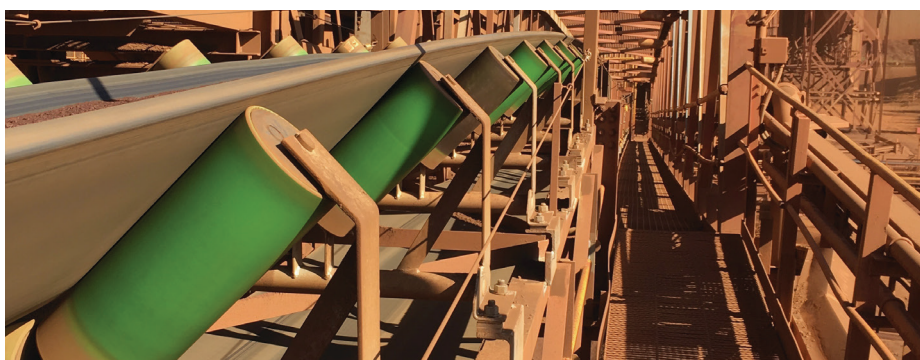
- Further reduces roll weight, improving manual handling
- Unique design ensures shaft deflection is kept to a minimum and strength is maintained.

### Composite Tubing

- 5.5x Stronger than standard HDPE tubing
- Unique Glass Fibre Reinforced tubing allows lengths of up to 2.5m
- FRAS Options
- Excellent abrasion qualities increasing roll life by up to 5x of steel
- Minimal shell deflection
- Dual layer options

- Reduction in work related injuries.
- Reduction in cost of spares.
- Reduction in conveyor damage and downtime.
- Reduction in labour costs.
- Electricity usage savings.
- Reduction in noise violations.

## Financial Benefit



### INDUSTRIES SERVED

- |   |                 |                      |
|---|-----------------|----------------------|
| • Coal (Surface / Underground)                      | • Potash        | • Aggregate          |
| • Hard Rock (Gold, Copper, Platinum, Iron Ore, etc) | • Steel         | • Crushed Stone      |
| • Ports   | • Chemical      | • Mobile Crushing    |
| • Load Out Facilities                               | • Fertilizer    | • Preparation Plants |
| • Salt  | • Sugar         | • Cement             |
|   | • Sand & Gravel | • Grain              |

### MANUFACTURING STANDARDS:

- |   |  |
|---|--|
| • Global Manufacturing - ISO 9000,        | • Running Friction SANS 1313-3:2012,   |
| • Water Ingress Testing SANS 1313-3:2012, | • Fire Resistance AS/NZS Standard,     |
| • Dust Ingress Testing SANS 1313-3:2012,  | • Anti-Static AS/NZS Standard,         |
| • TIR SANS 1313-3:2012,                   | • Acoustic Testing - KRD2005GA,        |
| • Breakaway Mass SANS 1313-3:2012,        | • Toxicity Testing - SANS 10177 Part 9 |

# Specification Chart

	LBA DUAL LAYER	LBA HDPE & UHMWPE
Manufacturing Method	Proprietary Non-Coextrusion	Extruded HDPE
ISO Certification	ISO 9001	
SA Manufacturing Compliance	Tests conducted in accordance with SANS 1313-3:2012, "Conveyor, Belt Idlers, Part 3: Performance specifications for belt conveyor idlers."	
Manufacturer	Lorbrand Australia	
Shell Construction	Composite	
B/Housing Construction	Reinforced	
Single Longest Roll Length	2500mm	
Sulphuric Acid Resistance	Excellent	
Std Diameters (mm)	127 - 450mm Diameter	89 - 450mm Diameter
Weight Reduction over Steel Rolls	Up to 60% Less	
Std Wall Thickness (mm)	10, 15, 20, 30 or to specification	
Shaft Diameter (mm)	25 through 65	
Bearing Sizes	6205 - 6312	
Bearing Type	Greased for life ball bearing	
Bearing Manufacturer	TIMKEN, SKF, FAG or customer specification	
Seal Type	Non Contact Centrifugal Seal	

