

HEAVY MINING CONVEYOR IDLERS

Problems raised. Problems solved. Run with Superior!

REAL TIME CONVEYOR MONITORING

See back page for details!



VANTAGE® CONVEYOR MONITORING

BENEFITS

- » 50 years alongside the world's highest capacity mines known for the most challenging applications
- » Technicians conduct onsite evaluation of applications and challenges for reliability of custom roll designs
- » Predictive analysis system backed by real-time alerts to profitably prevent any unplanned downtime
- » Relentless customer service supported by employees with instinctual service minds and devoted hearts

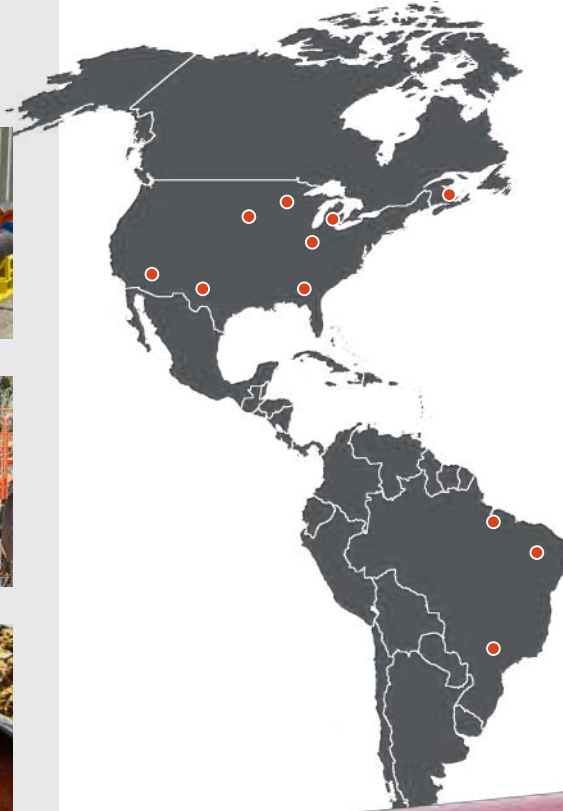
SPECIFICATIONS

- » Bearing sizes up to 60mm
- » Roll diameters up to 8" (203mm)
- » Belt widths up to 120" (3,048mm)

ABOUT SUPERIOR

Superior Industries is a privately-owned, American-based manufacturing company of crushing, screening, washing and conveying solutions. We're building a manufacturing company that creatively solves problems, eagerly serves customers, and pursues the lowest cost per ton. We're motivated by new opportunities for employees, distributors, vendors, communities, and most importantly...you!

PRODUCTS



1,500

GLOBAL EMPLOYEES

\$400,000,000

ANNUAL REVENUE

1,000,000

POUNDS OF STEEL*



*Pounds of steel used to produce products in 2021.



ROLL STYLES



DOUBLE TUBE STEEL



CEMA RATED STEEL



DX DESIGN STEEL



URATHON® POLYURETHANE



VULCANIZED RUBBER



TIRE RUBBER

STEEL ROLLS

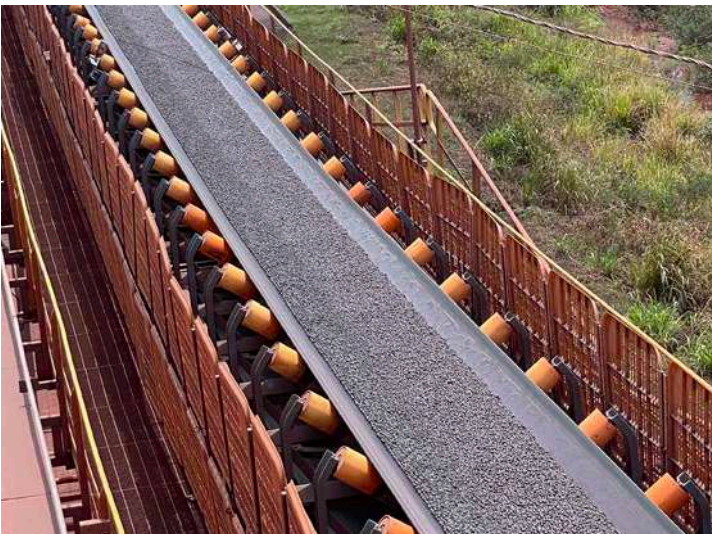
CLASS	BEARING	DIAMETER inch (mm)	SHELL THICKNESS inch (mm)	BELT WIDTH inch (mm)	TUBES
60DT	60mm	7", 8" (177, 203)	1/4" x 2 (6.3 x 2)	60" - 120" (1,524 - 3,048)	Double
CEMA F	50mm	7", 8" (177, 203)	1/2", 3/4" (12.7, 19.0)	42" - 120" (1,066 - 3,048)	Single
50DT	50mm	7", 8" (177, 203)	1/4" x 2 (6.3 x 2)	42" - 120" (1,066 - 3,048)	Double
45DT	45mm	6", 7", 7.5" (152, 177, 190)	1/4" x 2 (6.3 x 2)	54" - 108" (1,371 - 2,743)	Double
CEMA E	40mm	6", 7" (152, 177)	1/4" (6.3)	36" - 96" (914 - 2,438)	Single
40DT	40mm	6", 7" (152, 177)	1/4" x 2 (6.3 x 2)	36" - 72" (914 - 1,828)	Double
DX	30mm	5", 6" (127, 152)	1/4" (6.3)	30" - 72" (762 - 1,828)	Single
CEMA D	25mm	5", 6" (127, 152)	5/32", 3/16" (3.9, 4.7)	24" - 72" (609 - 1,828)	Single

RUBBER/POLYURETHANE ROLLS

CLASS	BEARING	DIAMETER inch (mm)	BELT WIDTH inch (mm)	IDLER STYLES		
				VULCANIZED	TIRE	POLYURETHANE
CEMA G	60mm	7", 8" (177, 203)	60" - 120" (1,524 - 3,048)	■		
60DT	60mm	7", 8" (177, 203)	60" - 120" (1,524 - 3,048)	■		
CEMA F	50mm	7", 8" (177, 203)	42" - 120" (1,066 - 3,048)	■	■	
50DT	50mm	6", 7", 8" (152, 177, 203)	42" - 120" (1,066 - 3,048)	■		
45DT	45mm	6", 7", 7.5" (152, 177, 190)	54" - 108" (1,371 - 2,743)	■		
CEMA E	40mm	6", 7" (152, 177)	36" - 96" (914 - 2,438)		■	■
40DT	40mm	6", 7" (152, 177)	36" - 72" (914 - 1,828)	■		
DX	30mm	5", 6" (127, 152)	30" - 72" (762 - 1,828)	■		
CEMA D	25mm	5", 6" (127, 152)	24" - 72" (609 - 1,828)		■	■



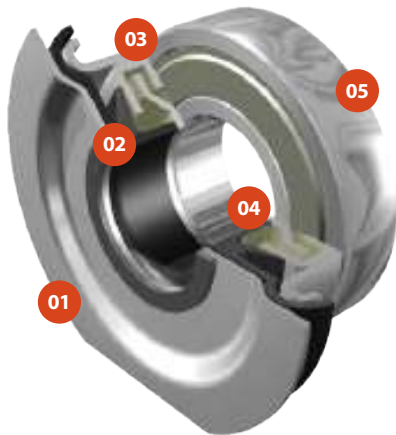
DOUBLE TUBE ROLLS



TWO STRUCTURAL TUBES FOR MORE CAPACITY

FEATURES

- » Produced with two structural tubes for increased loads
- » Suitable for conveyors up to 25,000 tons per hour
- » Inner tube seals and protects bearing assembly
- » Design allows for full wear of outer tube for prolonged life
- » Submerged arc welding offers finest mechanical strength



PREMIUM BEARING SEAL

- 01/ ROCK AND SPRAY SHIELD MADE OF STEEL**
- 02/ CONTACT SHIELD BLOCKS CONTAMINATION**
- 03/ RUGGED, WATERPROOF SEAL**
- 04/ APPLICATION-SPECIFIC PROPRIETARY GREASE**
- 05/ PREMIUM BEARINGS ENDURE EXTREME TEMPERATURES**



CEMA RATED ROLLS

FEATURES

- » Meets or exceeds standards established by Conveyor Equipment Manufacturer’s Association (CEMA)
- » Application-Specific seals offer bullet-proof bearing protection in demanding conditions
- » Hundreds of standard models and thousands of custom designs from idler engineering team
- » Powder coat paint offers long-lasting, color-durable finish

**TOP 2 NORTH AMERICAN
VOLUME MANUFACTURER**
BASED ON MARKET DATA FROM CEMA



HIGH QUALITY ROLLS WITH FAST LEAD TIMES

APPLICATION-SPECIFIC BEARING SEALS

NEW!



TITANIUM™ SEAL

30% increased idler lifespan
Supreme bearing protection



WET SEAL

Moisture defense
Double contact seal



DUST SEAL

Dry particle shield
Oiled and contact seal



ECO SEAL

Less resistance, Reduced HP
Overland conveyors



DX DESIGN ROLLS



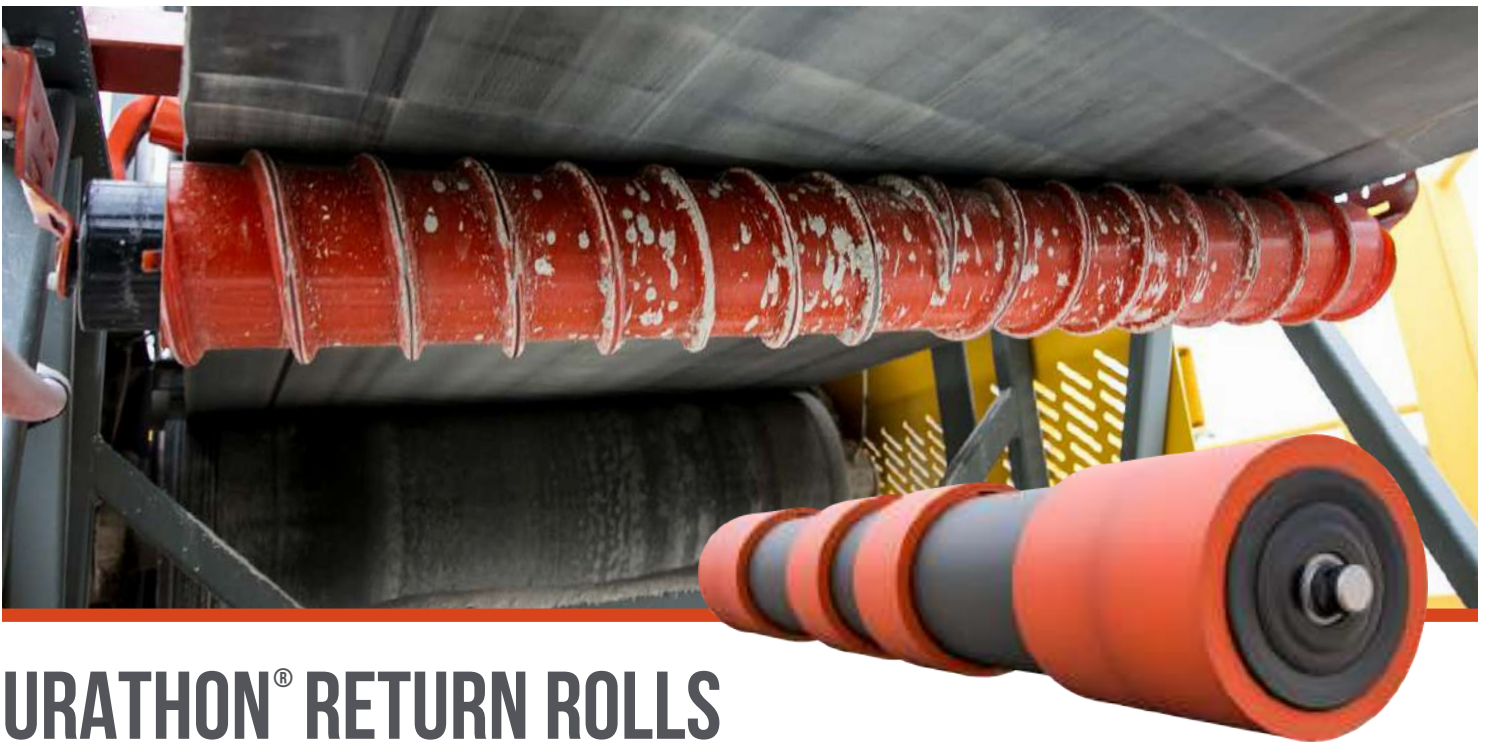
IDEAL FOR LOWER COST CONVEYOR SYSTEMS

FEATURES

- » Fills design gap between CEMA D and CEMA E specifications
- » Heavy duty steel shell (30% more steel)
- » Utilizes premium bearings with taconite contact seal
- » Lower demand, lighter duty mining applications
- » Paired with CEMA D support frame



SUPERIOR'S VERTICALLY INTEGRATED CONVEYOR MANUFACTURING CONSUMES THOUSANDS OF ROLLS ANNUALLY



URATHON® RETURN ROLLS

FEATURES

- » Non-stick properties reject sticky material
- » In-house urethane production improves quality
- » Lasts at least 3X longer than steel or rubber rolls
- » Spiral and beater models aid belt cleaning efforts



AVOID MATERIAL BUILD-UP ON RETURN ROLLS

SERVICES OFFERED

SITE SURVEY

On-site visit from professionals specialized in rolls for belt conveyors.

Data collected includes identification of critical points, evaluation of operating conditions, and verification of existing dimensions.

A report for improvement is delivered to the customer after the visit.

PRODUCT TRAINING

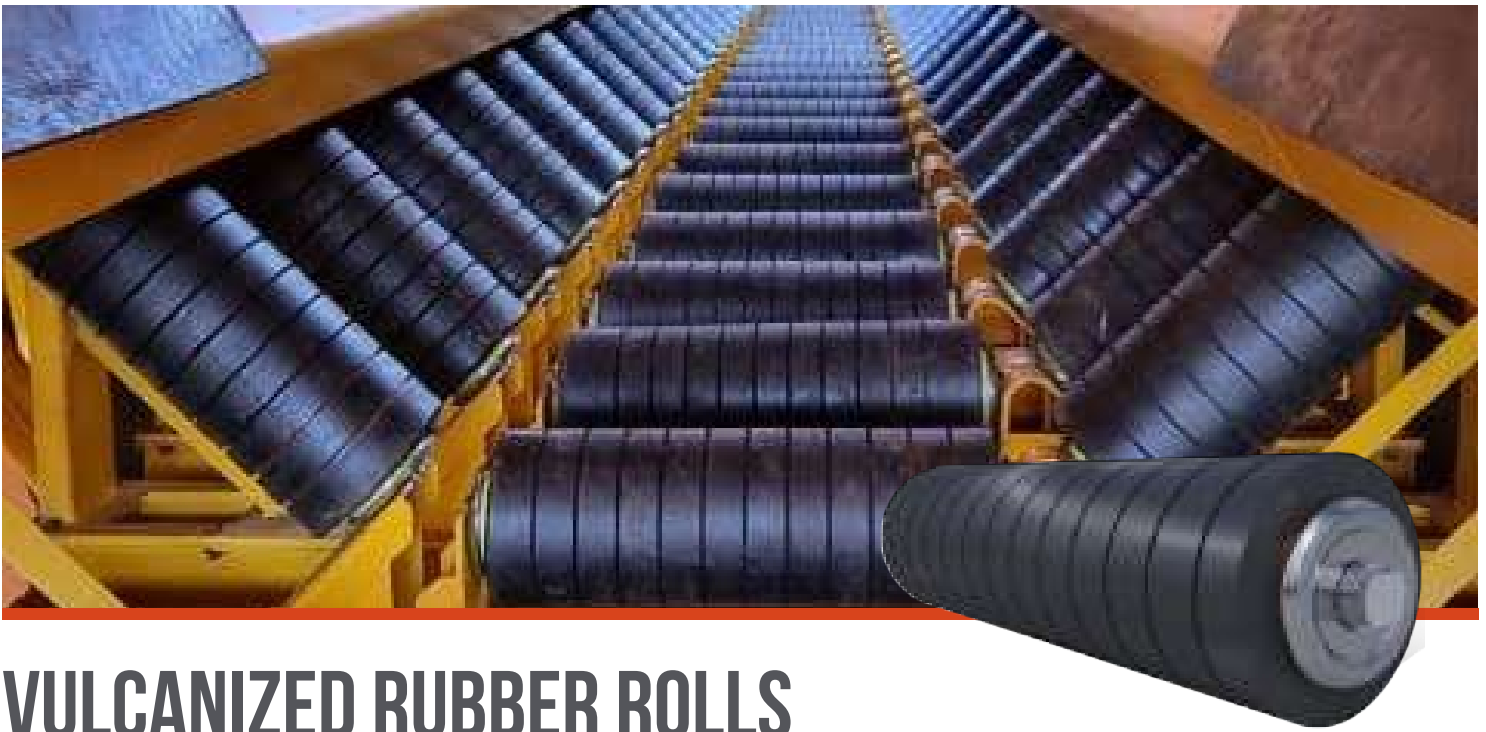
Training in operation and maintenance covering dimensions, care, transport, handling, installation and performance monitoring.

Excellent forum for exchanging experiences, generating technical improvements, and improving the reliability of belt conveyors.

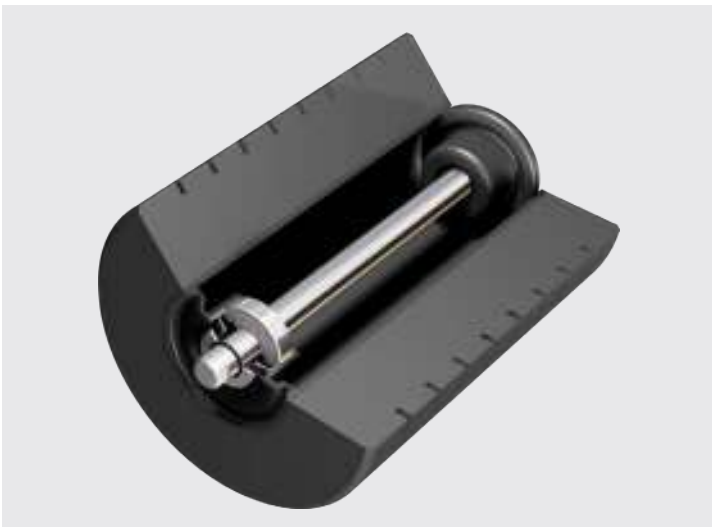
IDLER SIZING

Creation of a customized roll design, according to the project specifications and real conditions of each conveyor.

Dimensioning includes design verification in accordance with ABNT NBR 6687:2017, CEMA 7th edition, and finite element analysis (FEA).



VULCANIZED RUBBER ROLLS



FEATURES

- » Hot vulcanized rubber applied directly on steel tube
- » Autoclave machine permanently bonds rubber to steel
- » In-house rubber production for total control of quality
- » Steel seal dissipates heat from bearings
- » UL94-V0 self-extinguishing rubber provided when specified
- » ASTM International specifications available upon request

DENSITY OF RUBBER COATING IS CUSTOMIZABLE

SELF-EXTINGUISHING RUBBER ROLL

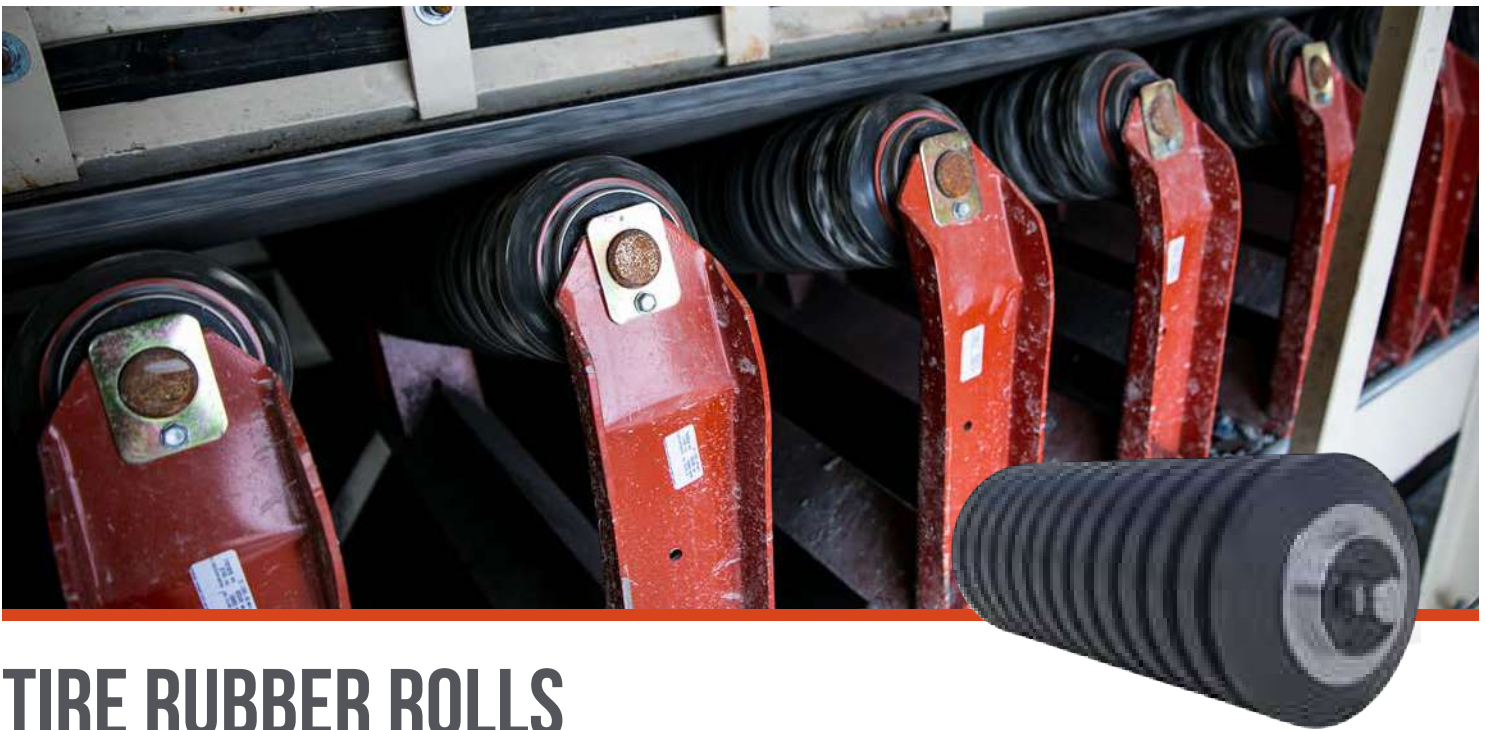


TORCH TEST AT 1,300° F (700° C)



SELF-EXTINGUISHING UL94 V-0

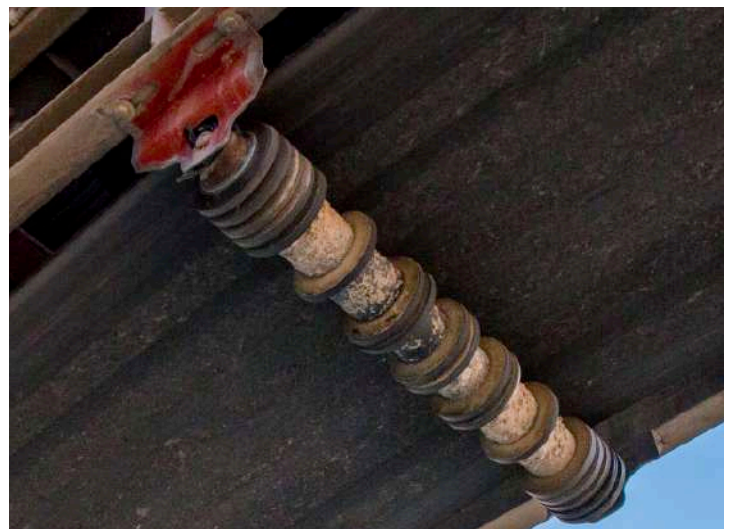
- » Greatest level of fire safety for rollers
- » Extinguishes in three seconds or less
- » Prevents expensive equipment fires
- » Impact and return roll installations
- » UL94 V-0, MSHA certification



TIRE RUBBER ROLLS

FEATURES

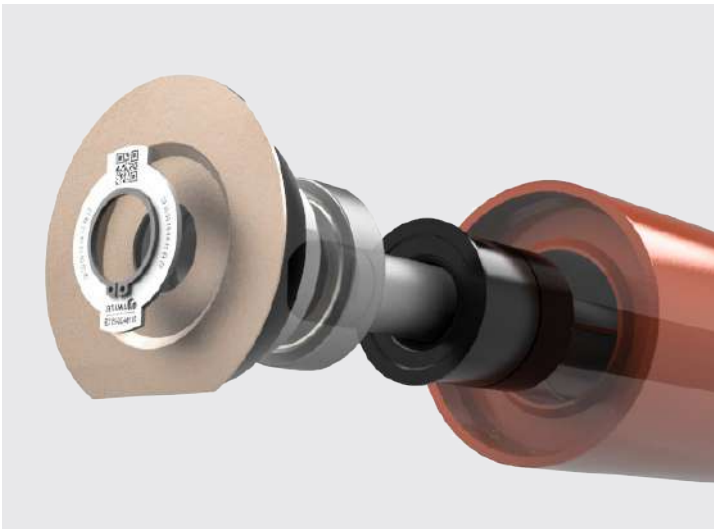
- » Absorb impact forces to prevent conveyor belt damage
- » Autoclave machine permanently bonds rubber to steel
- » In-house rubber production for total control of quality
- » Self-aligning bearings allow greater shaft deflection
- » Utilizes premium bearings with taconite contact seal



TIRE SPACING IS CUSTOMIZED BY APPLICATION



VANTAGE® MONITORING



EMBEDDED HARDWARE PROTECTED INSIDE ROLL

FEATURES

- » Continuous monitoring of conveyor roll conditions
- » Monitor temperature, load and rotation
- » Real-time alerts pushed to computer or mobile device
- » Eliminates the need for expensive daily inspections
- » Analyze historical trends and predictive analysis tools

