CoreTech™

CoreTech™ Nylon Conveyor Rollers

The CoreTech™ Advantage

The next generation of troughing and return rolls are made of lightweight, high strength, corrosion and abrasion resistant composite material. Plus belt friendly construction means that even advanced wear on the shell won't damage the belt.

CoreTech™ Tackles Common Issues

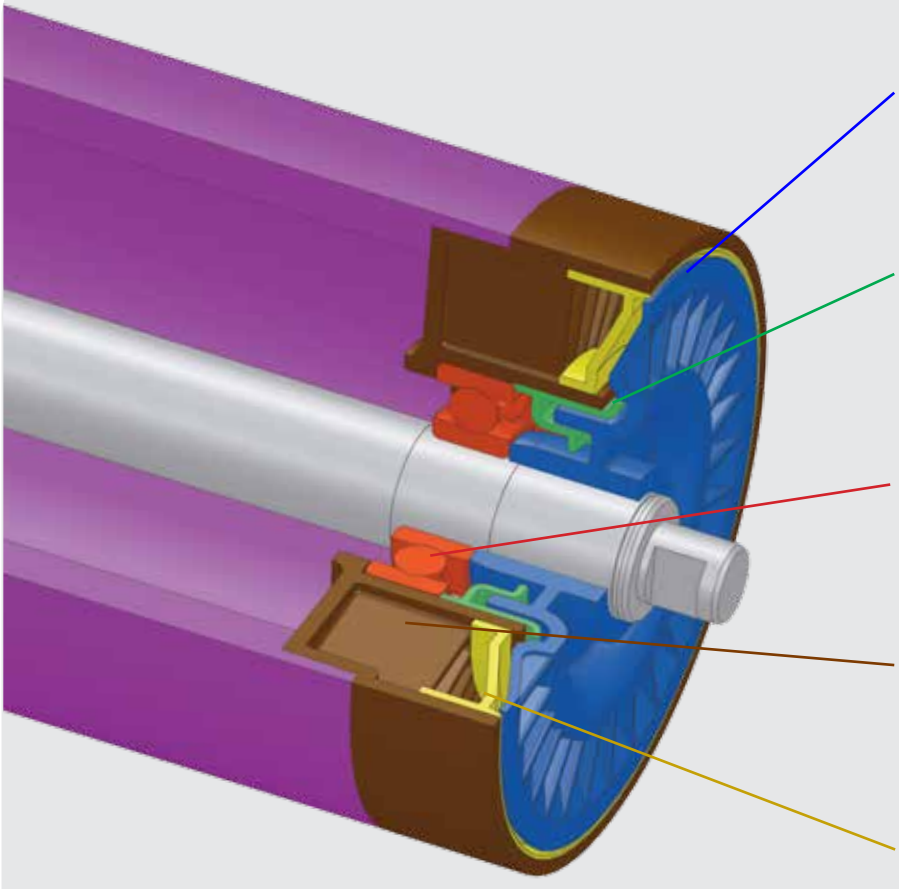
Life. CoreTech™ rollers offer the best combination of structural strength coupled with the requirements of mining, which include corrosion resistance, abrasion resistance, and very low surface friction.

Corrosion. When moisture, salt, or other corrosive materials are present, CoreTech provides an excellent alternative to steel rollers. CoreTech rollers provide the same CEMA ratings as steel rollers, with no loss of functional performance, and much longer life.

Weight. CoreTech rollers are approximately 40 percent lighter than equivalent steel rolls and as the rollers get longer in the larger diameter steel rolls, that weight reduction gets closer to 50 percent. CoreTech rollers require only one individual to lift, carry, and place the roller, increasing productivity while keeping workers safe.

Power Consumption. CoreTech rollers have lower running friction values, which, depending on the application, can decrease power bills by up to 30 percent a year. Less power is used during start-up and while in operation, contributing to lower electrical consumption.

Noise. CoreTech rollers create far less noise than steel rollers. The estimated noise contribution of CoreTech rollers is +/- 10 dB below the noise contribution of metal rollers. This noise variation can mean the difference between functioning below the maximum decibel levels and violating ordinances and compromising worker safety.



Field-Proven Seal Design

Rock Shield – *The rock shield is pressed tight on the shaft and is stationary when the roller is in operation. This is the first line of defense and prevents larger material from damaging the seal. Since the rock shield is stationary, it improves safety by limiting rotating components accessible to workers near the outside of the idler.*

Centrifugal Seal – *The key to the CoreTech™ sealing arrangement, the centrifugal seal rotates with the roller and is specifically designed to create a vortex with forces up to 9X gravity. This action expels moisture and fines that may pass the rock shield. Centrifugal sealing is the most effective method of preventing moisture and dirt from entering the bearing chamber without the need for a grease pack.*

Deep Groove Ball Bearing – *A last line of defense, all CoreTech rollers use deep groove, factory lubricated and sealed for life ball bearings. The bearing selection ensures all CoreTech rollers meet the required application ratings and protect the bearings from premature failure due to corrosion or spalling.*

Bearing Housing – *The bearing housing is fused to the roller tube in a way that guarantees there is no path for moisture or dust to enter the roller. While many rollers use press fit end discs, the CoreTech roller is a unitary housing design. This means no end disk walk out and no risk of "pizza cutter" belt damage.*

Housing Guard – *The smooth surface of the housing guard provides for optimal operation of the centrifugal seal.*

Key Features and Benefits

Ultra light construction for safe, easy handling.

Advanced composite material blend allows renegade materials to shed from the roll preventing material build-up and belt damage.

The centrifugal seal is designed for protection, preventing trapped material from damaging the end disk, which often results in premature roller failure.

Composite materials have excellent impact absorption qualities, which provide additional support for bearings and other roll components, resulting in increased roll life.

CoreTech™
Nylon Conveyor Rollers

Nylon Rollers pair the latest plastic technology with smart design to produce a roller combining strength, performance, and durability. Perfect for medium- to heavy-duty applications, CoreTech™ Nylon Rollers are custom manufactured for each application. Contact Flexco for more information.

	127mm (5") Diameter	152mm (6") Diameter	178mm (7") Diameter
Shell Material Construction	Polyamide Composite Plastic	Polyamide Composite Plastic	Polyamide Composite Plastic
Bearing Housing Material Construction	Glass Reinforced Polyamide 6	Glass Reinforced Polyamide 6	Glass Reinforced Polyamide 6
Weight Reduction over Steel Rolls	Min 40% Less	Min 40% Less	Min 40% Less
TIR (Total Indicated Runout)	< 0.4mm	< 0.4mm	< 0.4mm
Roll Max Face Length	2046mm	2452mm	2452mm
Shell Dimensional Tolerances	<= 1mm	<= 1mm	<= 1mm
Shaft Material	EN 8 Mild steel (Stainless Available)	EN 8 Mild steel (Stainless Available)	EN 8 Mild steel (Stainless Available)
Bearing Type (Double Rubber sealed, greased for life)	2RS C3	2RS C3	2RS C3
Seal Type	Non Contact Centrifugal Seal	Non Contact Centrifugal Seal	Non Contact Centrifugal Seal
Breakaway Mass (Energy Required to cause rotation)	< 50grams	< 50grams	< 70 grams
Running Friction (Energy Required to maintain a given RPM)	Ave <= 2.1 N	Ave <= 2.1 N	Ave <= 2.1 N
Noise Emission (Tested at 90% less than steel)	Ave 60% less than steel	Ave 60% less than steel	Ave 60% less than steel

Authorised Distributor:

Flexco (Aust.) Pty. Ltd • 10 Solent Circuit • Baulkham Hills NSW 2153 • Australia
Tel: 612-8818-2000 • Fax: 612-8824-6333 • E-mail: sales@flexco.com.au

Visit **www.flexco.com** for other Flexco locations and products.