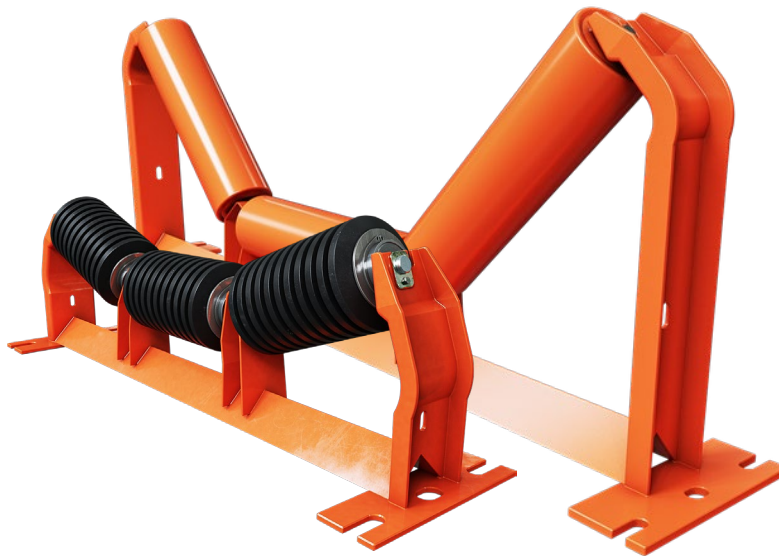


REPLACEMENT & AFTERMARKET

EQUAL TROUGHING IDLERS



Collaborate / Create / Convey

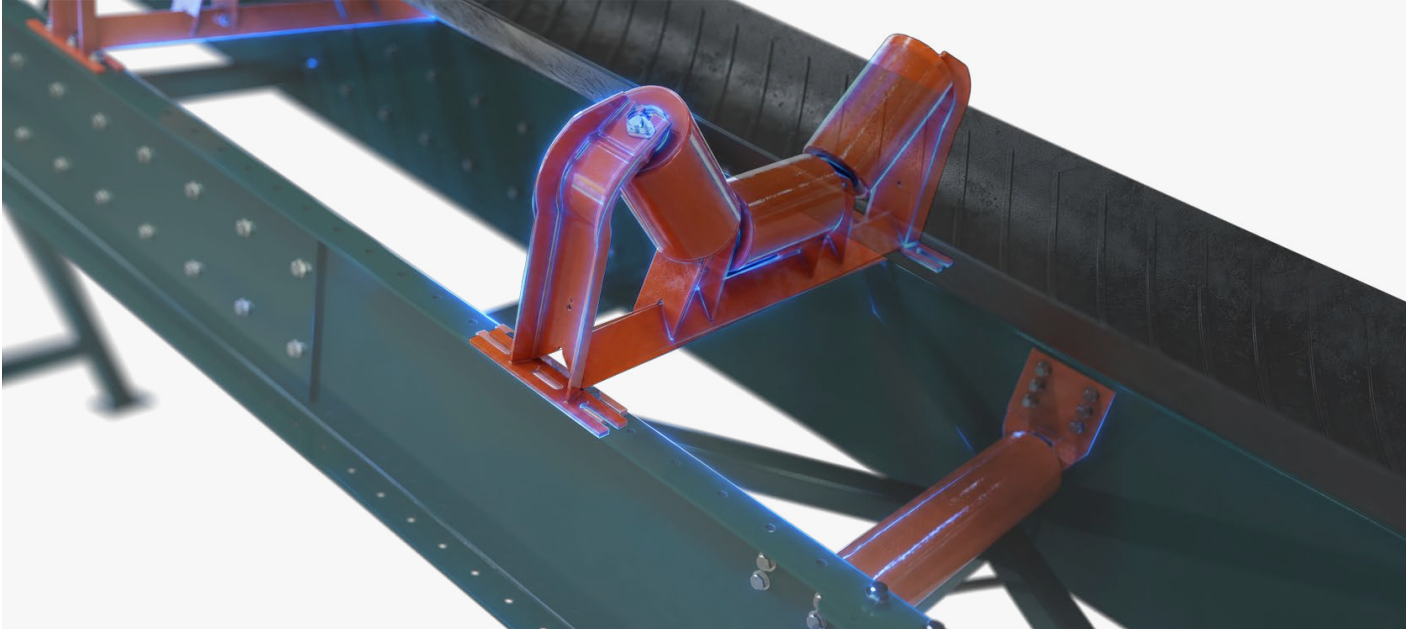
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EQUAL TROUGHING IDLERS



Equal Troughing Idlers

Bulk material transport subjects carrying belts to continuous dynamic loading, friction, and sag. Without rigid structural support, belts suffer edge pinching, uncontrolled deflection, and material spillage. This structural failure escalates maintenance intervals and degrades throughput across standard conveyor spans.

Engineered to CEMA B through F duty classifications, these units utilize three equal-length sealed rolls mounted in a reinforced frame. Cold-rolled steel shafts and application-specific tube materials maintain exact structural alignment under specified load calculations. Deployed along standard trough lines, transition zones, and radial stackers, the assemblies establish exact belt tracking geometry.



Steel Equal Troughing Idlers

Fabricated with steel rolls for general-duty structural support across standard conveyor systems and material types. Specified for dry, moderate-temperature environments.



Rubber Equal Troughing Idlers

Constructed with rubber-cushioned rolls to dissipate kinetic energy at loading zones and resist chemical degradation. Deployed in transition zones and high-adhesion material applications.

APPLICATIONS



Recycling Sort Stations

Equal troughing idlers are built for heavy impact and abrasive conditions, ensuring reliable belt support and reduced downtime in harsh waste and mining operations.



Wash Plants & Dredging

High-moisture processing strips away standard lubrication and accelerates bearing degradation. Wet idler seals provide isolated internal protection against water ingress and slurry accumulation.



Bulk Material Handling

High-tonnage environments demand continuous structural support to manage belt sag and material retention across extended runs. Three equalLength sealed rolls form a specific trough profile to handle dry and moderate-temperature applications.



Impact & Loading Zones

Transfer points subject the belt surface to direct kinetic force from falling bulk materials. Rubber-cushioned roll configurations absorb heavy shock loads and protect against structural deformation at the loading point.



Crushing & Screening

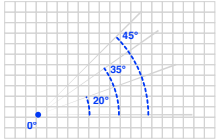
High-particulate aggregate environments introduce abrasive fugitive dust that attacks exposed bearing housings. Dry idler seal configurations establish a reinforced barrier to prevent internal contamination.

KEY FEATURES

01

Three-Roll Equal-Length Geometry:

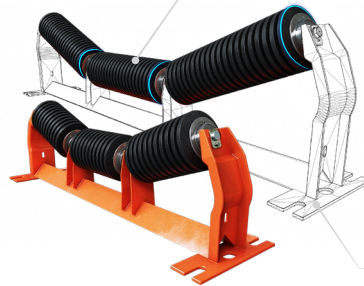
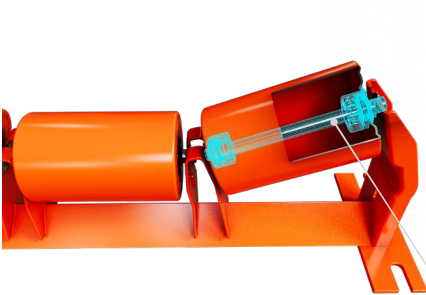
Constructed with symmetrical roll dimensions across 20°, 35°, or 45° trough angles to establish uniform belt contact.



02

Titanium Idler Seal Upgrade:

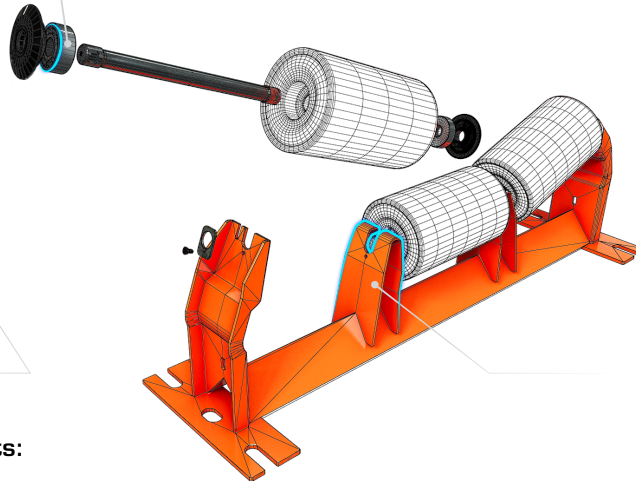
Integrated into the bearing housing assembly to isolate critical internal components in severe-duty applications.



03

C1018 Cold-Rolled Steel Shafts:

Interfaces directly with standard ball, tapered, or spherical bearings across CEMA B through F operating classifications.



04

Rubber-Cushioned Impact Roll Variant:

Fabricated with a resilient surface layer to dissipate kinetic energy at loading and transition zones.

05

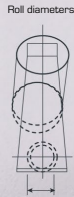
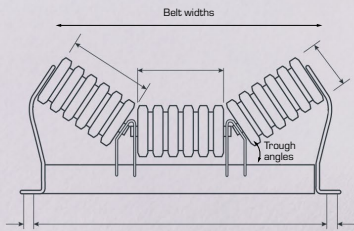
Thick Slotted Footpad Base:

Engineered into the frame structure to provide a heavy-duty mechanical connection point for structural stringers.

06

Offset Frame Configuration:

Designed with a lowered center roll position to alter belt training characteristics and tracking behavior.



EQUAL TROUGHING IDLERS SPECIFICATIONS

Parameter	Standard Specification
CEMA Classes	B, C, D, E, F
Belt Width Range	18" - 72"
Trough Angles	20°, 35°, 45°
Roll Diameters	4" - 6"
Bearing Types	6305 ball bearing, tapered roller, spherical
Shaft Material	Cold-rolled steel (C1018 or equivalent)
Tube Material	ERW steel (ERW1020), rubber cushion, polyurethane coated, DOM tubing
Mounting Types	Standard top mount, channel inset, web mount
Finish Options	Painted, galvanized, stainless steel

Configuration Reference

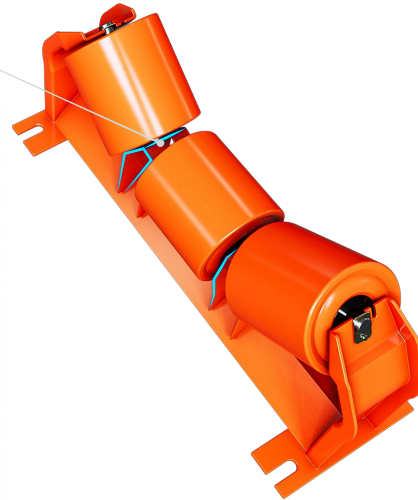
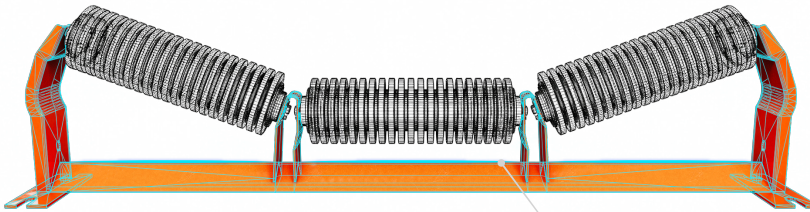
Seal Type	Primary Application	Protection Level
Dry Seal	Crushing, screening, dusty aggregate	Reinforced barrier
Wet Seal	Wash plants, dredging, high-moisture	Enhanced protection
Eco Seal	Washed sand and fines	Combined extreme condition protection
Titanium Seal	Severe-duty operations	Maximum durability

THE ENGINEERING ADVANTAGE

This section outlines the core structural methodology behind equal troughing idlers, covering specific frame and roll design elements to ensure mechanical fit and continuous service life.

Minimal Roll Gap Tolerance:

Engineered with precise physical clearances between the center and wing rolls to eliminate the pinch points that damage conveyor belting.



Material-Shedding Frame Geometry:

Fabricated with reinforced angles that prevent the accumulation of fugitive bulk material around the rotating structural components.

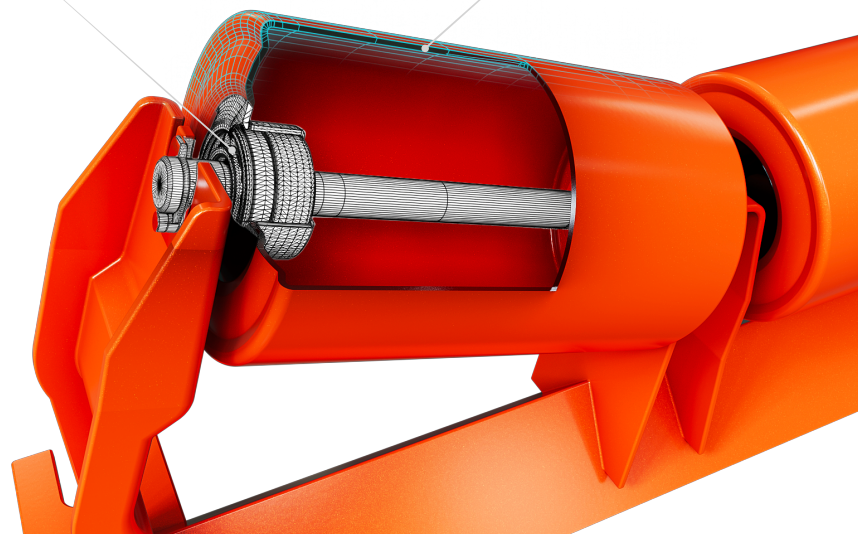
Application-Specific Tube Material Selection:

Specified with ERW steel, DOM tubing, or polyurethane coatings to match the shear and impact demands of the material being conveyed.



Application-Matched Seal Architecture:

Configured with wet, dry, eco, or titanium internal barriers to isolate the bearing assembly from specific environmental contaminants.



CONTACT INFORMATION

OUR ENGINEERS WILL SPEC THE EXACT PART FOR YOUR SYSTEM

For product specifications, engineering support, or order inquiries, please contact our team using the information provided below. Our specialists are available to ensure accurate recommendations and efficient service for your application requirements.

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