

REPLACEMENT & AFTERMARKET

SLEWING BEARINGS



Collaborate / Create / Convey

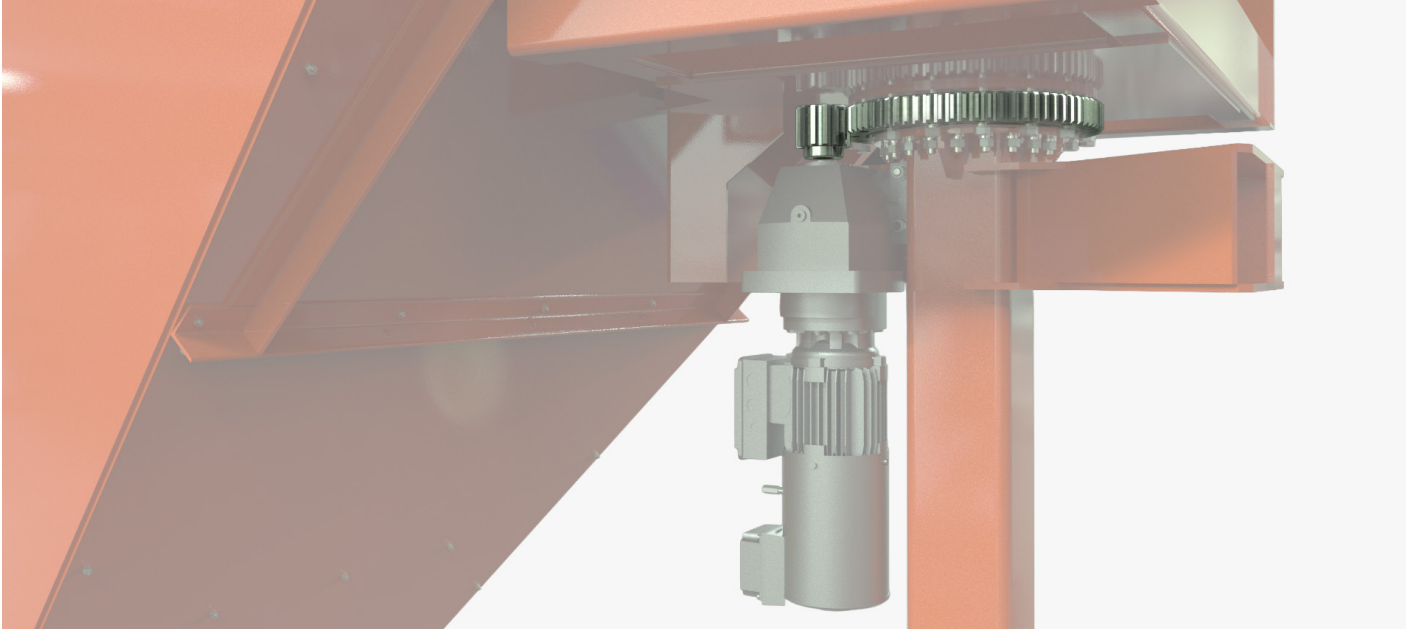
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SLEWING BEARINGS



Slewing Bearings

Heavy-duty radial stackers, rotating chutes, and turntable conveyors require immense structural support at their pivot points to distribute materials across wide arcs. Inadequate or degraded pivot support leads to excessive moment load stresses, resulting in worn raceways, seal failures, and compromised structural envelopes. These bearing failures introduce severe grinding, binding, and catastrophic structural damage to the pivot assembly, halting production and necessitating extensive conveyor downtime.

Slewing bearings mitigate these stresses by utilizing high-capacity rolling elements, including three-row roller, four-point contact, and cross roller configurations, to handle extreme axial and radial loads. Engineered with integrated internal or external gear teeth and advanced sealing technologies, these components withstand dust, moisture, and extreme temperatures. Positioned directly at the conveyor pivot point, these genuine Dodge Industrial bearings are specified to exact mounting hole, bolt circle diameter, and cross-section tolerances. Precise evaluation of mounting surface flatness and pinion backlash ensures exact system compatibility for heavy-duty material handling applications.

APPLICATIONS



Waste & Recycling

Built for demanding waste and recycling conveyors, flange bearings ensure stable alignment under heavy loads and contamination. Sealed against debris and moisture, they deliver reliable 24/7 performance with reduced maintenance.



Radial Stacker Conveyors

Stacker conveyors handle heavy material weight and wind forces requiring dynamic pivot points to distribute materials across wide areas. Slewing bearings installed at the pivot point enable the discharge boom to rotate while supporting the massive moment loads.



Rotating Chutes

Custom transfer chutes demand precise redirection of material flow from a single feed to multiple discharge points. Pivot-mounted bearings facilitate accurate structural rotation while resisting contamination from constant aggregate flow.



Turntable Conveyors

Rotating industrial platforms encounter continuous axial loads and extreme rotational friction during operation. Heavy-duty rolling elements maintain controlled rotation and structural integrity across the equipment footprint.



Aggregate & Recycling Facilities

Outdoor material processing yards subject pivoting joints to severe environmental contamination, moisture intrusion, and abrasive dust. Internal gear configurations protect the drive teeth from environmental exposure to extend bearing operational life.

KEY FEATURES

01

Advanced Sealing Technologies:

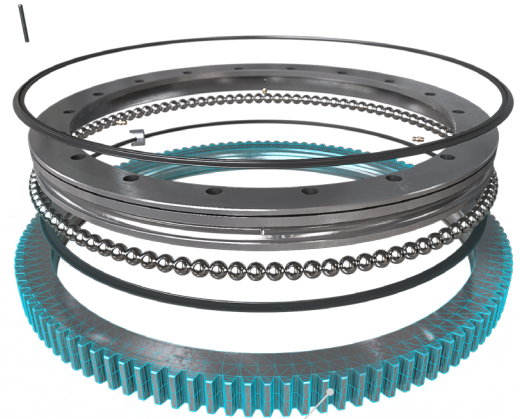
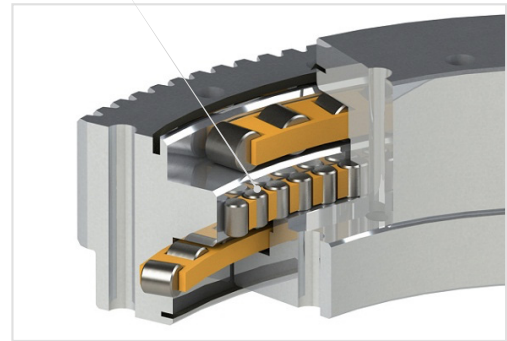
Incorporates heavy-duty seals that prevent grease leakage and block moisture intrusion in high-dust and outdoor material handling environments.



02

Three-Row Roller Design:

Engineered with multiple rows of rolling elements to manage the extreme moment loads generated by long boom extensions and heavy material weights.



03

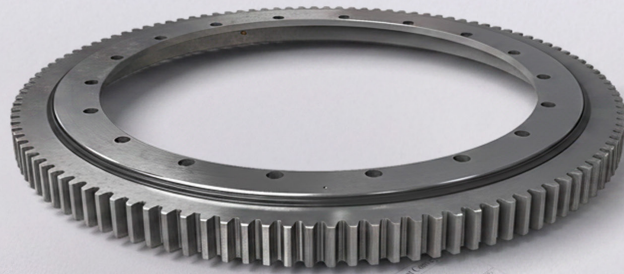
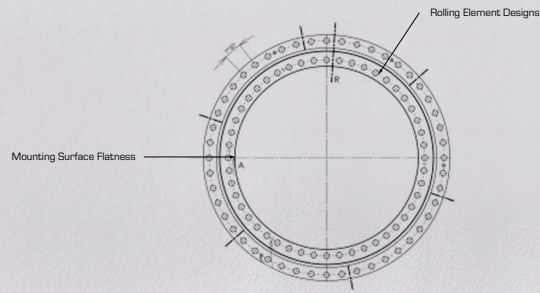
Four-Point Contact Architecture:

Utilizes a specialized raceway geometry to support moderate axial and radial loads simultaneously within a compact structural envelope.

04

Internal and External Gear Configurations:

Designed with teeth machined on either the inner or outer diameter to accommodate varied pinion access and motor mounting requirements.



SLEWING BEARINGS SPECIFICATIONS

Parameter	Standard Specification / Range
Mounting Surface Flatness	0.002 – 0.010 inches (total indicated runout)
Pinion Backlash Tolerance	0.010 – 0.030 inches
Bearing Type Configurations	Gearless (Internal or External), Gearless
Rolling Element Designs	Three-row roller, Four-point contact, Cross roller
Standard Lead Time	1 – 3 weeks
Note: Component sizing, flatness tolerances, and backlash specifications depend heavily on bearing diameter, gear module, and application load requirements.	

THE ENGINEERING ADVANTAGE

This section outlines the core mechanical engineering methodologies behind slewing bearing installation and operation, covering precise tolerance evaluation and load management principles to ensure structural stability and exact conveyor system alignment.

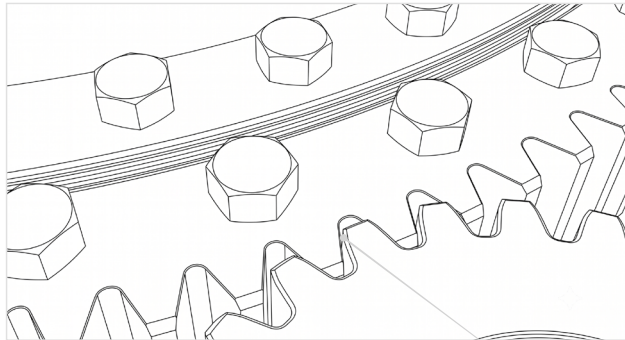
Precision Surface Flatness Tolerances:

Requires mounting surface flatness maintained between 0.002 and 0.010 inches total indicated runout to prevent load concentration, high stress generation, and premature raceway failure.



Induction-Hardened Gear Profile:

Integrates localized hardening across the primary gear teeth to withstand intense rotational forces, leaving an identifiable transition gap for exact installation orientation.



Circumferential Backlash Verification:

Measures free play across multiple points around the gear circumference using dial indicators to confirm proper bearing mounting and exact pinion center distance.



Load-Specific Rolling Elements:

Matches internal geometry ranging from cross rollers for moderate forces to three-row rollers for heavy-duty operations directly to calculated boom length and material weight moments.

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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Send us your questions or requests, and we'll respond promptly.

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