

REPLACEMENT & AFTERMARKET

ANSI CHAINS



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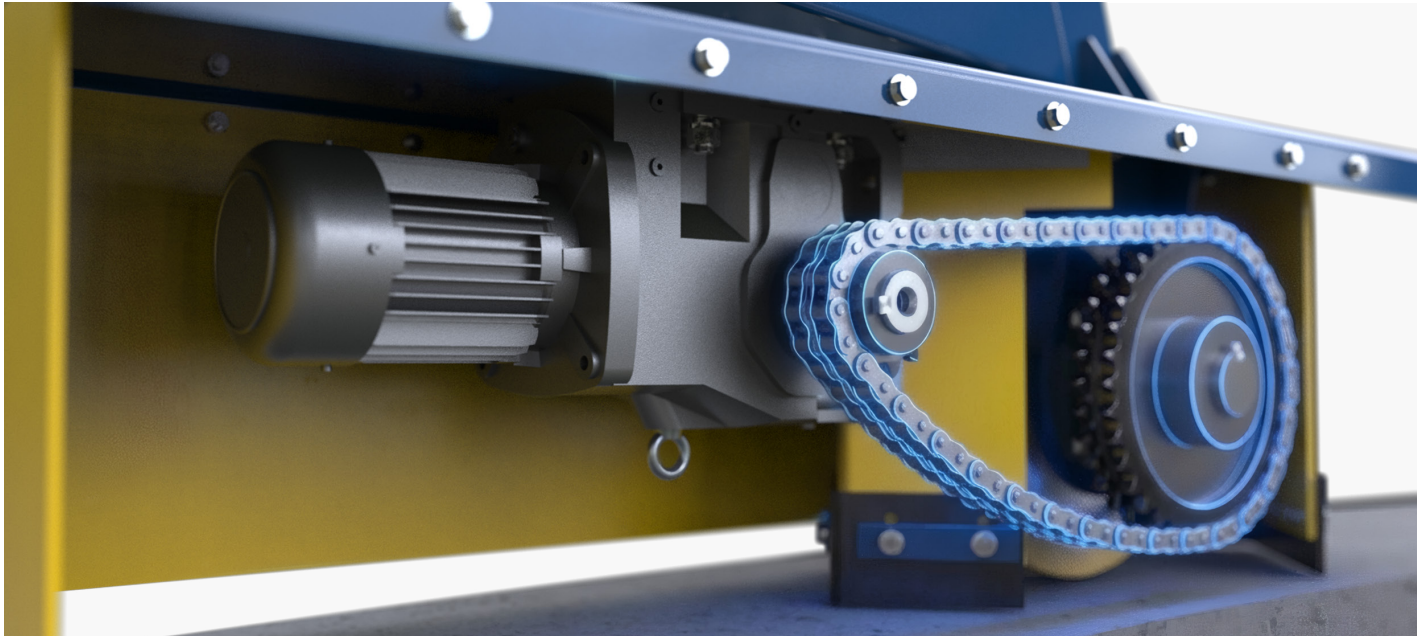
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ANSI CHAINS



ANSI Chains

ANSI chain transmits torque in conveyor drive applications where a motor and gearbox must rotate a shaft under sustained load, including radial stacker pivot arm drives and package handling center drive assemblies. Chain wear concentrates at the pin-bushing interface: insufficient lubrication or abrasive contamination removes material from the pin surface and bushing bore, and the effective pitch of each link grows until the chain no longer seats correctly on the sprocket. Once elongation passes the 3% threshold, the chain rides up on sprocket teeth, accelerates sprocket wear, and puts the drive at risk of unplanned stoppage.

Replacement ANSI chain is constructed with alloy steel link plates, heat-treated alloy steel pins and bushings, and alloy steel rollers, dimensioned to the ASME/ANSI B29.1 standard. Single and double strand configurations cover pivot arm drives on radial stacker conveyors and center drive assemblies on package handling conveyors, in both original-build and retrofit installations. Master link and offset link connecting types allow correct chain length matching on installation, and every chain size pairs with ASME/ANSI B29.1-compliant sprockets for a matched drive interface.

APPLICATIONS



Recycling & Material Recovery

Radial stacker conveyors in recycling yards pivot through a wide arc to build stockpiles of shredded scrap, processed fines, and recovered commodities, exposing the pivot drive to airborne abrasives and outdoor contamination. ANSI chain transmits gearbox torque through the pivot arm sprocket assembly to swing the stacker, with heat-treated pins and bushings resisting the contamination-driven wear that erodes the pin-bushing joint.



Aggregates & Bulk Material

Stockpiling operations run radial stackers across long duty cycles to position discharge points over the full stockpile radius. ANSI chain drives the swivel mechanism independently of the belt drive, holding sprocket engagement under repeated directional loading.



Distribution & Logistics

Long package handling conveyor runs manage starting tension and belt sag across the full conveyor length, often through a center drive positioned mid-conveyor. ANSI chain couples the motor and gearbox output shaft to the conveyor drive shaft, balancing belt tension across the carrying and return runs.



Package Handling

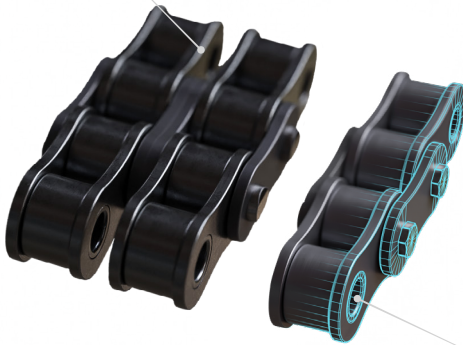
Center drive configurations place the drivetrain beneath the conveyor rather than at the head or tail pulley. Single and double strand ANSI chain carries the required torque rating for the drive shaft while fitting the compact center drive envelope.

KEY FEATURES

01

Alloy Steel Link Plate Construction:

Fabricated from alloy steel to carry tensile load across each pitch without plate cracking under repeated drive torque.



02

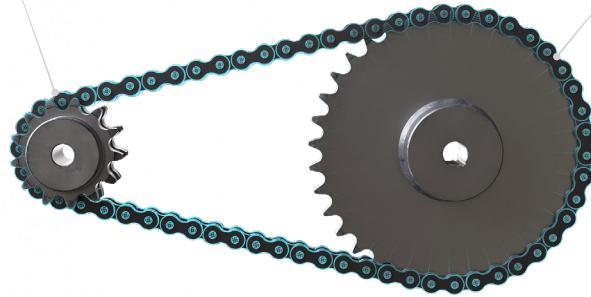
Heat-Treated Pin and Bushing Joint:

Hardened pin surfaces and bushing bores resist the metal-to-metal wear that drives chain elongation at the primary articulation interface.

03

Alloy Steel Roller Assembly:

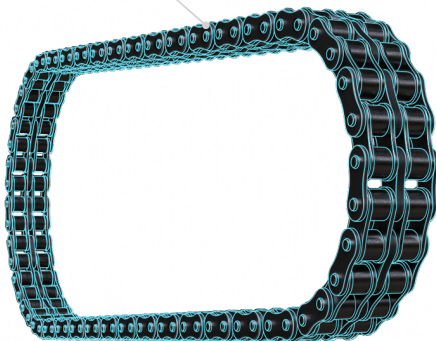
Rotates against the sprocket tooth face during engagement, distributing contact load and reducing sliding friction at each tooth.



04

Single and Double Strand Configurations:

Doubles the load path across parallel strands where a single strand cannot carry the required drive torque.



05

Master Link and Offset Connecting Links:

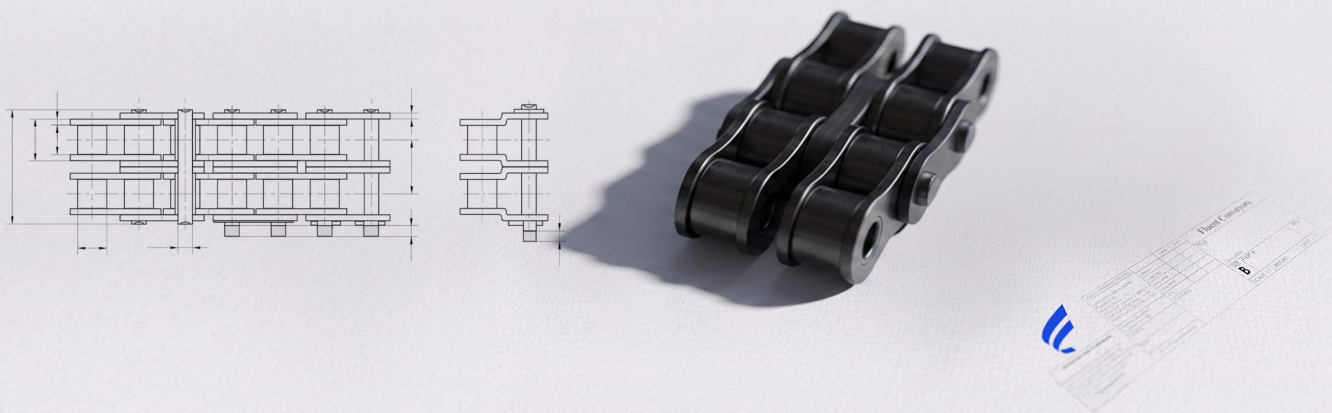
Closes the chain loop at installation and corrects for odd-pitch lengths without forcing a full chain replacement.



06

ASME/ANSI B29.1 Standard Pitch:

Conforms every dimension, pitch, roller diameter, and plate profile, to the interchange standard shared by compliant sprockets.



ANSI CHAINS SPECIFICATIONS

Parameter	Standard specification
Standard	ASME/ANSI B29.1
Strand configurations	Single strand, double strand
Chain Sizes	35 – 80 (Single Pitch) / 2040 – 2100 (Double Pitch)
Pitch Range	3/8" – 2.5" (9.525 mm – 63.50 mm)
Tensile Strength Range	Exceeds ASME/ANSI minimum standards
Link plate material	Alloy steel
Pin and bushing material	Alloy steel, heat-treated
Roller material	Alloy steel
Lubrication	Manual lubrication or conveyor oiler compatible
Connecting link types	Master link, offset link
Applications	Radial stacker pivot arms, package handling center drives
Sprocket compatibility	ASME/ANSI B29.1-compliant sprockets

Note: Replace chain at or before 3% elongation over a reference length, measured with a chain wear indicator or steel rule across a sufficient number of links to average out variation.

THE ENGINEERING ADVANTAGE

This section outlines the dimensional conformance, heat treatment, and drive interface methodology behind ANSI chain, covering wear management and sprocket matching to ensure correct seating and full service life on the drive.

ASME/ANSI B29.1 Dimensional Conformance:

Manufactured to the B29.1 interchange standard so pitch, roller diameter, and plate geometry seat correctly on any compliant sprocket without custom fitment.

Pin and Bushing Heat Treatment:

Hardens the two primary wear surfaces of the articulation joint, slowing the material removal that manifests as pitch elongation.



Matched Sprocket Replacement Interface:

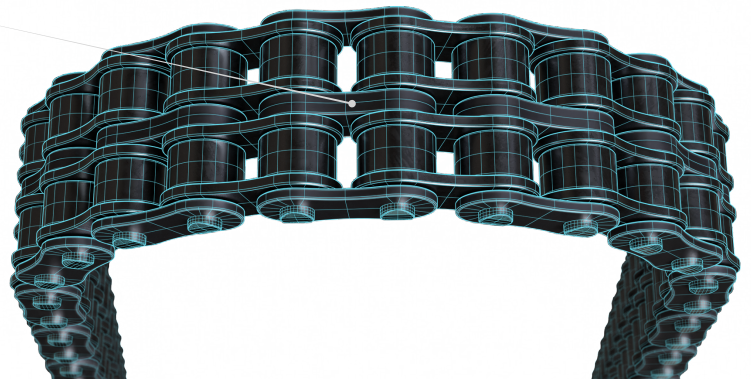
Pairs each chain size with a corresponding B29.1 sprocket so chain and sprockets can be replaced together, preventing worn tooth patterns from accelerating wear on new chain.

Conveyor Oiler Integration:

Accepts automated oiler lubrication on the chain run to hold consistent film coverage at the pin-bushing interface and eliminate missed manual service intervals.

Elongation-Based Wear Measurement:

Sizes each chain to a defined reference length so wear can be tracked against the 3% elongation limit with a chain wear indicator or steel rule.



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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