

REPLACEMENT & AFTERMARKET

ASCE 25 RAILROAD RAILS



Collaborate / Create / Convey

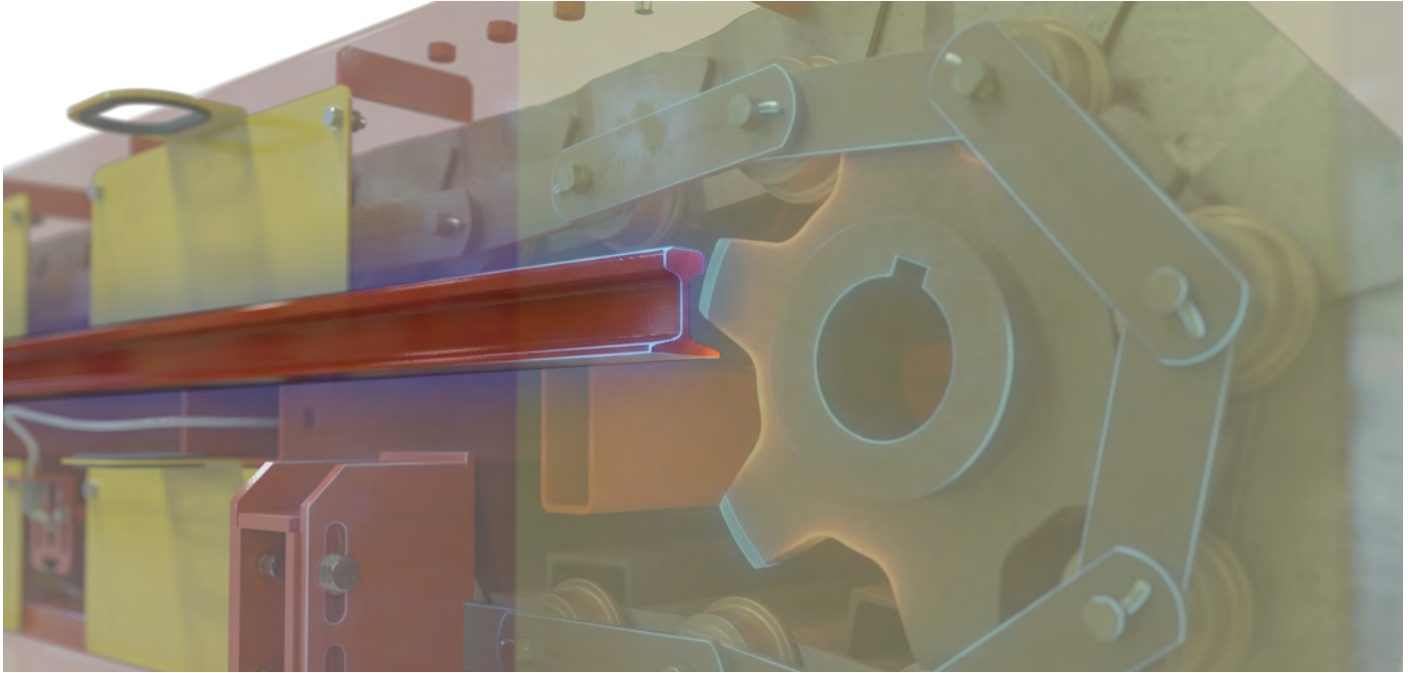
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ASCE 25 RAILROAD RAILS



Asce 25 Railroad Rails

Heavy-duty roller chain conveyors need a belt support surface that holds its geometry under continuous loading, and lighter track sections such as angle iron, channel, or plastic rails deform and gall at concentrated contact points. Once the support surface loses its profile, the chain assembly binds, rollers wear unevenly, and tracking drifts across the run. Each of those failures pulls the line down for track repair and accelerates damage to chains, rollers, and frame members downstream.

ASCE 25 railroad rails are the lightest classification in the ASCE rail range at 25 lb/yd, rolled from high carbon steel in an I profile that spreads load across a vertical web and horizontal flanges. The hardened head presents a low friction running surface where the roller chain belt rides, while the 2.75 in wide base flange welds directly to varied conveyor frame designs. Sections arrive pre drilled in a standard 2 in × 4 in pattern with matched splice bars and rail bolts, so runs extend and join while preserving chain alignment across the conveyor.

APPLICATIONS



Recycling

Recycling lines feed dense, irregular material across roller chain conveyors that take continuous loading and point impacts throughout every shift. ASCE 25 rails reinforce the belt path in these zones, holding chain tracking stable where mixed material concentrates force at moderate foot loads.



Waste Management:

Waste processing conveyors run near capacity with abrasive, unsorted streams that punish contact surfaces. The hardened rail head supports the roller chain belt while resisting the concentrated wear these streams produce.



Aggregates

Aggregate operations subject conveyor structures to heavy, continuous throughput of stone, sand, and gravel. The I profile section carries these loads without deformation across the vertical web and flanges.



Manufacturing:

Production conveyors move palletized and unit loads that demand consistent chain alignment across long runs. ASCE 25 rails guide the roller chain within a controlled tolerance to keep material flow uninterrupted.

KEY FEATURES

01

I-Profile Rail Section:

Distributes belt and chain loads across the vertical web and horizontal flanges, preventing deformation at the section modulus and moment of inertia rated for this weight class.

03

Hardened Head Running Surface:

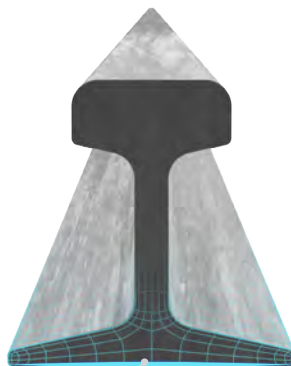
Presents a smooth, wear resistant 1.5 in wide contact surface that reduces friction where the roller chain belt rides the rail.



02

High Carbon Steel Construction:

Rolled from high carbon steel to withstand years of continuous heavy loading in demanding operating conditions.



04

Wide Base Flange:

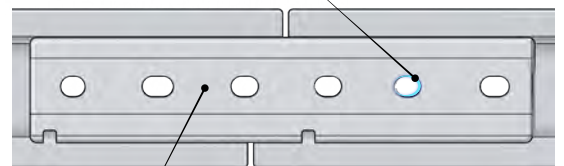
Provides a 2.75 in mounting footprint that welds to varied conveyor frame designs without custom brackets.



06

Pre-Drilled Bolt Configuration:

Arrives with a standard 2 in x 4 in drilling pattern, 5/8 in diameter holes, and matched 1/2 in x 2 in rail bolts for direct frame attachment.



07

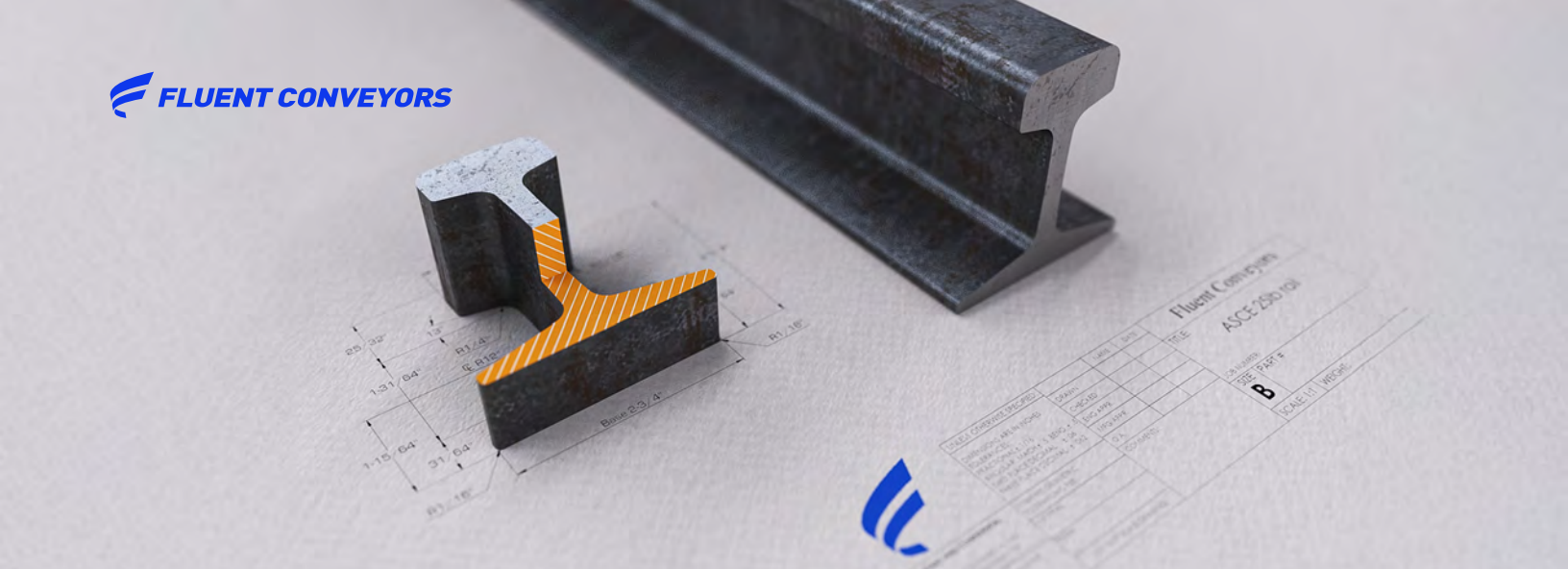
Splice Plate Joint System:

Joins rail sections with purpose made splice plates or butt welds to extend runs while preserving chain alignment.

05

ASCE 25 Weight Classification:

Grades the section at 25 lb/yd as the lightest rail in the range, supporting approximately 3,000 lb foot loads on heavy-duty roller chain conveyors.



ASCE 25 RAILROAD RAILS

ROADSSPECIFICATIONS

Parameter	Specification
Weight	25 lb/yd
Height	2.75 in
Base width	2.75 in
Head width	1.5 in
Web thickness	0.3 in (19/64 in)
Section area	2.4 – 2.53 in ²
Section modulus (head)	1.76 in ³
Moment of inertia	2.5 in ⁴
Standard drilling	2 in × 4 in with 5/8 in dia. holes
Rail bolt size	1/2 in × 2 in
Material	Carbon steel
Rail type code	25 AS
Item weight per piece (30 ft)	250 lb

Note: Most rails ship in 20 ft – 40 ft lengths and can be cut to manageable lengths for delivery. Standard length for ASCE 60 lb rail was not stated in the source document.

Joining and Load

Parameter	Specification
Splice bar length	16-1/8 in
Splice bar weight	6 lbs/pair (7 lbs/pair with hardware)
Approximate foot load rating	3,000 lb
Typical shipping lengths	20 ft – 40 ft (can be cut to manageable lengths)

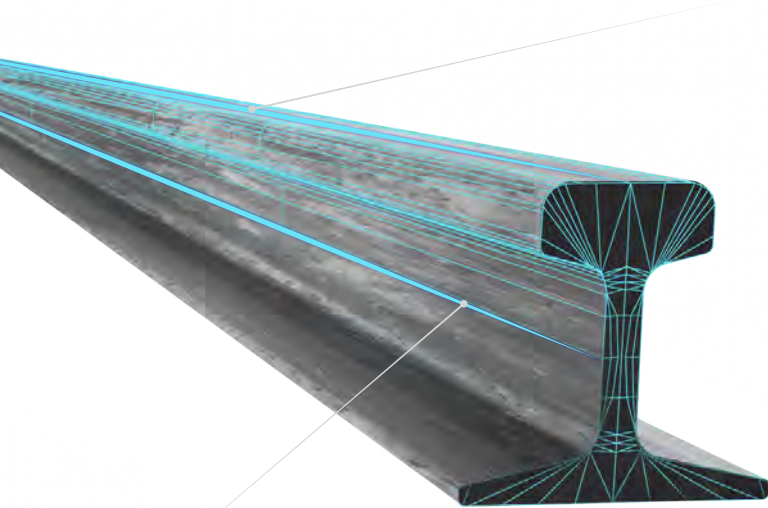
Note: Foot load rating is approximate. Final capacity depends on conveyor setup and rail spacing; engineering review is required for load calculations.

THE ENGINEERING ADVANTAGE

This section outlines the mounting, alignment, and connection methodology behind ASCE 25 railroad rails, covering weld and bolt attachment, tracking tolerance, and section joining to ensure accurate fit and full structural service across the conveyor frame.

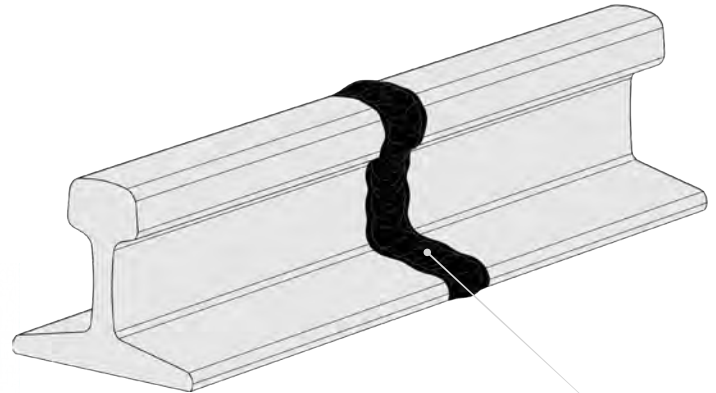
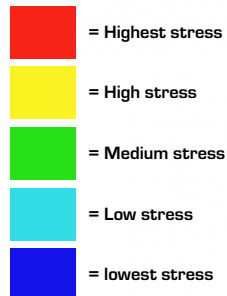
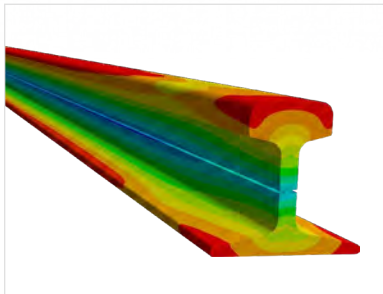
±1/16 Inch Alignment Tolerance:

Rails install parallel and level within a $\pm 1/16$ in tolerance to maintain roller chain tracking and prevent binding as the chain assembly moves across the conveyor.



ASCE Section Classification:

Rolled to the American Society of Civil Engineers 25 lb/yd standard, where section weight per yard correlates directly to load-bearing capacity and structural strength.

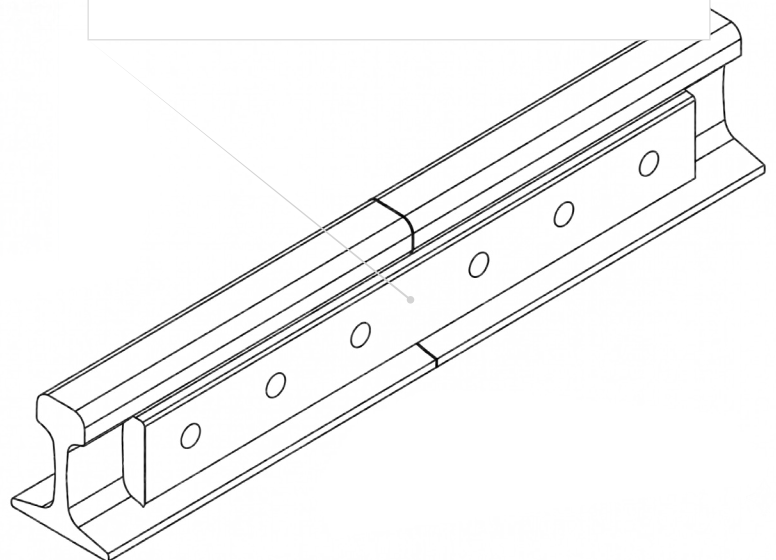


Welded Frame Mounting:

Rails mount by welding to the conveyor frame, producing joints that outlast Grade 8 nut and bolt assemblies under constant heavy loading.

Splice Bar and Butt Weld Joining

Sections join to common rail length using purpose made splice bars or butt welds, extending runs without interrupting the running surface.



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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