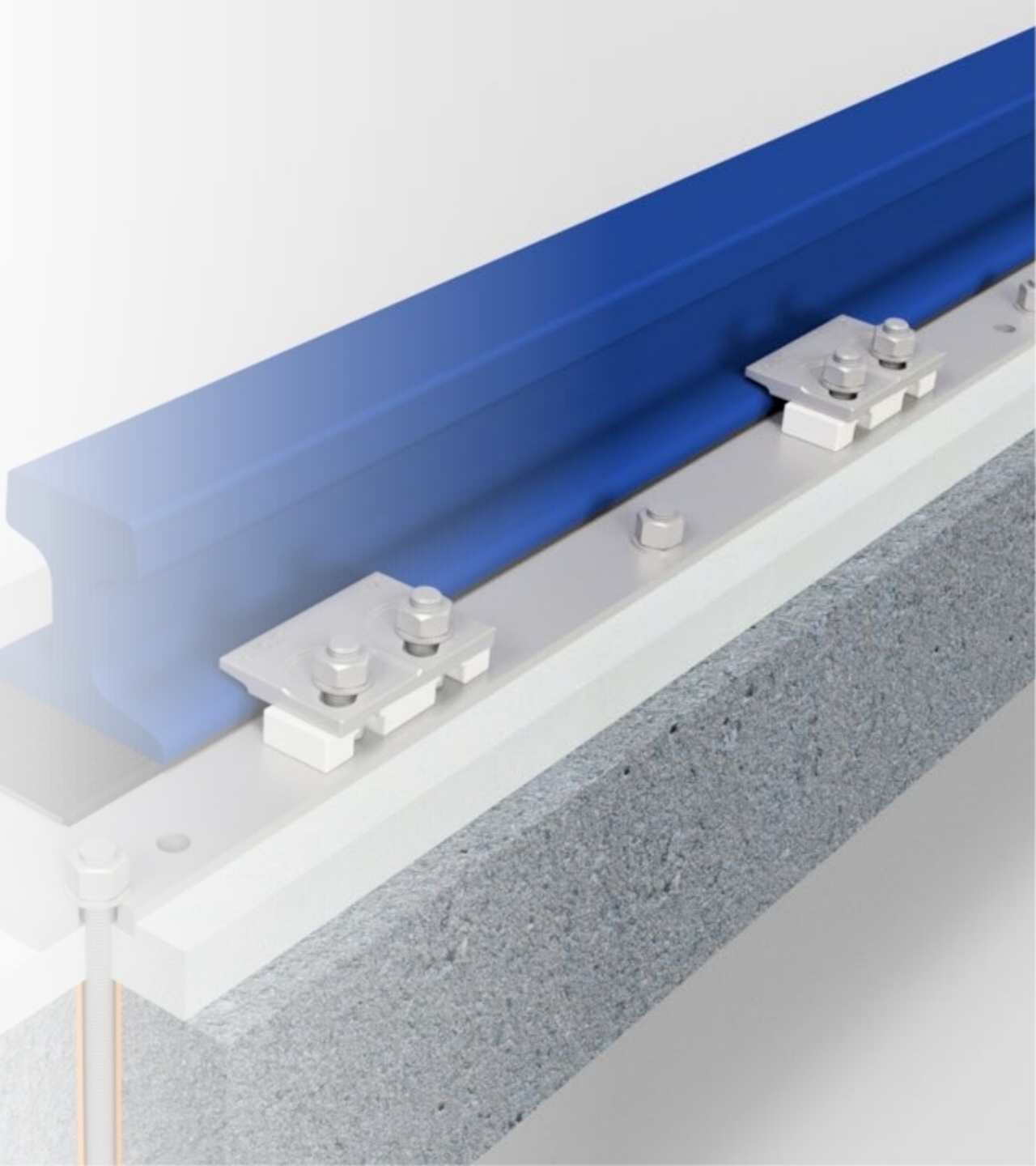
ATLANTIC TRACK
CRANE RAIL SOLUTIONS

Global Solutions | Local Support

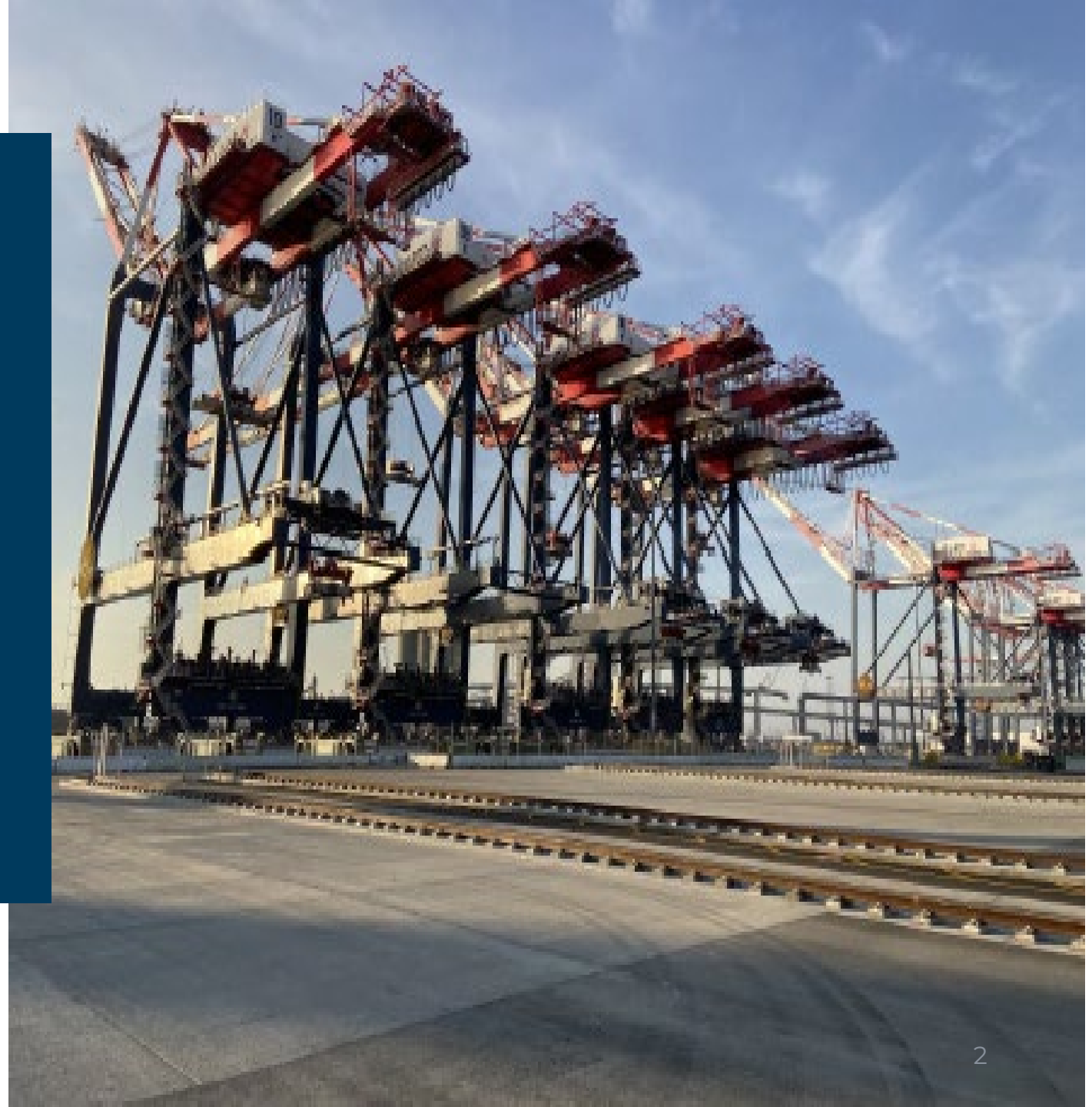
Terminal Technology & Trade Engagement 2026 – Colombo
10th Feb 2026



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

CONTENTS

- Introduction & Company Profile
- Our Approach – Crane Rail System Solutions
  - Review of System Components
    - Rail
    - Clips
    - Anchor Bolts & Support Plates
    - Pad
    - Grout
- Installation Guidance and Support



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

INTRODUCTION – WHO WE ARE

Atlantic Track is the largest, most diversified source of high-quality and cost-effective crane rail systems.

We are committed to achieving the highest safety and sustainability standards in the industry. Our manufacturing facilities adhere to strict guidelines that reduce not only risk, but our carbon footprint as well.

Since 1964, we have been continuously investing in and expanding our equipment, manufacturing, and distribution capabilities. Our strategically located sales, manufacturing, and distribution facilities across the globe ensure prompt customer service. By expanding our global footprint, we can provide more efficient and cost-saving direct delivery. .

We assist design consultants to design a proper Crane Rail System.

We Manufacture and Supply complete Crane Rail System Components.

We provide installation support on all projects and depending on project location.

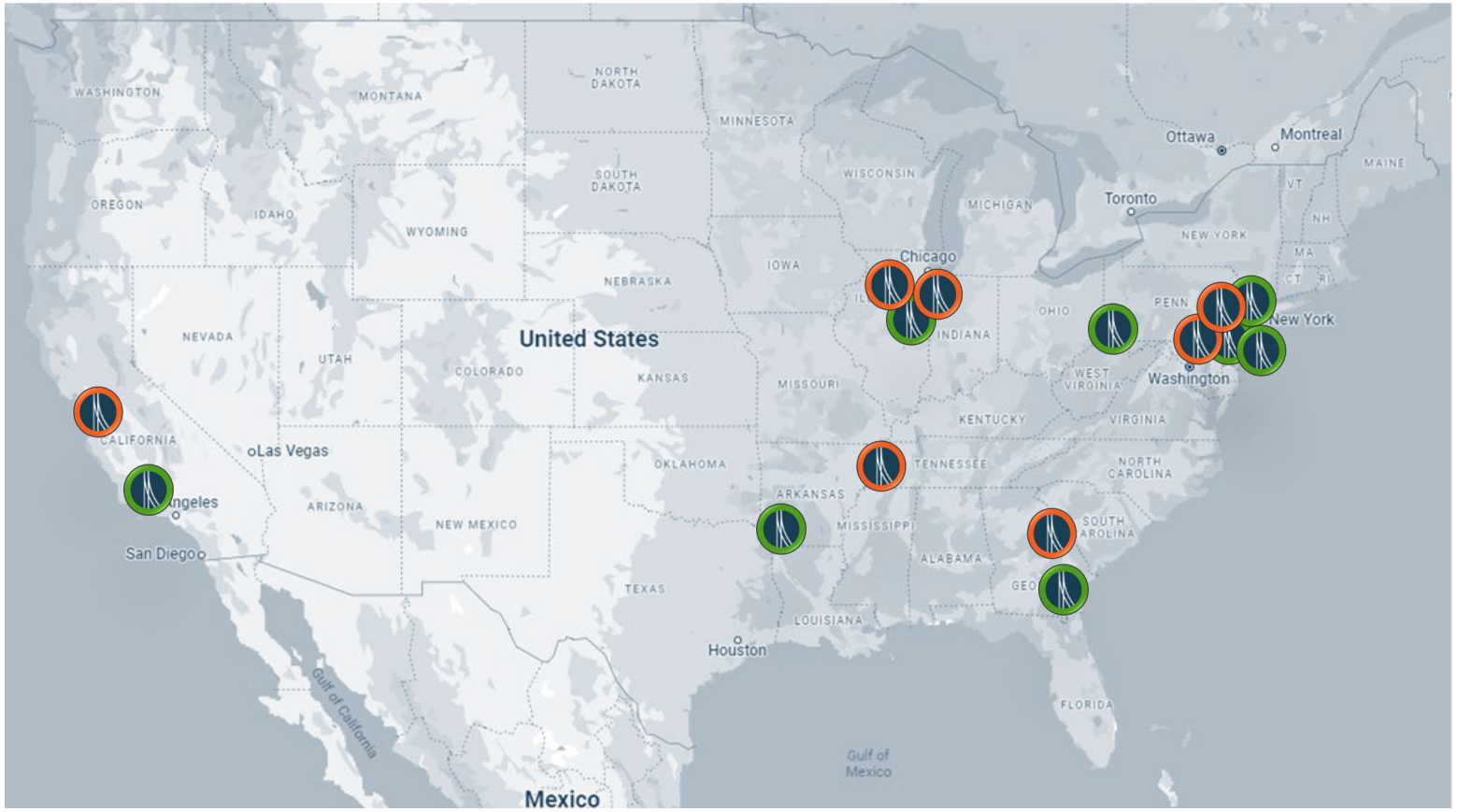
ATLANTIC TRACK FOOTPRINT - USA

Fabrication and Storage Facilities

- St. Clair PA
- Steelton, PA
- Clyo, GA
- Memphis, TN
- Chicago Heights, IL
- Richmond, IL
- Santa Fe Springs, CA

Sales Offices

- Bloomfield, NJ
- Leesport, PA (CRD International)
- St. Clair, PA
- Pittsburgh, PA
- Buford, GA
- Wheaton, IL
- Antioch, CA
- Texarkana, TX



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

ATLANTIC TRACK FOOTPRINT - INTERNATIONAL

Fabrication & Storage Facilities

- Elche (Alicante), Spain

Sales Offices

- Gloucester, UK
- Cairo, Egypt
- Navi Mumbai, India

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

ATLANTIC TRACK
Memphis, TN (USA)

- AAR M-1003 Certified
- Engineering/Design Center
- 15,000 Square Meters Fabrication Capabilities
- Manufacturing Capabilities:
  - Comp Rail Production
  - Robotic Welding Capabilities
  - Conley Bridge Joints
  - RR/CR Expansion Joints
  - RBM Frog Production (in-house EDH)
  - Henry-Line CNC Machine
  - Track Panels
  - Panelized Turnouts
  - Served by the Canadian National Railroad

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

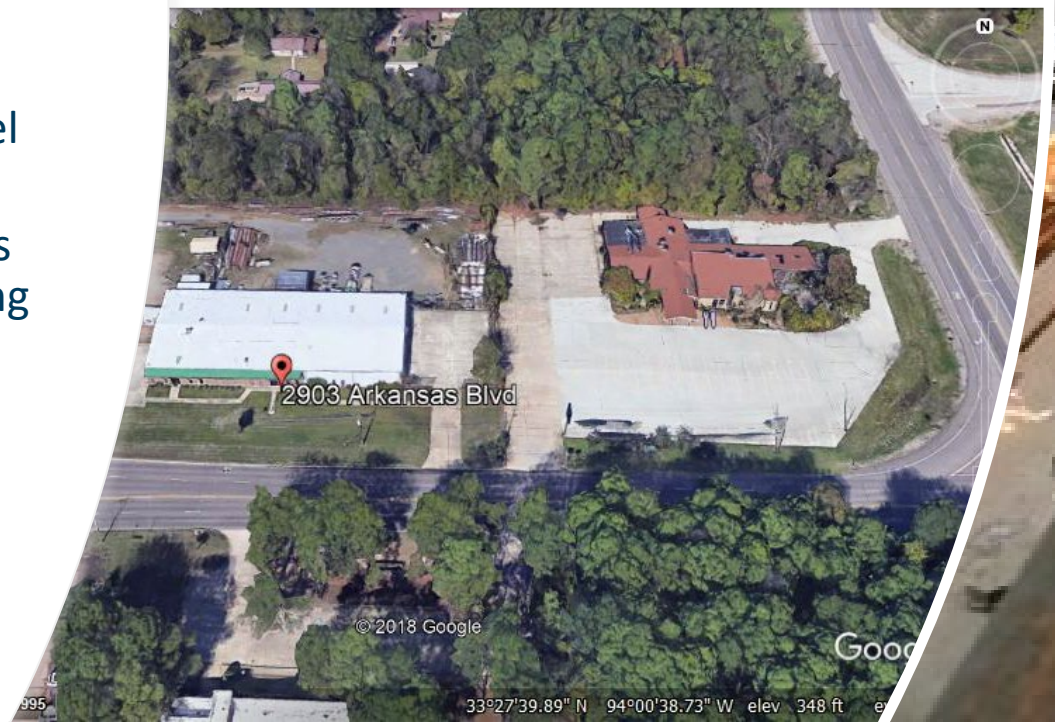
ATLANTIC TRACK Steelton, PA (USA)

- Inventory/Capabilities at this location:
  - Crane Rail and Accessories
  - ASCE Rails and Accessories
  - Clip and Pad Inventory
  - Clip Nose Bonding
  - Tie – Back Manufacturing
  - Transit Materials
  - Fabricating, Refurbishing and Precise Assembly - Trackwork Components
  - 25 Meter Lengths of Crane Rail Stored at this facility.

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

ATLANTIC TRACK RUNWAY SERVICES Texarkana, AR (USA)

- Only Turn-Key Crane Runway Installation Contactor in the USA.
  - Crane Runway System Installation and Rail Change Outs
  - Trolley Rail and Wheel Change Outs
  - Structural Corrections and Equipment Setting
  - Thermite and Flash Welding Services



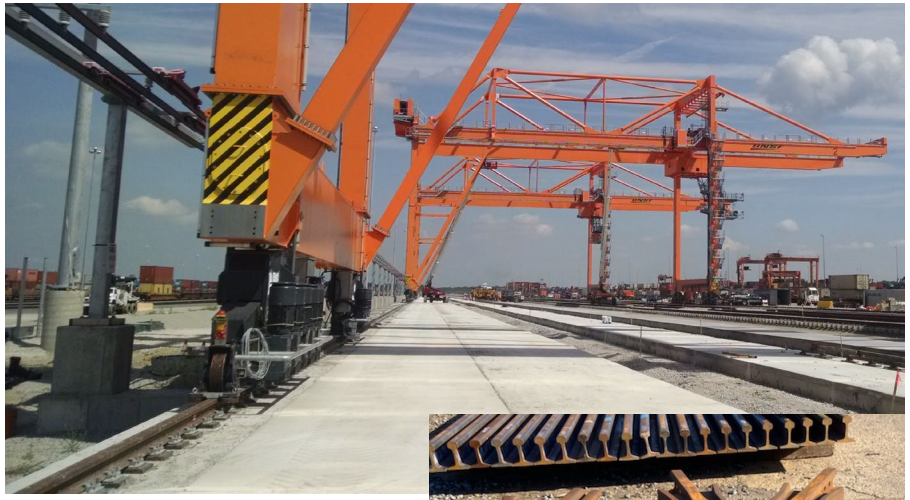
ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

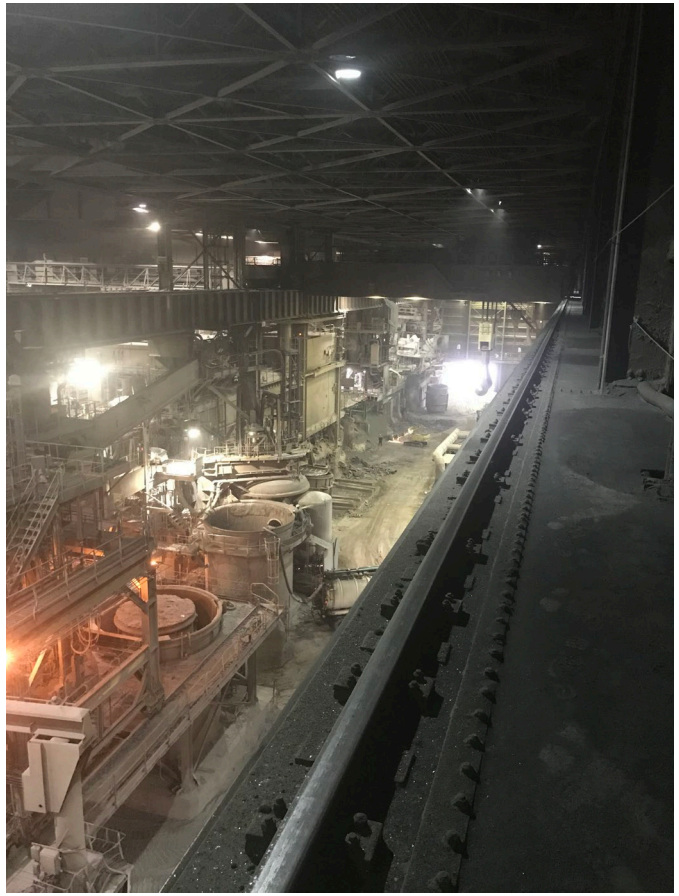
ATLANTIC TRACK – INTERNATIONAL Alicante, Spain

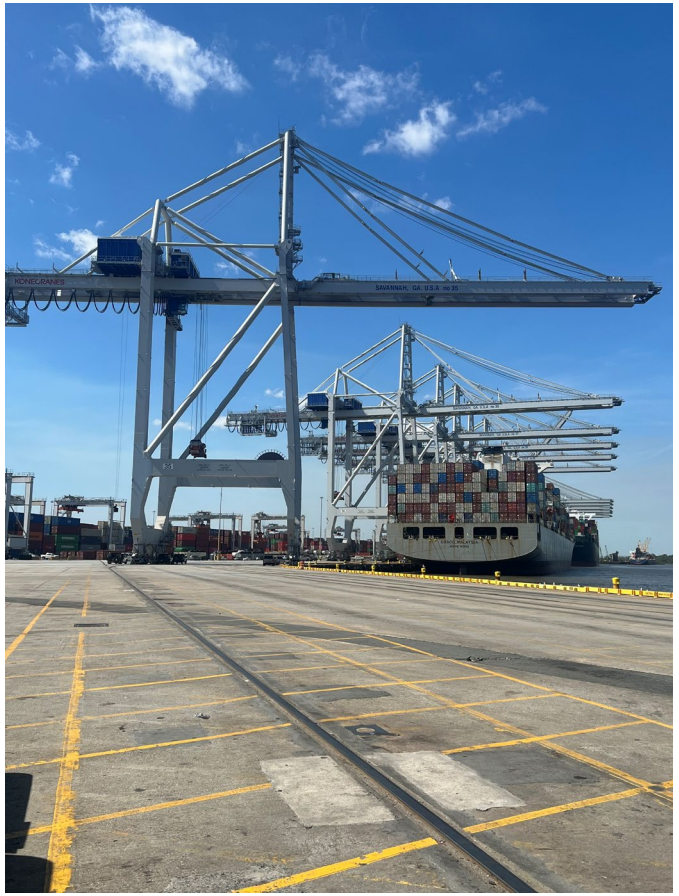
- Opened 2024!
- Stocking and Bonding European Produced Rail Clips

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

ATLANTIC TRACK CRANE RUNWAY DIVISION



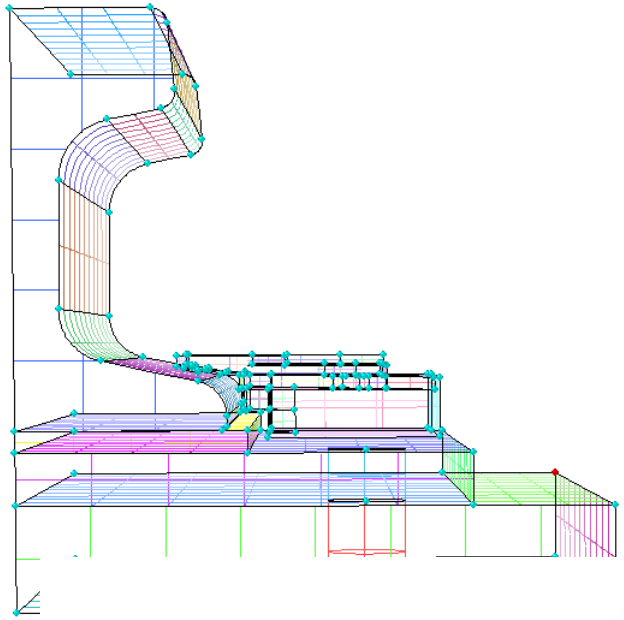


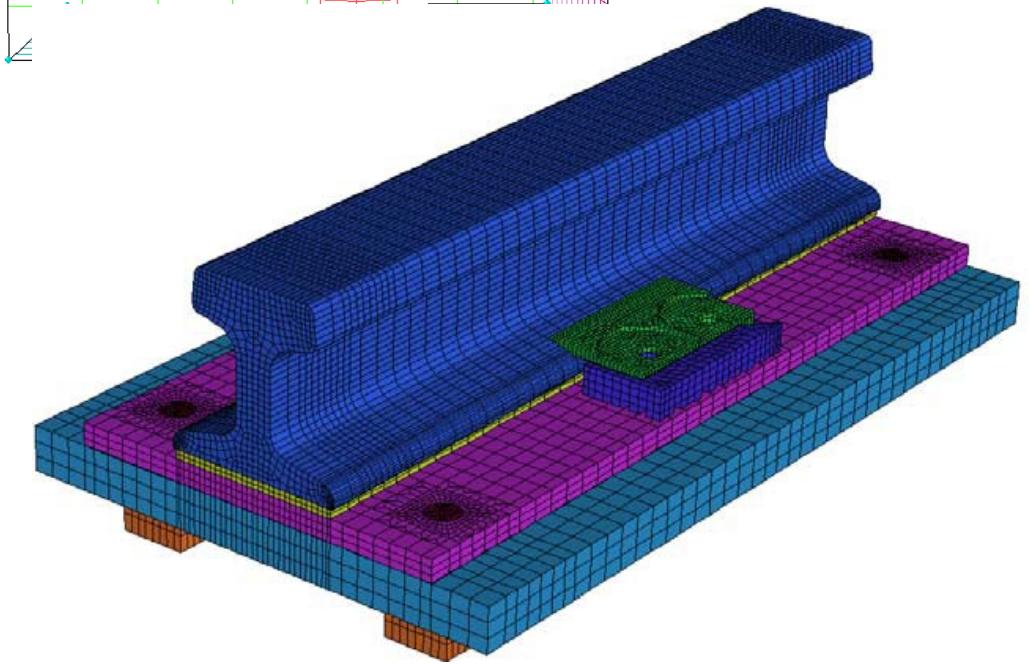


ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

OUR APPROACH

As Industry leaders in the Design, Manufacturing and Installation of Crane Rail Systems, we first need to understand our customers requirements and expectations.

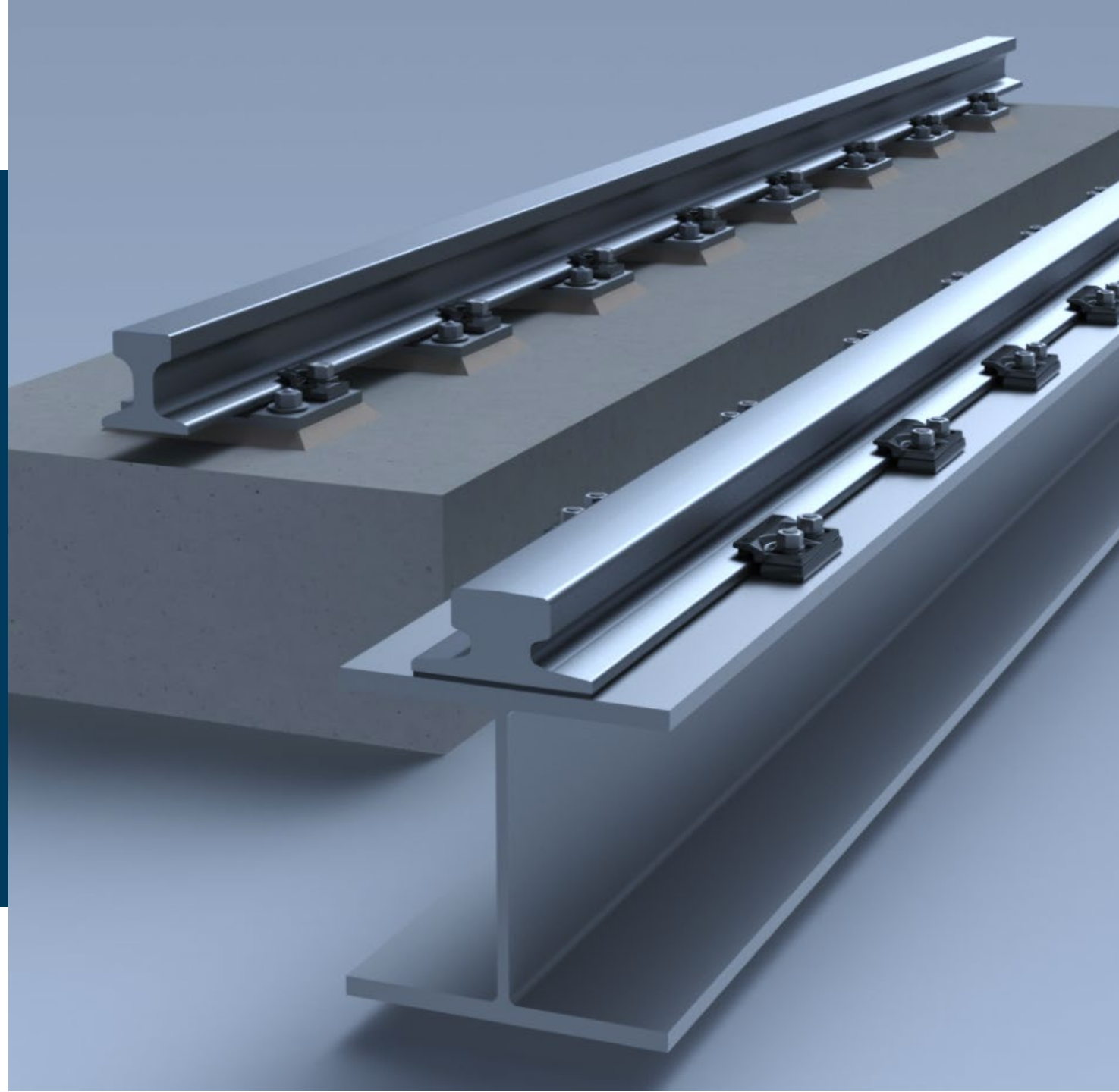




ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

CRANE RAIL SYSTEM COMPONENTS

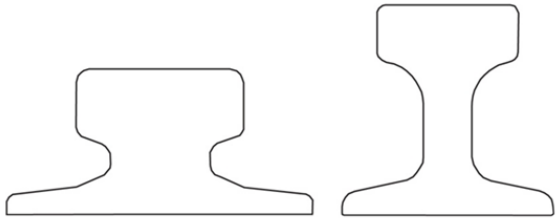
- Crane Rail
- Clips
- Rail Pad
- Support Plates
- Anchor Bolts
- Grout



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Crane Rail

Railway Rails

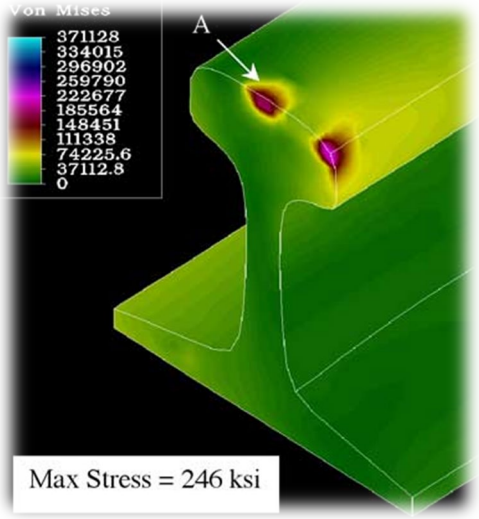


Crane Rails

- Traditional railway rail strength 690 n/mm²
- Crane rail strengths are produced in three grades 690n/mm², 880 n/mm² and 1100 n/mm² is also available – this being the hardest grade is more difficult to source, and it is not available for all rail types.
- Grade 880 has become standard for port applications
- Choosing the correct grade will extend the life of the rail system and help to avoid – down time.

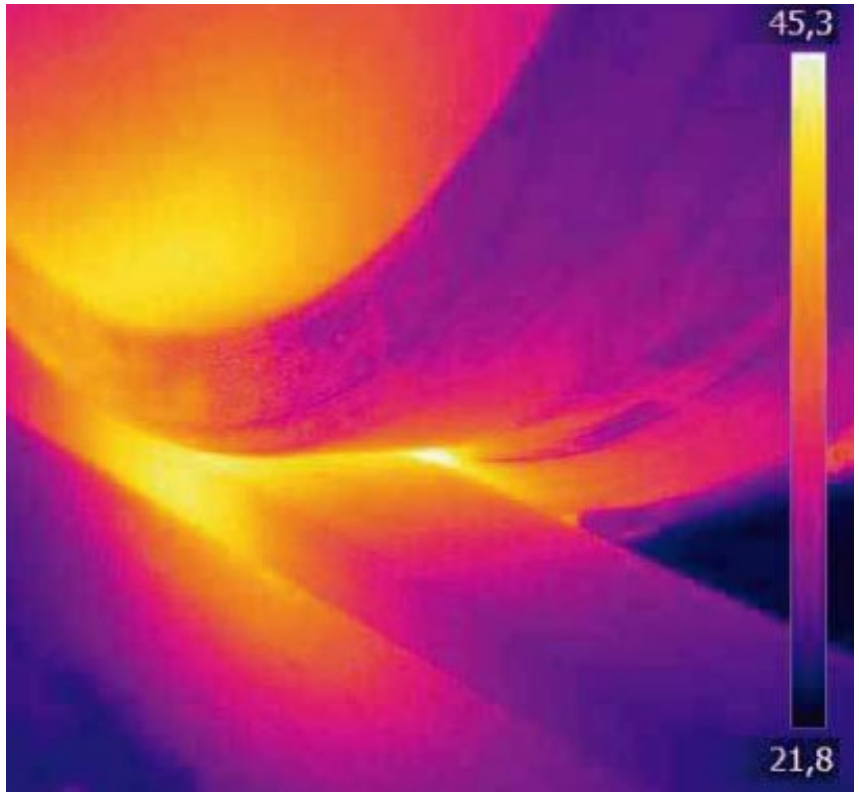
Crane Rail – Why Strength Matters?

- Why Constantly Pursue Harder and Mechanically Stronger Profiles?
  - Crane Capacity and Demand is increasing, resulting in Higher Wheel Loads.
  - These shear forces create “metal flow” or “false flange” conditions along the rail head.
  - These false flange conditions will eventually “spall” or break away from the profile.
  - Eventually, very hard wheels operating on a non-compatible rail section, will cause “extreme” plastic deformation of the profile to occur.



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

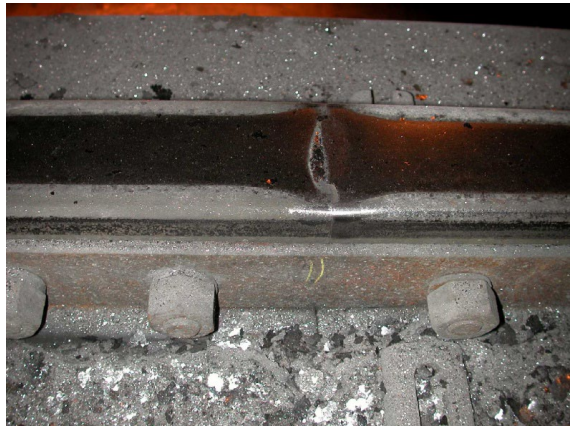
Crane Rail - UT Testing



- We use the most advance rail producing mill in the World which can Ultrasonic test **every single piece of rail**.
- Ultrasonic Testing (UT) can identify voids or manufacture defects within the rail profile.
- This not only prevent and reduces risk when the rail is in operation.
- With this addition we believe we can provide the best quality crane rails money can buy.

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

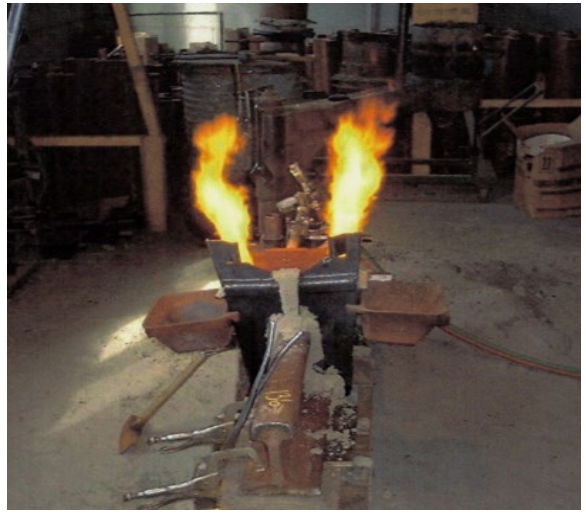
Typical Crane Rail Joining Methods



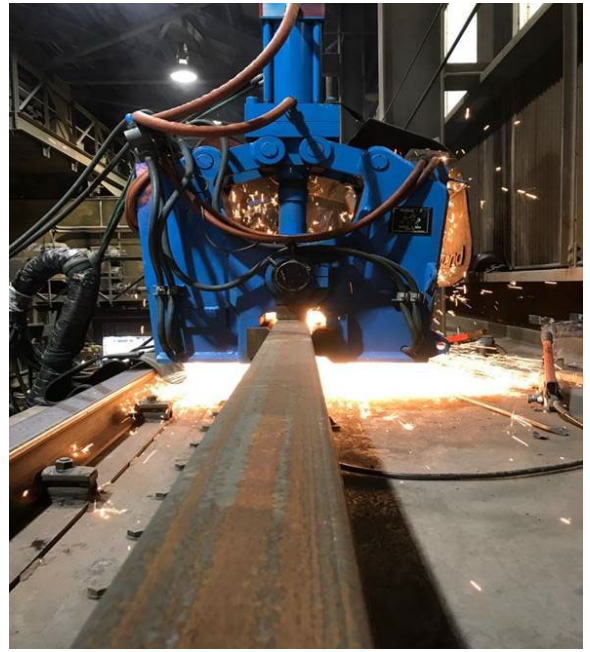
Mechanical Splice Bar

Electrode Arc Welding

(NOT RECOMMENDED)



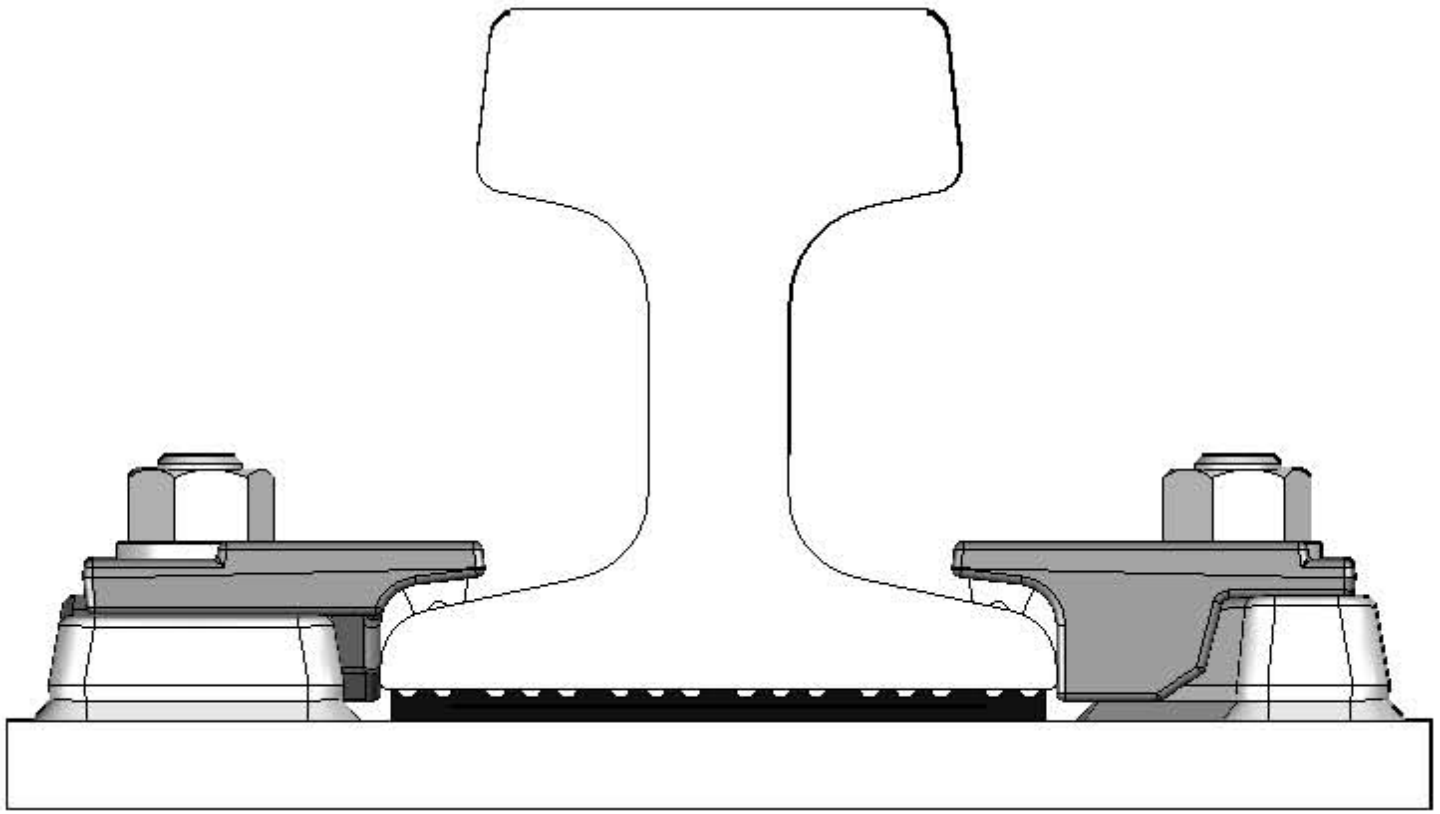
Thermite Welding



Flash but Welding

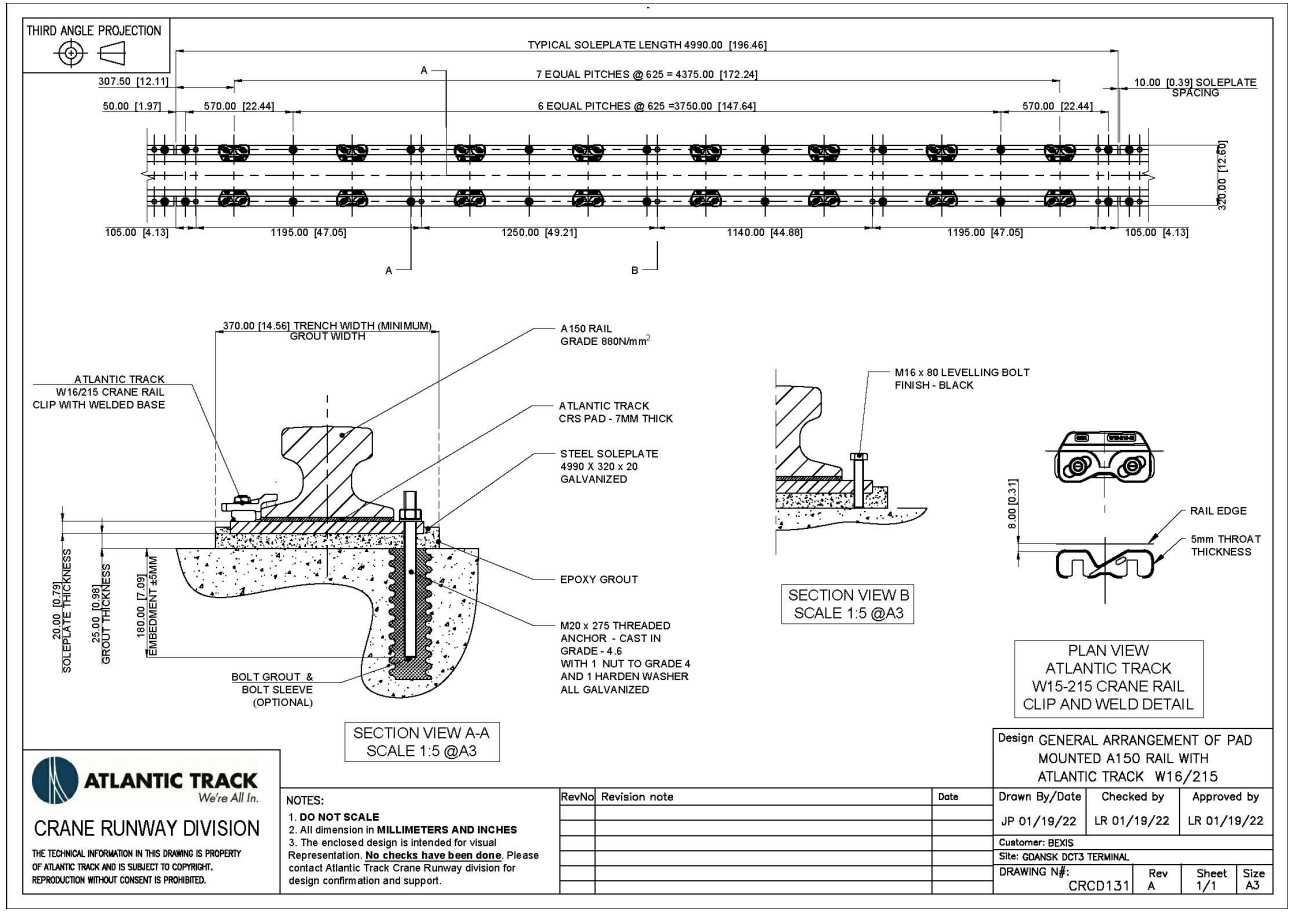
ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Crane Rail Clips & Pads The Soft Mount Rail System



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Crane Rail System Design



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Crane Rail System Calculation

Calculation Verifies:

- Rail Size & Grade
- Rail Clip Selection
- Support Plate and Anchor Bolt Selection
- Grout selection is adequate

ATLANTIC TRACK
We're All In.

Crane Runway Division
1001 James Dr., Suite B37
Leesport, PA 19533
www.atlantictrack.com

CALCULATION RESULTS
FOR CONTINUSLY SUPPORTED RAIL

CALCULATION No.:	ATC 112
CUSTOMER :	BEXIS
PROJECT:	DCT Gdansk Terminal 3

PERFORMED BY:
(Valid When Signed)
Luis R.
DATE: 01/20/22

Rail System Components	Result	Units	Code	Comment
Rail	A 150	-	S	
Proposed Pad	CRS	-	P	
Proposed Steel Soleplate Length	4990	mm	P	
Proposed Clip	W16/215	-	P	
Proposed Anchor Diameter	M20	mm	P	
Proposed Levelling System	M16	mm	P	
Proposed soleplate Grout Material	Epoxy	-	P	
Support Structure	Concrete	-	S	
Crane Wheel Diameter	nk	nk	A	
Rail System Loadings				
Crane Wheel Load Vertical	1471.5	kN	S	
Crane Wheel Load Lateral	123.0	kN	S	
Crane Wheel Load Along Rail	73.6	kN	A	
Number of Wheel Cycles	Nk	cycles	A	
Rail Confirmation				
Rail Stress due to Vertical Load	185.5	N/mm2	ATCR	
Rail Stress due to Transverse Load	57.9	N/mm2	ATCR	
Rail Stress due to along Rail Load	3.8	N/mm2	ATCR	
Maximum Rail Stress	247.2	N/mm2	ATCR	
Allowable Maximum Rail Stress	280.0	N/mm2	B	
Maximum vertical rail deflection	0.6	mm	ATCR	
Maximum horizontal rail deflection	0.1	mm	ATCR	
Rail Head Width	150.0	mm	S	
Min Head Width for Wheel Load	268.4	mm	ATCR	Acceptable Considering Grade 880N/mm2
Confirmation of Rail Head Width	SEE COMMENT	-	ATCR	Acceptable Considering Grade 880N/mm2
Critical Depth for Rail Web (mm)	71.8	mm	ATCR	
Web Thickness for Critical Depth (mm)	85.7	mm	ATCR	
Web Stress	119.6	N/mm2	ATCR	
Confirmation of Rail Web	OK	-	ATCR	
Confirmation of Rail Acceptability	SEE COMMENT	-	ATCR	Acceptable Considering Grade 880N/mm2
Pad Confirmation				
Pad Stress	11.0	N/mm2	ATCR	
Confirmation of Pad Acceptability	OK	-	ATCR	
Steel Soleplate Confirmation				
Steel Soleplate Thickness	20	mm	P	
Steel Soleplate Confirmation	OK	-	ATCR	
Grout Confirmation				
Grout Stress	18.9	N/mm2	ATCR	
Grout Confirmation	OK	-	ATCR	
Clip Spacing Confirmation				
Clip/Rail Lateral Rail Adjustment	15	mm	AT	
Clip fixing type	WELDED	-	AT	
Clip Bolt Grade	10.9	-	AT	
Allowable Transverse Load	170	kN	AT	
Estimated Clip Spacing	625	-	-	
Confirmation of Clip Capacity	OK	-	-	
Confirmation of Clip Spacing	OK	-	ATCR	
Minimum Girder/Sole Plate Width	350	mm	AT	

Key
A - Assumed
AT - Atlantic Track Internal Information
ATCR - Atlantic Track Crane Runway Calculated Figure
B - BS Standard
D - DIN standard
P- Proposed
S - Supplied information

Overall System Confirmation
PASS

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Crane Rail Clips - Welded

Welded clips are widely used in pretty much any application.

- The side load capacity varies from 125kN To 300kN.
- Adjustment vary from 8-20mm.
- They also vary from 1 – 2 bolt arrangements.
- Variation in height to fit pad mounted and hard mounted rails.

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

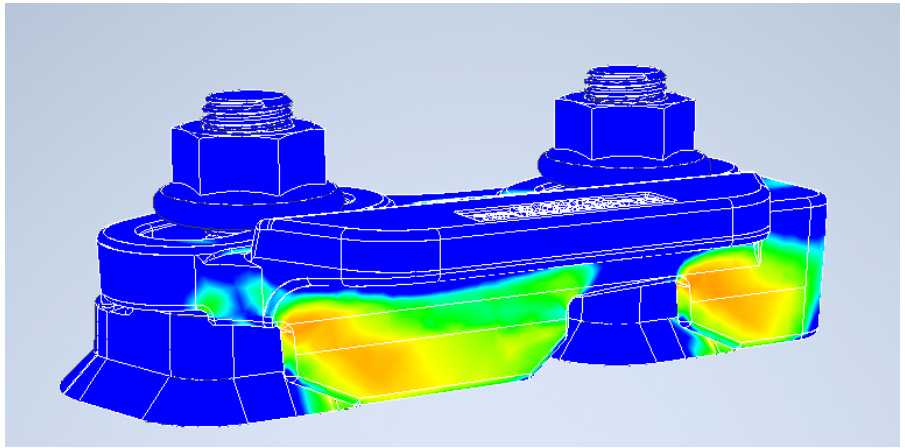
New Range of Clips – X Series (Welded Base)

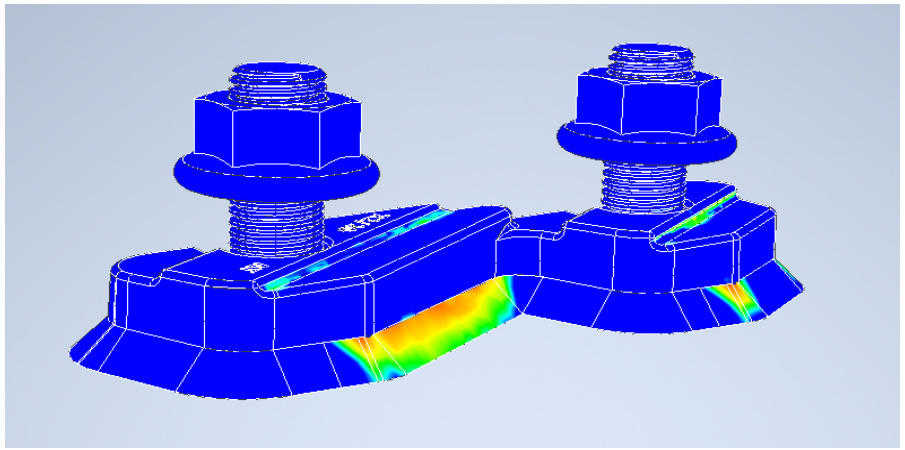
- Retrofit Feature
- Proprietary Parts

  British Patent application No. 2306136.9
- Enhanced Stress distribution
- Enhance Load distribution
- Standard Hex Bolt & Nut (No More Proprietary Fasteners)
- *Produced in Europe*

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

New Range of Clips – X Series (Welded Base)





ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Atlantic Track X2-16

	ATLANTIC TRACK X2-16	GANTRAIL 1216/15	GANTREX RAILOCK W20
SIDE LOAD	**165 kN**	165 kN	165 kN
MOUNTING WIDTH	**100 mm**	100 mm	100 mm
LATERAL ADJUSTMENT	**15 mm**	15 mm	15 mm

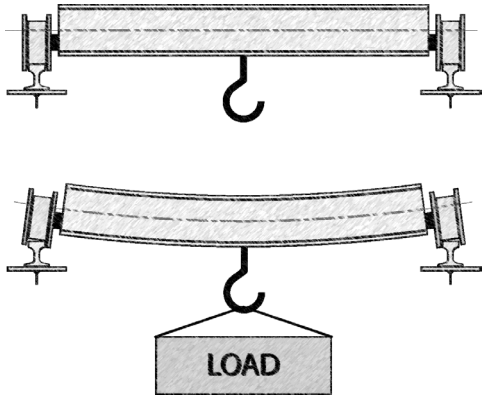
ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

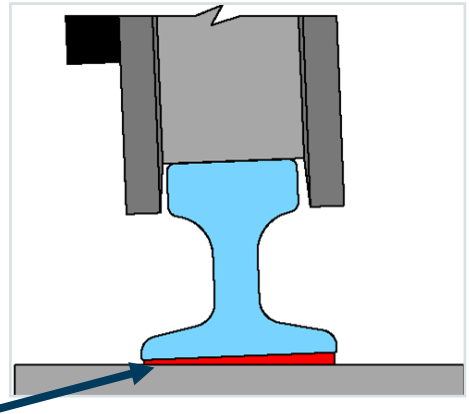
Atlantic Track X2-20

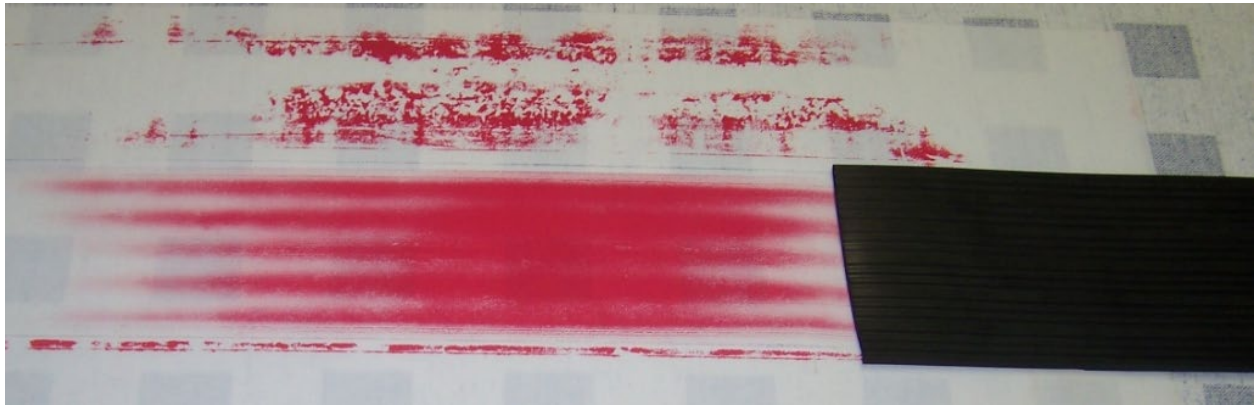
	ATLANTIC TRACK X2-20	GANTRAIL 1220/21	GANTREX RAILOCK W25
SIDE LOAD	**300 kN**	300 kN	300 kN
MOUNTING WIDTH	**130 mm**	130 mm	150 mm
LATERAL ADJUSTMENT	**21 mm**	21 mm	20 mm

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Soft Mount Rail System – Rail Pad



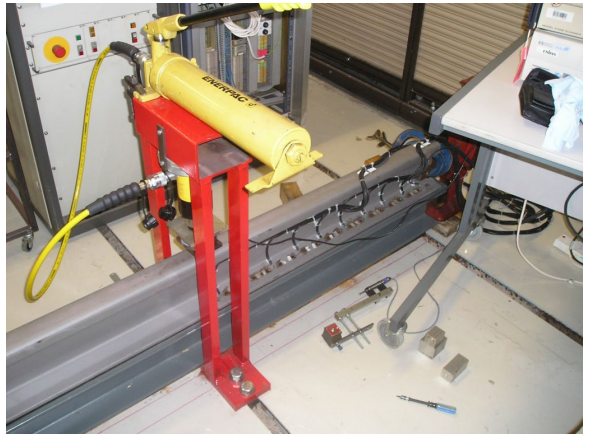




The Rail Pads allow the rail to rotate a small amount so the rail and crane wheel can interface smoothly.

This helps to evenly distribute the stress from the wheel load throughout the system and prevents stress concentration spots due to the uneven surfaces of the rail and steel structure.

The Rail Pads eliminate fretting corrosion between rail and steel support. Reduce Vibration and noise dramatically.

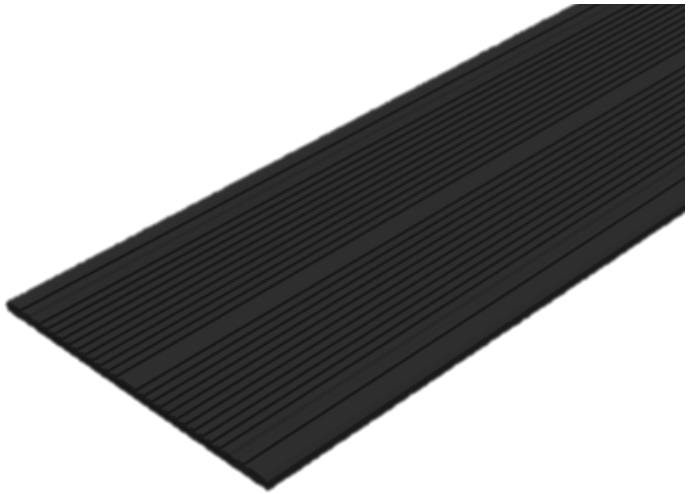


ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

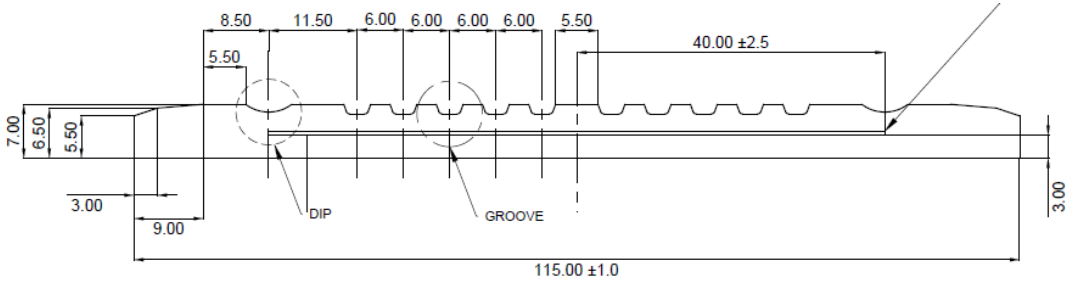
New Range of Pad – F Series

- Redesigned to provide the best rail support.

- Dip feature – reduce Stress area
- 2 Stage edge slope
- Enhanced Rubber comp.
- Enhance Load distribution



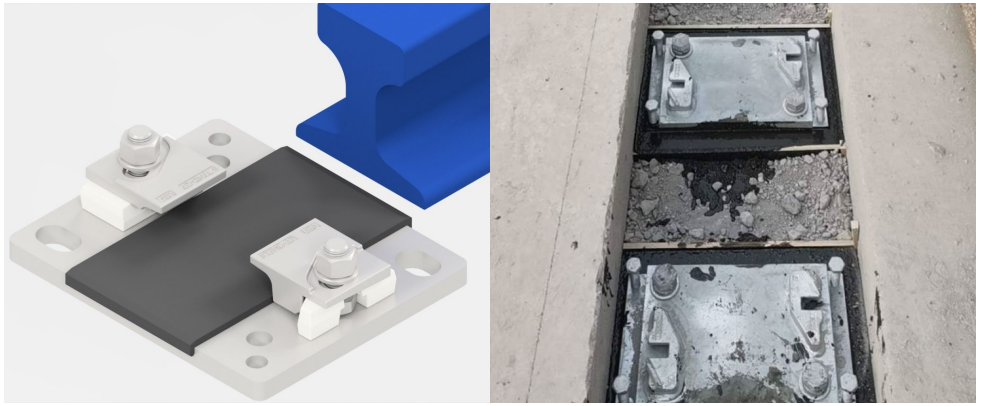
SECTION VIEW F7-115
SCALE 2:1 @A3



ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Crane Rail Pad

- The Continuous pad was designed with a fluted top surface which results in a two-stage stiffness characteristic.
- Stage 1 - On loading, the voids in the top allow the clips to pre-compress the pad a small amount.
- Stage 2 - On increasing the wheel loading, the voids are filled, and the pad becomes stiffer. This ensures that the rail is not over stressed.
- The pad is reinforced with a steel strip to ensure high lateral stiffness and prevent movement/snaking from under the rail.

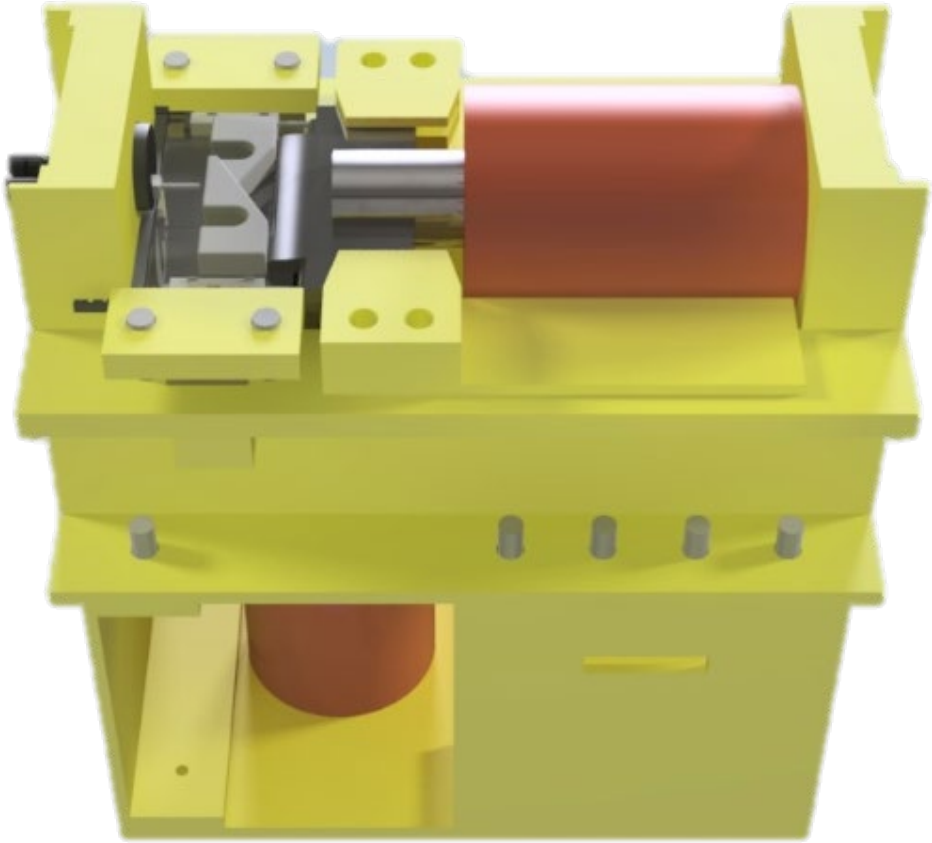


- The individual pad was designed in order to provide a soft mounting system for individual rail systems.
- The individual pad hugs the plate with the tabs at either end in order to prevent pad displacement.
- The addition of individual pad to the individual system provides all the benefits from the soft mounting system discuss in previous slides.

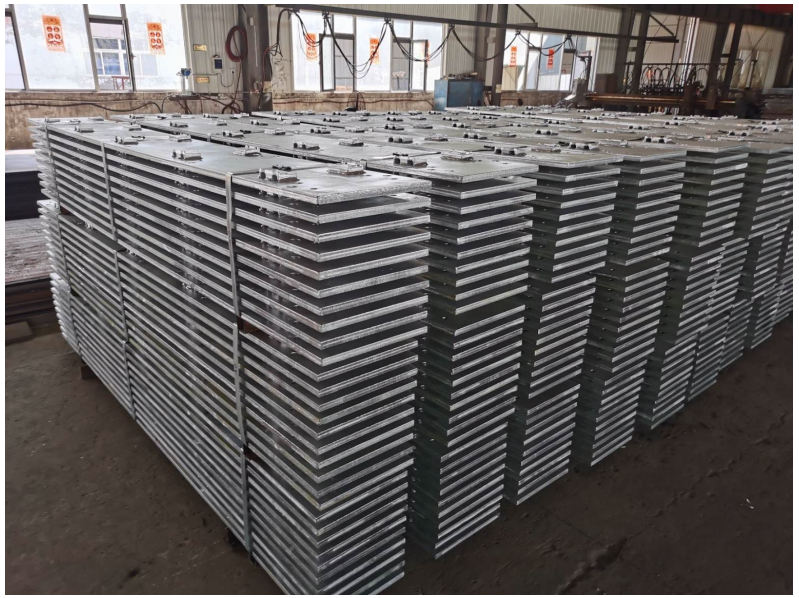
ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Quality and Testing

Partners all ISO Certified
In-House and External Testing



Crane Rail Support Plates (Continuous)

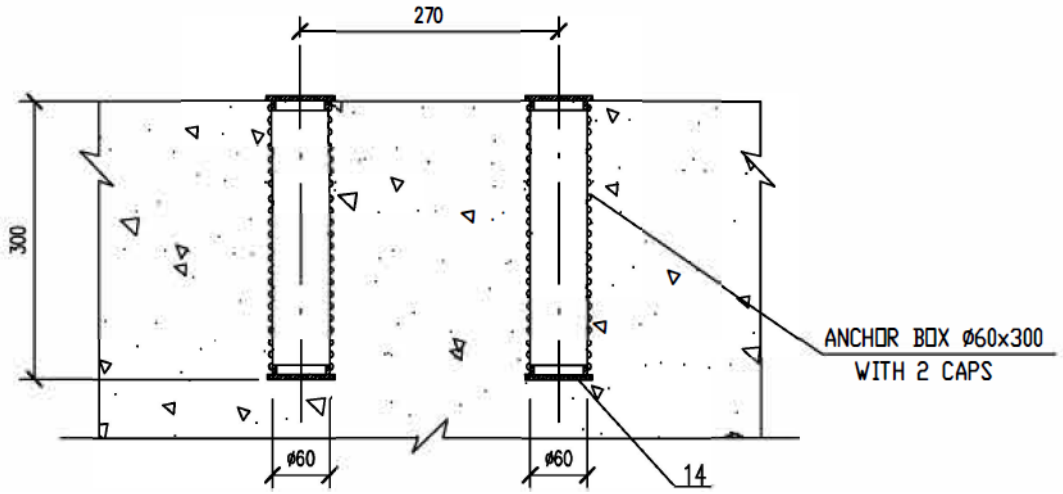


- For port applications soleplates are usually galvanized.
- They vary in thicknesses from 15-25mm.
- They vary in grades depending on the region.
- They are usually supplied with the welded bases and tapped holes – ready to be installed or used as templates to drill the holes for the anchor bolts.

- We have various facilities around the globe where we can produce soleplates in various steel grades to comply with any specification.

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Anchor Bolts – Using Bolt Pockets or Cast-In-Situ

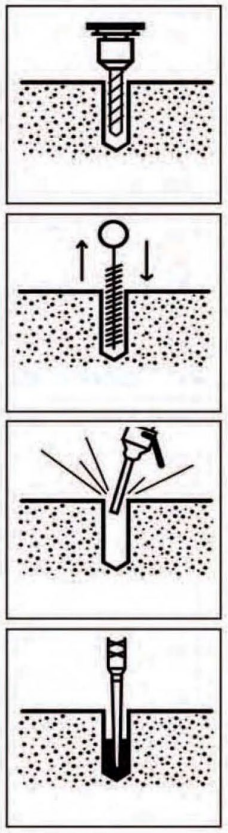


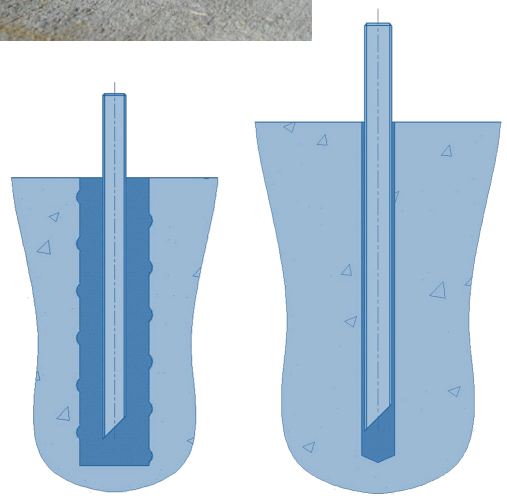
There are various anchor options to match specific requirements.

- Anchors can also be cast in situ OR bolt sleeves can be installed before concrete is poured.
- Reduces rail system installation time
- More forgiving/adjustable
- Has to be planned/sourced in advance

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Anchor Bolts – Post Installation





There are various anchor options to match specific requirements.

- Anchors can be post install – drilled or cored drilled.
- Anchor fixing can be done with epoxy or cementitious grout.
- More flexibility for post installation
- Can be time consuming and costly
- Might have an impact on the rebar is diamond core drilling has to be performed.

Grout

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Grout – Cementitious

Positive

- Cheap
- Good flowability
- Good working time
- Easy to clean - only requires water

Negative

- Final properties heavily reliant on water quantity, mixing and placement
- Requires pre and post pouring soaking
- Limited to 25mm+ gaps
- Cannot be used when very cold

Use With Caution

Grout – Epoxy

Positive	Negative
➢ High strength ➢ Excellent long term performance. ➢ Difficult to mix incorrectly. ➢ No pre or post soaking required. ➢ Can be used in gaps below 25mm.	➢ Up to 6 times more expensive than cementitious grout. ➢ Working time can be short when hot. ➢ Difficult to work with when very cold.

Use Epoxy When In Budget

Thermite Welding

- The most widely used welding type for crane rails.
- It should always be performed by an experience and professional aluminothermic welder.
- The material is provide in kits – Each kit is one weld.
- Attention to detail is key in order to obtain good lasting weld.
- We have access to professionals who are able to do this welds and also supervise.
- Kits are provided in different steel grades to match rail grade.

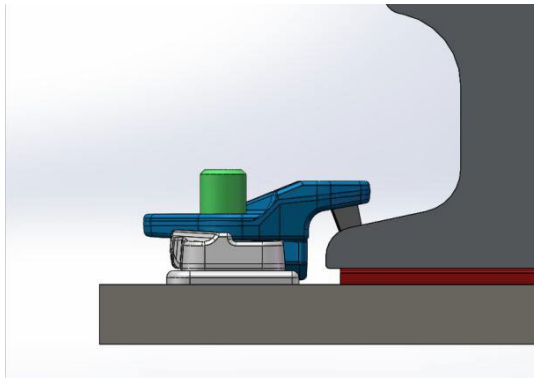
CRANE RAIL SYSTEM INSTALLATION

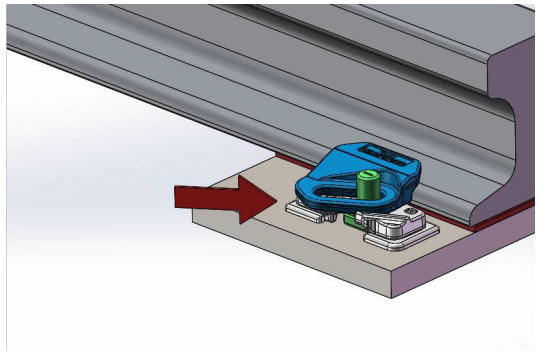
Best Practices and Considerations

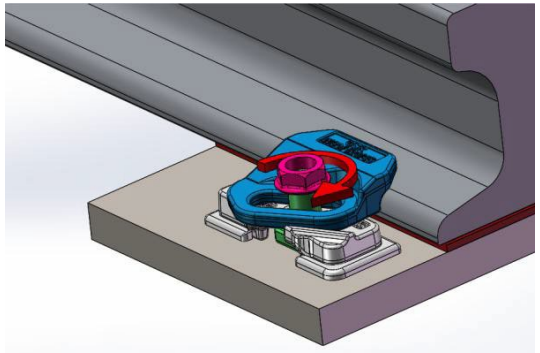
ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

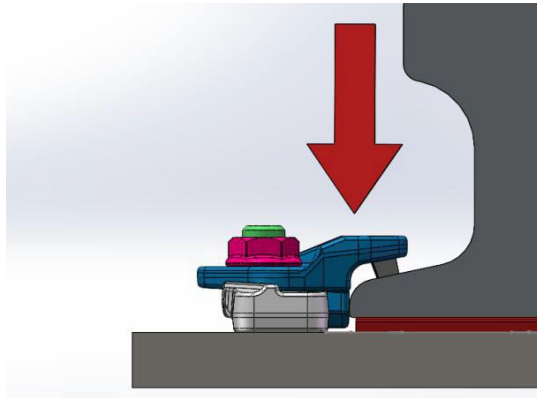
Setting the Base Plates

Proper Clip Installation









ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Proper Pad Installation

- All pad splices shall be placed to occur centered at a pair of crane rail clips or properly contained within a piece of square stock.
- Pad shall be placed directly underneath the rail.

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

Grouting the Base Plates

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

ATLANTIC TRACK PROJECT LOCATIONS

North America:

- All States
- Including Hawaii and Alaska

Canada

- Ontario
- Montreal
- Quebec

Europe:

- Norway
- Germany
- Spain
- Kazakhstan
- Turkey
- Italy

Oceania

- Australia
- Marshall Islands (US Government)

Caribbean Basin:

- Bahamas
- Jamaica
- Dominican Republic

Asia Pacific

- India
- Philippines
- South Korea

Middle East

- Saudi Arabia
- Bahrain

Latin America:

- Mexico
- Panama
- Costa Rica
- Nicaragua
- Honduras
- Colombia
- Ecuador
- Peru
- Brazil
- Chile
- Argentina

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL

THANK YOU

Devendra Deshmukh

Managing Director

Crane Audit

deven@craneaduit.com

Mobile: +91 98204 09886

ATLANTIC TRACK®
CRANE RUNWAY DIVISION
INTERNATIONAL