



Avadh Rail Infra Ltd.

Nex-Gen Rail Solutions



Serving **Railways** Since 1975



Group Of Companies



Avadh Technometals Pvt Ltd

Avadh Technometals Pvt Ltd has established itself as a pioneering force in advanced manufacturing, distinguished by its proficiency in leveraging both the green and no-bake sand processes. The company has an in-house pattern-making shop with experienced craftsmen and method engineers to produce 750 tonne per month and single piece castings up to 600 kgs in steel and SG Iron.

It is an approved Class A Foundry and leading manufacturer serving vital industries like Defense, Railway and Automobiles.



Atlantic Trade Engineers LLP

Atlantic Tradeengineers LLP specializes in conventional 25kV lines, including: Lightweight Section Insulators, Short Neutral Section Assemblies (PTFE Type), Precision Tensioning Devices, Advanced Modular Cantilever Systems, High-Performance Steady Arms. They are a premier manufacturer and supplier of GALLAND Brand Overhead Electrification (OHE) equipment.

They serve a diverse range of clients including Railways, Metro Systems, Dedicated Freight Corridor Corporation (DFCC), and various Engineering, Procurement and Construction (EPC) contractors. With a commitment to excel and innovate, Atlantic Tradeengineers LLP consistently delivers top-tier electrification solutions that meet the rigorous demands of modern railway infrastructure.



Vans Electro Engineerings Ltd.

VANS Electroengineerings is a pioneer in manufacturing of one-of-a-kind RDSO-approved 2x25 KV Switchgear and leading manufacturer of Double Pole 2x25 KV Vacuum Circuit Breakers (VCBs) and Vacuum Interrupters (VIs) in India.

Backed by 30+years of R&D and production expertise, CPRI & KERI certified products with in-house testing capabilities, customized switchgear design and manufacturing, full compliance with IS/IEC/TEEE/ANSI; it is committed to superior national and international quality regulation and standards.



Pullman Engineering Co. Pvt. Ltd.

Established in 1965 in Kolkata, Pullman Engineering Co. Pvt. Ltd., is a leading manufacturer of material handling equipment. Its product portfolio includes winches, dredgers, gear boxes, cranes, hoists, platform trucks and serving steel plants, thermal plants, ports, and Railway and Defense workshops across India. With two modern facilities in Kolkata and Baltikuri spanning 100,000 sq. ft. and equipped with advanced EOT cranes, Pullman has also diversified post 2020, partnering with IIT, Kanpur to develop oxygen generation plants and floating CNG barge stations.



Primax Industry Pvt. Ltd.

Primax Industry Pvt. Ltd., the latest addition to the Avadh Group, has been established to strengthen the Group's capabilities in railway track fastening systems. The company specializes in the manufacturing of Elastic Rail Clips (ERC Mk-V) and is equipped to produce a wide range of rail clip variants, including E-Type Clips, SKL Clips and other fastening solutions for railway and metro infrastructure.

Their state-of-the-art manufacturing facility is equipped with advanced CNC-based production lines, automated heat treatment, quality control systems, and comprehensive testing facilities. With a strong emphasis on engineering excellence, quality, and innovation, Primax is well positioned to cater to the growing requirements of Indian Railways, Metro Rail projects, High-Speed Rail, and international railway markets, while supporting Avadh Rail's vision of delivering world-class railway infrastructure solutions.



Novius Technologies India Pvt. Ltd.

Novius Technologies India Pvt. Ltd. has been a leading provider of condition monitoring, diagnostic monitoring and digital inspection systems for Indian Railways, Metro Rail and rail infrastructure operators, for more than 15 years now. They help railways, metros, OEMs, and infrastructure organizations modernize rail operations through advanced monitoring systems, AI-enabled analytics, machine vision, IoT sensing, and digital transformation solutions.

Committed to world-class quality, it is a trusted partner for smarter, future-ready mobility and industrial excellence

Avadh Rail Infra Ltd.

Avadh Rail Infra Limited (ARIL), established in 1975, is a trusted leader in engineering solutions for railways, metro systems, and defence sectors. With nearly five decades of proven expertise, Avadh is a preferred partner to Indian Railways, metro corporations, and global technology leaders.

The company’s portfolio spans overhead electrical equipment, rolling stock components, sub-assemblies, ballastless track systems, and fastening assemblies, supported by strong in-house capabilities in foundry, precision machining, polymer moulding, and rubber-to-metal bonding. Avadh also specializes in advanced testing of rails and welding joints using Phased Array Ultrasonic Testing (PAUT), ensuring uncompromising safety and quality.

Avadh undertakes EPC projects for the design, construction, and manufacturing of fastening systems for ballastless track, offering reliable and high-performance solutions for modern railway infrastructure. Through IoT and AI-enabled diagnostic systems, Avadh

drives smarter and safer railway operations. Its intelligent ecosystems of devices, networks, and sensors enable predictive maintenance and enhanced operational efficiency.

Beyond railways, Avadh contributes to national defence, manufacturing critical components for combat vehicles for the Ministry of Defence, engineered to strengthen mission readiness and operational reliability.

With six advanced manufacturing facilities, supported by in-house R&D and testing infrastructure, Avadh continues to drive innovation, sustainability, and excellence, shaping the future of mobility and national security.

Avadh Rail's Strength and Achievements

1000+ Workforce 	50+ Years of Serving 	6 Plants 	15+ Global Partners 
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OUR JOURNEY

1975

- Establishment of **Avadh Rail Infra Limited**

1977

- Developed India's First **Rubber Part Wagon Buffer Sprint.**

2005

- Collaborated with **TMT China** for **advanced suspension system**
- Merged **Madras Elastomers Limited** into **Avadh.**

2009

- Partnered with **Delkor Australia** for resilient bonded fastening systems in metro and mainline ballastless tracks.

2016

- Partnered with **ALSTOM IBRE France** for **Brake Discs** in LHB (FIAT) Bogies.



2018

- Signed "**India Production Base Agreement**" with **TMT**

2023

- Established **Avadh Technometals Ltd.** with **ALSTOM IBRE ToT**.
- Partnered with **WSTR** for **Gangway manufacturing**

2024

- Partnered with **Kraiburg PuraSys Germany** for **noise and vibration mitigation solutions** in IR and Metros.
- Introduced **Phased Array ultrasonic Testing (PAUT)** for welds and rails in IR.
- India's **1st BLT mainline project** with **IRCON BANIHAL-KHARI** section.

2025

- Partnered with **L&S Germany** for **advanced rail grinding solutions** in IR

2026

- Partnered with **Kumchun System Company Ltd., South Korea**, for **Specialized Rolling Stock Maintenance Machinery** for **High-Speed Rail Infrastructure**.



OUR VERTICALS

OHE

Rolling
Stock

Track &
Civil

Condition
Monitoring

OHE

Atlantic Tradeengineers LLP, a subsidiary of Avadh Rail Infra Ltd specializes in Overhead Catenary Systems (OCS), offering: Short Neutral Sections, Modular Cantilevers, 3-Pulley and 5-Pulley automatic Tensioning Devices and Lightweight Section Insulators for light, conventional, and high-speed train systems.



ROLLING STOCK

For over five decades, Avadh has been at the forefront of delivering high-quality, technologically advanced systems for modern rail vehicles. Our expertise spans a wide portfolio that includes air springs, brake discs, inter-car gangways, rubber and rubber-to-metal bonded anti-vibration mountings, bushings, precision-fabricated assemblies, and several other critical components.



TRACK & CIVIL

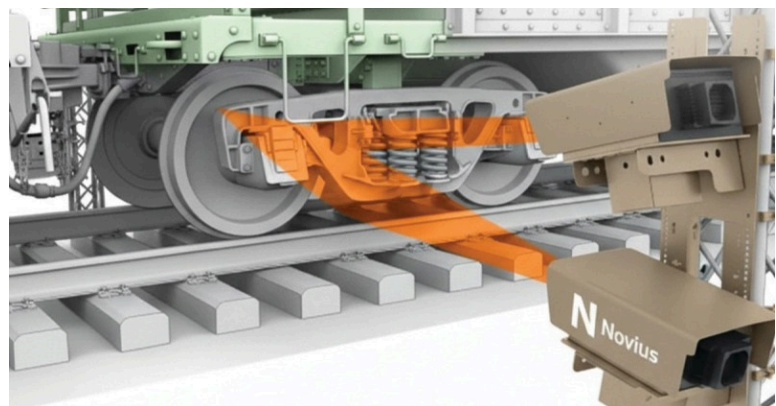
We deliver modern, low-maintenance ballastless track systems engineered for high-speed and heavy-axle operations. Our expertise spans tunnels, viaducts, depots, and washable aprons, ensuring durability and precision.

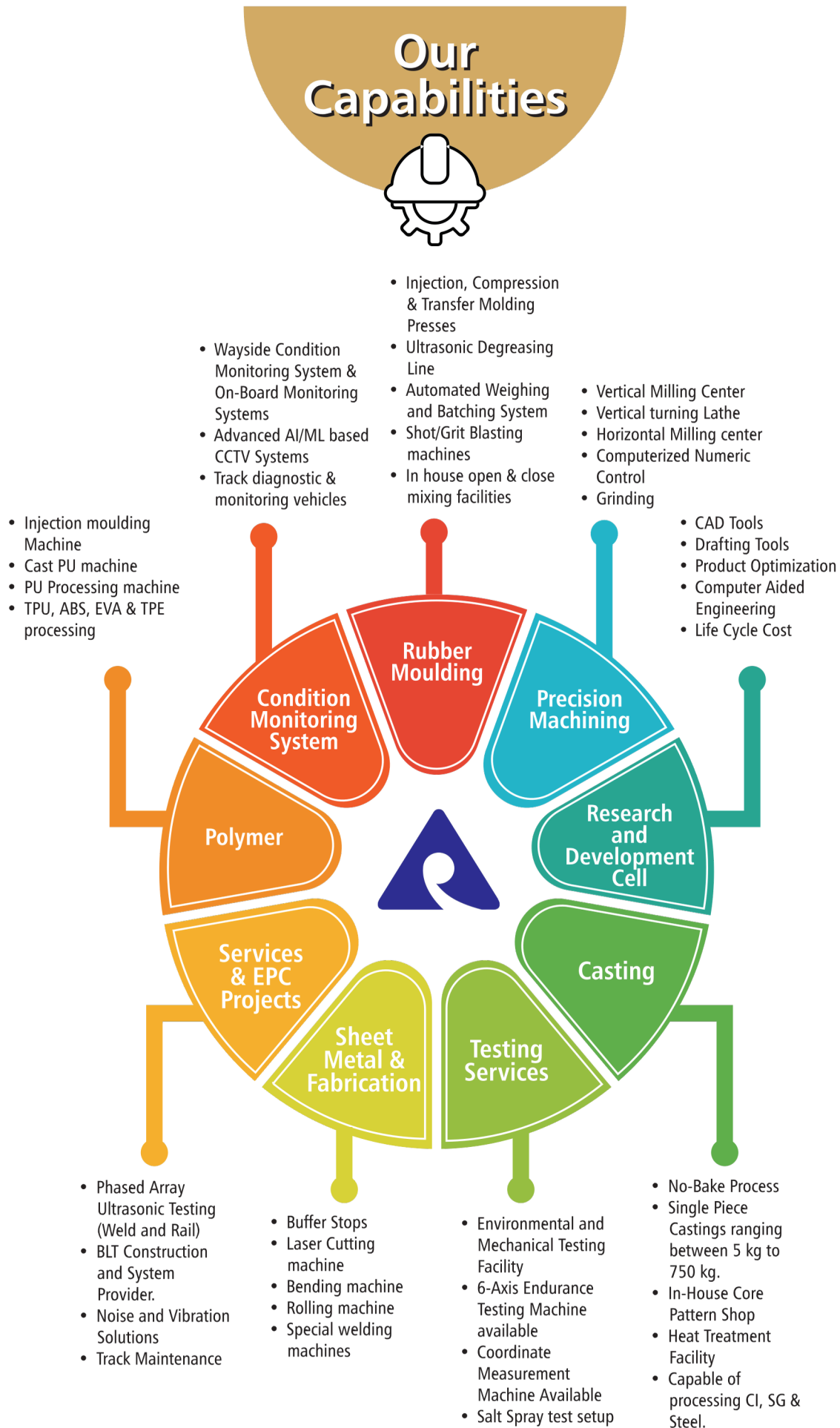
We also provide noise-vibration mitigation systems and Phased Array Ultrasonic Testing (PAUT) for enhanced rail and weld safety assurance.



CONDITION MONITORING

Condition Monitoring Systems: Advanced diagnostic technologies AT/ML & IoT enabled, predictive maintenance platforms, vibration and acoustic monitoring, and real-time data analytics to enhance asset reliability and operational efficiency.





Quality Certifications



Advanced Manufacturing & Precision Engineering

With state-of-the-art facilities in Lucknow, Chennai and Haridwar, Avadh delivers high-performance elastomeric, polymer, and precision-engineered components through world-class infrastructure and process automation.

Rubber Moulding & Processing

- 25+ Hydraulic Presses (Compression, Transfer & Injection) | 50T–1000T capacity
- Automated weighing, mixing facilities (Kneaders, Intermix, 2-Roll Mills, Calendars)
- Automated PU Dispensing machines
- Ultrasonic Degreasing & Surface Treatment Systems

Precision Machining

- CNC Turning Centers & Grinding Machines (micron-level accuracy)
- Vertical Turret Lathes (VTL) & Vertical Machining Centres (VMC)
- Wire Braiding & Hose Coupling Facilities





Testing Facilities

Complete Inhouse testing available including Material, Environmental and Product performance tests. Our Testing facilities range from Chemical, physical, Rheological, Environmental etc.

- Carl Zeiss CMM
- Ventilation Test Setup
- Computerized Tensile Testing machines
- Rheometers
- 3 & 6 Axis Endurance Testing machines
- Universal Testing Machines (Load Capacity – 100 Tons)
- Spectrometer
- Ozone & Conditioning Test Chambers
- Abrasion Testing Machine
- Thermogravimetric analyzers (TGA)

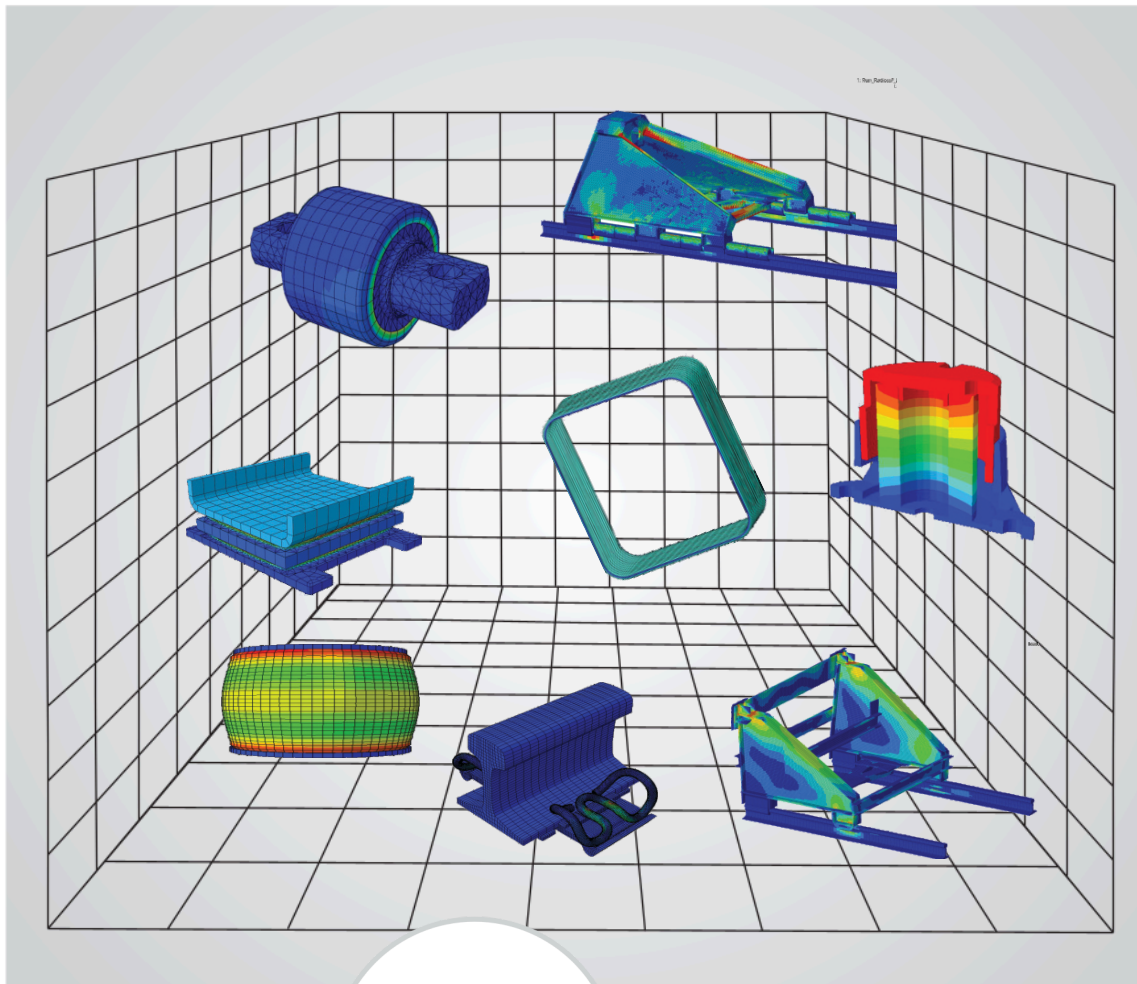




Research & Design (R&D)

Using premier linear and non-linear solver tools our designers and engineers conduct full 360-degree product characterization and product design optimization.

We use 4 modules of Licensed version Abaqus like FEA, Isight, Tosca & Fe-safe for simulating the service environment of products and characterize the performance and life of products



SIMULIA
ABAQUS

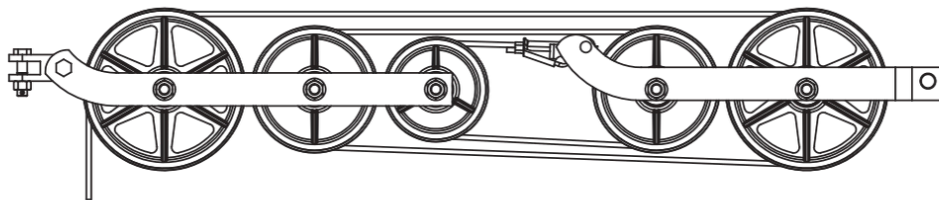
SOLIDWORKS

Our Products

Overhead Equipment (OHE)

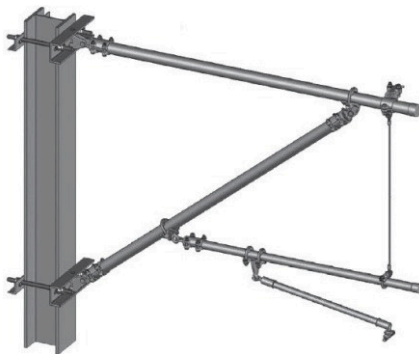
Atlantic Tradeengineers LLP, a group company of Avadh Rail Infra Ltd, is an Indian partner of **Galland SAS**, France for supplying Galland make OHE products to Indian Railways, Metros, Dedicated Freight Corridor Corporation (DFCC) and other private Railway companies.

Automatic Tensioning Device



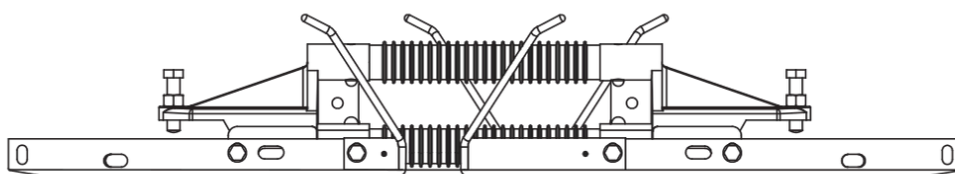
At Atlantic we have offer different types of ATD pulleys which are imported from GALLAND SAS, France which are with configuration of 4 pulley system, 3 pulley system and most commonly used in Indian railways i.e. 5 pulley ATD.

Modular Cantilever System



Cantilever Assemblies are used to hold the wires for the electrification of the line over track .Choosing the right cantilever is critical for the infrastructure life cycle under outdoor conditions i.e. humidity, pollution, temperature etc.

Light Weight Section Insulator



Galland offer a wide range of section insulators for the separation of two adjacent feeds which are developed at Galland's premises for the various suitability of Indian Railways and Metro projects.

Rolling Stocks

1. Rubber, Rubber to Metal and Plastic Components

Air Spring (Vande Bharat)

Air Spring EMU / DMU / Mainline / LHB Under technical collaboration with TMT, China.

Manufacturing under "Make In India" initiatives of Indian Government.

More than 70% localization has been achieved for Air Spring.



160kN for Train 18

Conical Rubber Spring : EMU's and Metro coaches



Rubber Metal Bonded Kit

Avadh Rail Infra specializes in manufacturing Rubber Metal Bonded Item (RMBI) Kits using advanced rubber-to-metal bonding.

These kits provide vibration control, shock absorption, and long-term durability, enhancing suspension performance and ride comfort in modern passenger coaches.

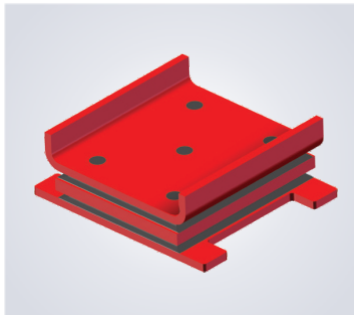
RMBI KIT for LHB and Vande Bharat Bogies



Freight Wagons



Modified Elastomeric Pad
Injection Moulded



Rubber Buffer Spring



Air Brake Hoses
(Complies with AAR Standards)



Locomotive

Side Bearer Pad



Sandwich Mounting



EMD Locomotive Side Bearer Pad



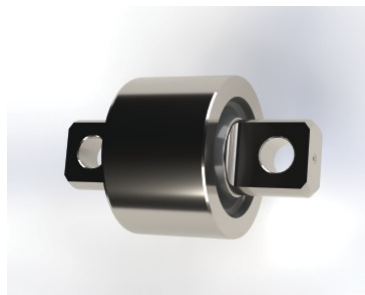
Spring (Happy) Pad



Gear Case Seal (Half wiper)



Spheribloc



2.Casting & Precision Machining:

Brake Discs



Axle mounted Brake Disc



Split type Brake Disc

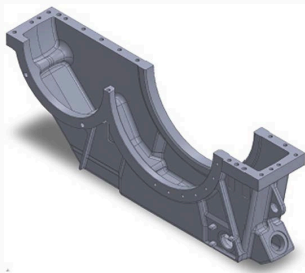


Wheel mounted Brake Disc

Control Arm Upper



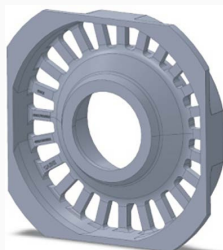
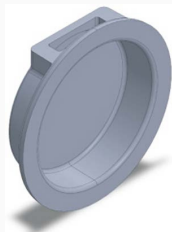
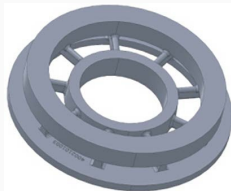
Gear Case



Wheel Set Guide

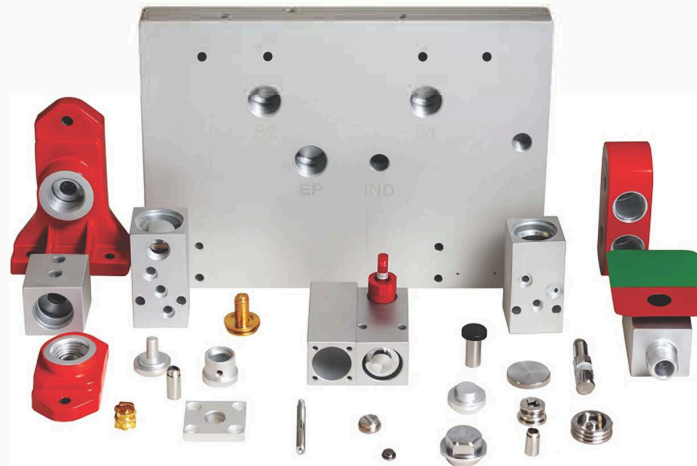


6 FRA Products



3. Pneumatic Systems

Failure Indication cum Braking Application (FIBA) system and Air Suspension Control Equipments (ASCE)



4. Sheet Metal

Our sheet metal division is equipped with state-of-the-art laser cutting, precision bending machines, and advanced plasma cutters. We manufacture a diverse range of high-quality sheet metal components that cater to the requirements of multiple industries.



5. Fabrication

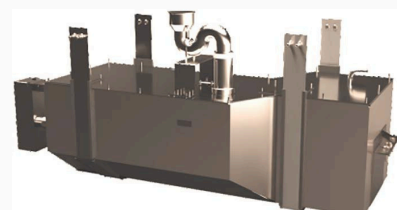
Air Reservoir



Battery Box



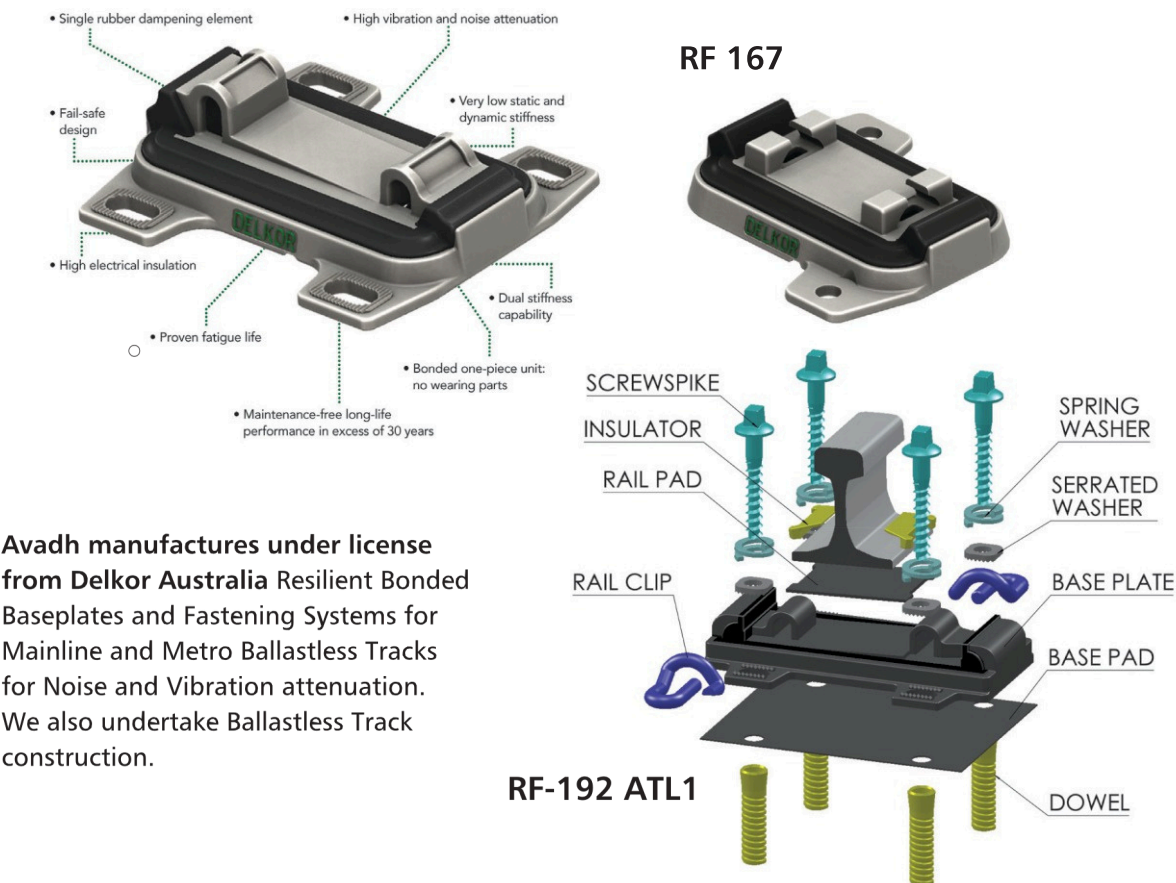
Retention tank



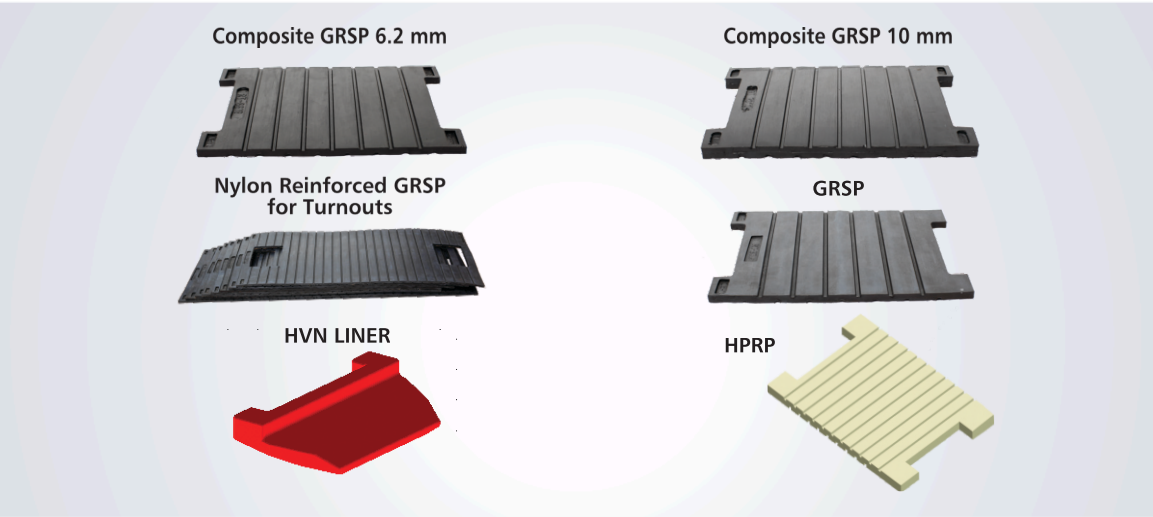
Track & Civil

1. Fastening

Resilient Bonded Baseplates and Fastening Systems



2. HPRP, GRSP & CGRSP and HVN Liners : For 60Kg & 52Kg Rail



3. BLT Projects

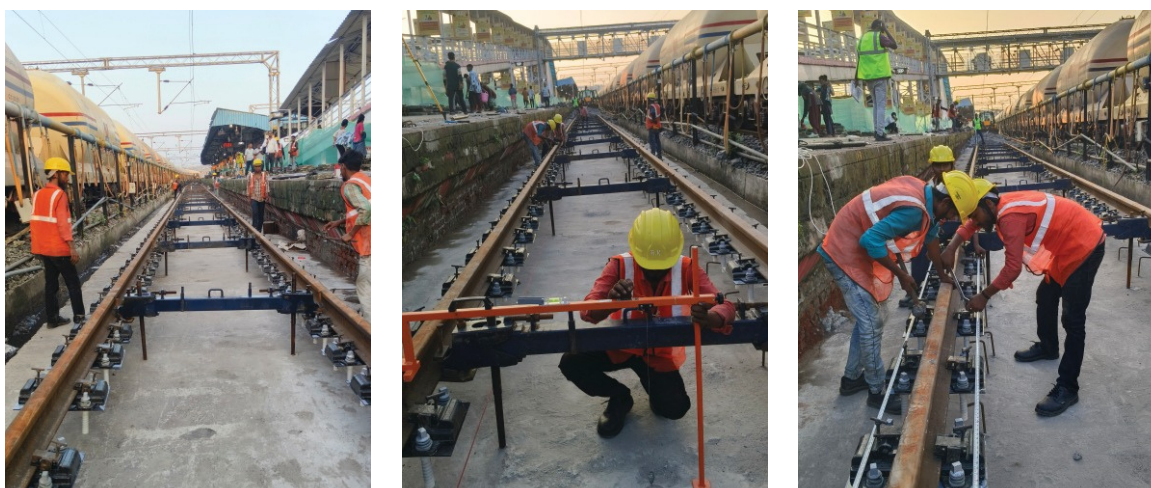
BLT Project: Ircon Project – Banihal – Khari: Commissioned on 06.01.2024



RVNL Bhopal Project – Barkhera-budni



- Execution of Ballastless Track (BLT) construction at East Cost Railway, Sambalpur, under the **Amrit Bharat Scheme**.
- Construction of new Broad Gauge (BG) line connectivity between Rewa–Siddhi–Singrauli in West Central Railway (WCR).



4. Phased Array Ultrasonic Testing (PAUT)

Weld Track Machine: Phased Array Ultrasonic Testing (PAUT) is an advanced NDT technique that ensures precise evaluation of weld integrity. Using multiple ultrasonic elements with electronically controlled beam steering, PAUT provides accurate, real-time imaging without probe movement.

Rail Track Machine: PAUT is an advanced NDT solution for ensuring rail safety and reliability. It delivers high-resolution imaging to detect cracks, inclusions, and hidden defects across the rail head, web, and foot. With faster inspection, digital data recording, and predictive maintenance integration, PAUT enhances safety and reduces downtime.



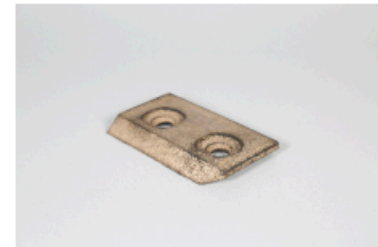
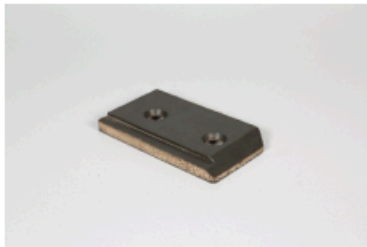
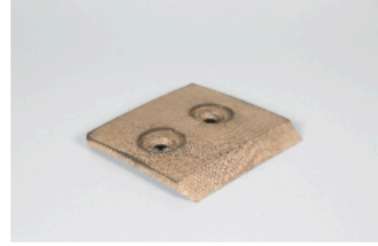
5. Rail Cum Road Inspection Vehicle (RCRIV)

The Rail Cum Road Inspection Vehicle (RCRIV) is an advanced version of the Railway Motor Trolley, designed for track inspections on broad gauge (1676mm). It enables safe travel on electrified and non-electrified sections, day or night. RCRIV operates at a maximum speed of 80 mph on roads and 60 mph on rails. It features fully air-conditioned seating for eight passengers (two in front, six in rear) and a mid-section storage area with a 500kg capacity, making it ideal for railway officials and maintenance staff carrying inspection equipment.



Defence

NBC Pads: Specialized Nuclear, Biological & Chemical shielding pads and sheets designed for combat vehicles, ensuring superior protection, enhanced survivability, and operational reliability for combat vehicles



Condition Monitoring System

Detecting Failures before they occur

Novius Railtech is a pioneering force in the railway technology industry, delivering cutting-edge solutions for railways worldwide. With a focus on enhancing safety, operational efficiency, and system reliability, our products span a range of advanced systems that monitor and improve rail operations.



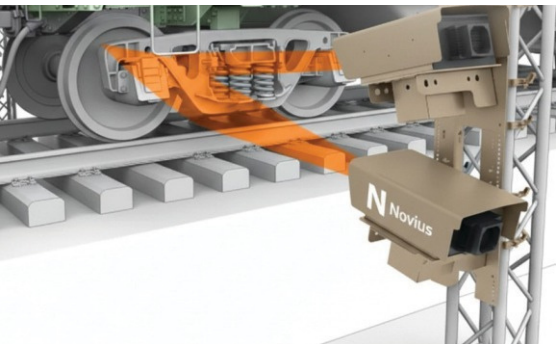
Hot Axle and Hot Wheel Detection Systems (HAHW)



Will Impact Load Detection Systems (WILD) / Flat Wheel Detection Systems



Wheel Profile Measurement System (WPMS)



Machine Vision Inspection System (MVIS)



Handheld Wheel Profile Measurement System (HWPMMS)



Onboard Condition Monitoring System (OCMS)

Our Customers



दिल्ली मेट्रो रेल कॉर्पोरेशन लिमिटेड
Delhi Metro Rail Corporation Limited



BANGALORE METRO
RAIL CORPORATION LIMITED



National High Speed Rail Corporation Ltd.

Banaras



Locomotive Work



रेल विकास निगम लिमिटेड
Rail Vikas Nigam Limited



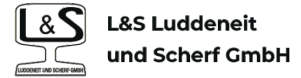


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GLOBAL PARTNERS



우성티알 (주)



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Sultanpur Road, Near Lulu Mall,
Sushant Golf City,
Lucknow - 226030 UP India
Website: www.avadhrail.com



Plant I
Lucknow

Plant II
Haridwar

Plant III
Chennai

Plant IV
Haridwar

Plant V
Haridwar

Plant VI
Haridwar

GROUP COMPANIES



Avadh Techno Metals Pvt. Ltd.



Atlantic Tradeengineers LLP.



VANS Electroengineerings Ltd.



Pullman Engineering Co. Pvt. Ltd.



Primax Industry Pvt. Ltd.



Novius Technologies India Pvt. Ltd.