





Corporate Office: 27 Shakespeare Sarani, 3rd Floor, Kolkata 700 017

Gurgaon Office: Corporatedge, Level 6, Wing B, Two Horizon center,

DLF 5, Sector 43, Golf Course road, Gurgaon 122 002, Haryana, India

HALDIA UNIT

Kashberia, Bardhanyaghata Debhog, Midnapore (E) Haldia - 721 657, W.B. India

ULUBERIA UNITVill-Polara, Mahisrekha

Uluberia Howrah - 711 303, W.B.

GHUSURI UNIT

40/107, Joy Bibi Road Ghusuri Howrah - 711 1077, W.B.

PUTTING THE NATION ON THE TRACK TO PROGRESS

Lalbaba

Engineering Limited

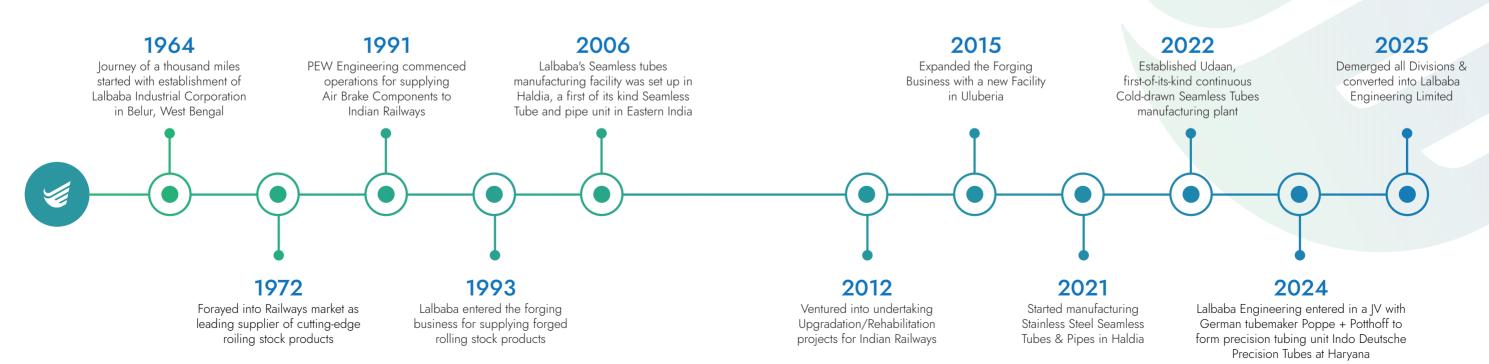
www.lalbabagroup.com

OUR LEGACY DEFINES US

Lalbaba Engineering Limited has business organised across three integrated verticals that together form the foundation of operations — tubular solutions, forging solutions and railway systems. Each vertical addresses distinct market needs, while also reinforcing the other through shared capacities, customer relationships, and a common focus on performance-critical engineering. We are among the few private engineering solutions players in India with an end-to-end offering spanning tube and forging manufacture, component assembly, systems integration, and on-site execution.



OUR JOURNEY



OUR VERTICALLY INTEGRATED BUSINESS SOLUTIONS:

TUBULAR SOLUTIONS

The tubular solutions vertical forms the technological core of our business. We design and manufacture cold-finished seamless tubes in carbon, alloy, and stainless-steel grades, catering to diverse high-performance industry applications such as automotive (steering columns, telescopic front forks), railways (air brake pipes, slack adjuster tubes), energy (boiler and heat exchanger tubes, including rifled and U-bend types), and infrastructure & industry (hydraulic cylinder tubes, bearing tubes, drill rods, and structural tubing)





FORGING SOLUTIONS

Our forging vertical produces precision forged components for high-load, fatigue-resistant applications where consistent performance is essential. We have played an instrumental role in the upgradation of RDSO-approved cast railway components into forged equivalents, improving mechanical reliability, dimensional accuracy, and lifecycle performance. While railways currently account for the majority of our forging volumes, we are increasingly extending into defence and industrial applications.

RAILWAY SYSTEMS & COMPONENTS

Our Railway Systems vertical showcases the strength of our integration capabilities. We manufacture critical assemblies including bogies and brake systems, and have expanded into turnkey modernisation programs through our innovative Rail Solutions-as-a-Service model. Our offerings span coach conversions, life-extension retrofits, and wagon rebuilds, executed seamlessly across multiple customer locations in India. With proven expertise in managing complex projects at scale, this vertical reflects our ability to deliver reliable end to end solutions.





KEY PRODUCTS FOR **DIVERSE**INDUSTRY SOLUTIONS



We manufacture a wide range through our tubing solutions vertical of: (i) Carbon and Alloy Seamless Tubes; and (ii) Stainless Steel Seamless Tubes

RAILWAYS:

- Precision-engineered seamless tubes for key railway applications including braking systems, air brake pipes, slack adjusters, and bogie underframes.
- Trusted by Indian Railways and private wagon manufacturers for delivering reliable performance, safety, and operational efficiency.

AUTOMOTIVE:

- High-performance tubular components including steering columns, telescopic front forks, stabilizer bars, drive shafts, and tubes for fuel injection, suspension, and braking systems.
- Engineered for fatigue resistance, weldability, and precision, serving passenger and commercial vehicles, two- & three-wheelers, off-road equipment, and farm machinery for seamless mobility and heavy-duty performance.

ENERGY:

- High-performance tubes for refineries, petrochemical plants, power, and fertilizer industries—available in carbon, alloy, and stainless-steel grades.
- Engineered for high pressure and temperature applications, including economizers, superheaters, condensers, and heat exchangers—recognized by the Central Boilers Board for proven reliability.

INDUSTRIAL & INFRASTRUCTURE:

- Robust, precision-engineered tubes for industrial and infrastructure use—offering strength, machinability, and wear resistance.
- Includes hydraulic cylinder tubes, bearing tubes, anchor bars, drill rods, and structural tubing—supporting construction, mining, tunnelling, and heavy engineering applications with proven durability and performance.







2

FORGING

Our forging vertical manufactures precision components for high-load, fatigue-resistant applications across railway systems, steel plant equipment, and defence. Our forged products provide superior reliability compared to cast or fabricated alternatives and are deployed in safety-critical and heavy-duty environments.

1) Forged Solutions Portfolio for Indian Railways & Wagon Builders:

- a) Bogie and Suspension: hangers, brackets, suspension links, side bearer housings, and pivots that ensure safe load transfer and riding comfort.
- b) Coupler and Draft Gear Components: CBC coupler forgings such as knuckles, connectors, and lock lift levers, along with draft gear wedges, shoes, and top followers that absorb shocks and protect rolling stock.
- c) Other Specialised Forgings: towing hooks, retaining rings, hinges, levers, cam locks, and pins for wagon classes such as BOXN, BOBRN, and container flats.



**These components are RDSO-approved and contribute directly to the safety and reliability of India's rail fleet.

2) Steel Plant Equipment:

We manufacture heavy-duty forgings designed to withstand severe thermal and mechanical stresses in iron and steel plants, including grate bars which are used in sinter plants and crusher hammers which are deployed in ore preparation and raw material handling.









3) Defence (Bailey Bridges):

We supply specialised forgings for modular Bailey bridge systems used by defence and disaster-relief authorities, including male eye lugs and forged eye plates. These components form critical load-bearing joints in bridge assemblies, where strength and durability are essential for field deployment.





AIR BRAKE PIPES:

Seamless carbon and stainless-steel pipes, CNC-bent and supplied in ready-to-fit condition. Each undergoes 100% inspection to ensure reliability under high-pressure service.



SLACK ADJUSTERS: Forged assemblies that automatically regulate clearance between brake shoes and wheels. They ensure consistent braking, reduce brake block wear, and enhance safety.



DOUBLE FERRULE PIPES AND FITTINGS: Stainless steel pipes and precision-machined fittings that create leak-proof joints in high-pressure brake systems. They are vibration-resistant, allow repeated assembly, and are widely deployed in passenger coaches and locomotives.



BRAKE BEAMS: Forged and fabricated members that transfer braking force from cylinders to brake shoes. Designed for impact and bending stresses, they ensure safe operation under heavy axle loads.



Cylinders and Reservoirs: Brake cylinders convert compressed air into mechanical braking force, while reservoirs store air for consistent operation.

Produced in multiple diameters and capacities, these products support different wagon and coach types.



VALVES: Supplying a full range of valves that regulate airflow and safety in braking systems, including angle cocks which control airflow between connected vehicles, isolating cocks which cut off sections during inspection or maintenance, check valves which prevent reverse flow of compressed air; and drain cocks which remove moisture and impurities from reservoirs.





4

RAILWAY WORKS AND PROJECTS

We execute large-scale railway works and modernization programs under our Rail Solutions-as-a-Service (RSaaS) model. These services have been delivered across more than 40 Indian Railways workshops and depots, as well as customer sites for private operators.

- Retrofitment of Twin-Pipe Systems in Wagons: Conversion of freight wagons from single-pipe to twin-pipe brake systems, enhancing braking efficiency and safety. Scope includes supply of complete kits, on-site fitment, commissioning, and certification.
- → Conversion of ICF Coaches: Conversion of older Integral Coach Factory (ICF) passenger coaches into NMG carriers and subsequently into NMGHS high-speed carriers, enabling more efficient utilisation of existing assets and supporting the growing demand for high-speed freight transport.
- → Supply and Fitment of Undercarriage Brake System Items: Supply and installation of undergear brake system components including air brake pipes, cylinders, reservoirs, beams, and slack adjusters for newly built wagons and coaches. We also execute on-site installation of double ferrule pipes and fittings in newly manufactured coaches and locomotives, ensuring faster commissioning and standardized quality.

Through this combination of components, assemblies, and system-level projects, we are capable of delivering end-to-end railway braking and modernization solutions, supporting Indian Railways and private operators across the full lifecycle of rolling stock. Our railway systems vertical combines tubular and forged inputs with fabrication, assembly, and field execution. Processes are designed to ensure safety, consistency, and compliance with Indian Railways' standards.





INFRASTRUCTURE

FACILITY SIZE & STATE OF THE ART EQUIPMENTS:

We operate three fully functional manufacturing facilities across the state, equipped with state-of-the-art machinery. Producing high-quality products every day, these facilities power the diverse industries that drive the nation forward.





- i) Induction Heating Furnaces rapidly and uniformly heat billets before forging, reducing scale formation and improving metallurgical consistency.
- ii) Drop Forging Hammers and Mechanical Presses shape billets into components with controlled force, ensuring strength and integrity.
- Trimming and Punching Presses remove excess material after forging to achieve accurate dimensions.
- v) Heat Treatment Furnaces (Normalising, Q&T) refine grain structure and adjust hardness and toughness.
- v) CNC Machining Centres finish forgings to close tolerances, ready for assembly in rail and defence systems.
- vi) **Die Shop with Vertical Milling Machines** design, produce, and maintain dies in-house for faster product development and quality control.
- vii) Barrel-Type Cross-Roll Piercing Mills form hollows from heated billets, ensuring concentric tubes and uniform wall thickness
- viii) Cold Draw Benches (Drawn-on-Mandrel) produce precise diameters and smooth surfaces for automotive, hydraulic, and engineering applications.
- x) Pilger Mills (Stainless Tubes) reduce diameter and wall thickness with high accuracy, delivering fine surface finish and dimensional precision for heat exchangers and boilers.
- Bright Annealing Furnaces heat treat tubes in controlled atmospheres, producing oxide-free surfaces with improved corrosion resistance.
- xi) Sizing Mills refine outer diameters of hot finished tubes to ensure dimensional consistency.
- CNC Bending Lines bend tubes such as air brake and U-tubes into ready-to-fit shapes for railways and process industries.







TESTING & QUALITY CONTROL

We follow a stringent measuring and monitoring system from raw materials to finished products, ensuring customer requirements are consistently met. Our NABL-accredited laboratory, equipped with ultrasonic, eddy current, hydrostatic, tensile, and impact testing facilities, conducts hydraulic and pneumatic tests—including leakage, pressure, and endurance checks simulating operating conditions. Instruments such as spectrometer for chemical analysis, Brinell Hardness Tester, Universal Tensile Testing Machine, Hydro Tester, Eddy Current Tester, Impact Tester, and Ultrasonic Tester ensure precision, reliability, and quality satisfaction at every stage







R&D

The Lalbaba Innovation Centre, spanning over 42,000 sq. ft., enables close collaboration with OEMs and regulatory bodies to develop new materials, simulate real-world performance, and accelerate commercialization cycles. Our R&D teams have been instrumental in converting RDSO-approved cast steel railway components into forged variants such as CBC coupler components, draft gears, container spares, and bogie subassemblies enhancing mechanical reliability and dimensional consistency.



LEARNING & DEVELOPMENT

Lalbaba Gurukul, our flagship L&D initiative is a first-of-its-kind initiative in Eastern India's manufacturing landscape. More than just an L&D program—it's a bold step towards reshaping the industrial talent ecosystem. Just like the Vedic Age Gurukul concept, Lalbaba Gurukul nurtures talent at all levels—helping new hires settle in, upskilling technical teams, and grooming tomorrow's leaders to navigate a fast-changing industrial world. From Campus to Corporate programs like NEEV for fresh recruits, to tailored leadership journeys like Nurture, and deep technical upskilling through Le Chhalaang, our initiatives cover every stage of professional growth. Learning at Lalbaba also includes on-the-job training, peer mentorship, and flexible eLearning modules that build technical, functional, and behavioural skills.

CERTIFICATIONS

We aim to ensure that our manufacturing facilities are in compliance with applicable regulatory standards. Our facilities are subject to periodic inspections from various agencies that have issued certifications. Set out below are certifications issued to our Company:



