Engineering a better tomorrow





GIVING MOTION TO THE NATION FOR 60 YEARS

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OUR MISSION, VISION & VALUES

VISION

To create value through innovative solutions by delivering cost-effective products and services, the company strives towards upgradation of its system, as well as training the employees to create and deliver value to all stake holders.

MISSION

Lalbaba Group aims to grow and become a INR 10 Billion company by being the customer's first choice, achieving operational excellence by implementing appropriate tools and technology for better data and documentation management, and be adjudged as the most rewarding workplace in the industry.

VALUES

- Adaptability to Change
- Problem Solving Attitude
- Knowledge Sharing & Transparency
- Leading by Example



Foreword from the **FOUNDER**

It all started with a dream and vision of a better tomorrow. We at Lalbaba Group, have always believed in focusing on the future, while keeping our feet firmly on the ground. Our journey had a humble beginning in the 1960's; from where we have transcended and evolved as a well known Industrial Group by dint of the sheer hard work. Today our global presence has reached more than 20+ countries, and our name is synonymous with quality and reliability. We have achieved this feat by taking bold decisions and always looking for new products.

What has made us a trusted name in the industry for over five decades is our principle of delivering quality that exceeds expectations. The mark of our quality is guided by our attention to the minutest detail and the expectation from our esteemed customers. Lalbaba Industrial Corportation first offered Air Brake Pipes in 1991 and has since been the leading supplier of Air Brake Pipes to the wagon industry, with an estimated share-of-business of close to 60%. Our pursuit for perfection in everything we do has enabled us to grow from just a small machine room to a conglomerate of four manufacturing plants with one of the best manufacturing facilities in the Eastern India. Today our Group has Lalbaba Seamless Tubes Pvt. Ltd., at Haldia, Lalbaba Industrial Corporation Pvt. Ltd. At Uluberia, PEW Engineering Pvt. Ltd at Howrah and Lalbaba Projects Pvt. Ltd. as a turn-key solution provider to the Railways.

'Change is the only way forward' – we believe. Hence, we are changing, striving to build a world that is ready for tomorrow, in order to deliver the very best for the people we serve. In our quest for growth, we adhere to our responsibilities in providing our staff the opportunities for progress, as also in developing the society, to carry the values and the vision of Lalbaba Group forward as we march into the future.

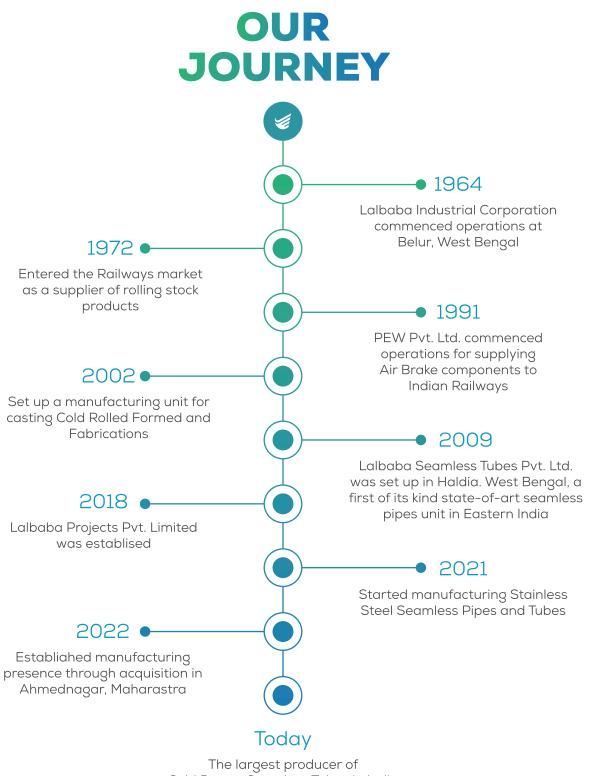
OUR LEGACY DEFINES US

The journey begins in 1964 with the vision of Mr. Murari Lal Dhanuka and his pursuit of perfection. "Attention to detail," is what he vouched for. For he knew that only the pursuit of perfection would help us in our quest to deliver quality that exceeds expectations. Later, under the leadership of Mr. Kishan Dhanuka, the group prospered as they ventured into the world of engineering, which paved the way for the emergence of entities like PEW Engineering Pvt. Ltd., Lalbaba Industrial Corporation Pvt. Ltd., Lalbaba Seamless Tubes Pvt. Ltd. and Lalbaba Projects Pvt. Ltd. What started as an enterprise by setting up a small pneumatic forging and fabrication unit in Howrah, to cater to local demand, became an engineering conglomerate supplying a diverse range of engineering products to the Indian railways as well as many other ancillary companies not only around Howrah industrial belt, but all over the country.

Through our sheer will and an eye for the future, we have transcended now and expanded our footsteps beyond the state of West Bengal to create a legacy that has redefined us. Our Group has state-of-the-art manufacturing facilities spread over the industrial belt of West Bengal and Maharashtra, India. The versatile range of products manufactured by Lalbaba Group has earned us a unique place in the MSME sector in the state of West Bengal, India. Our products are used extensively in Railways, Automobile Sector, Power Sectors, Oil & Gas Industries, etc. We have recently started undertaking project works in Railway Sector for upgrading Rolling Stock at customer sites.

Over the years, Lalbaba group has become an integral part of the rail freight industry's supply chain and today the group proudly claims to have contributed to every wagon in the Indian Railways' fleet.





Cold Drawn Seamless Tubes in India

THE PILLARS OF LALBABA GROUP

The Board of Directors:



Mr. Kishan Dhanuka



Mr. Nikunj Dhanuka



Mr. Nishit Dhanuka



Lalbaba Seamless Tubes Pvt. Ltd.

A leading manufacturer of Carbon, Alloy, and Stainless Steel Seamless Pipes & Tubes, required for various applications in Railways and other process industries, like Oil, Gas and Automobile.

Lalbaba Industrial Corporation Pvt. Ltd.

Lalbaba Industrial Corporation Pvt. Ltd. is engaged in manufacturing of critical forging and fabrication items for application in Wagon, Carriage, and Locomotives, for Railways, along with uses in the Automobile Industry & Defense.

PEW Engineering Pvt. Ltd.

A dedicated manufacturer of Brake System Components i.e., Brake Cylinders, Reservoirs, Angle Cocks, Check Valves, etc.

Lalbaba Projects Pvt. Ltd.

Lalbaba Projects Pvt. Ltd. was formed as a joint venture between NF Forgings Pvt. Ltd. and PEW Engineering Pvt. Ltd. to facilitate retrofitting orders of twin pipe air brake conversion from the Indian Railways.



LALBABA SEAMLESS TUBES PVT. LTD.

Lalbaba Seamless Tubes Pvt. Ltd. is a leading manufacturer of Cold Drawn Carbon Steel & Stainless Steel Seamless Tubes with an installed capacity exceeding 72,000 Metric Tonnes per annum.

Tubes manufactured by Lalbaba Seamless Tubes are trusted in industries like Mining, Oil & Gas, Automobiles, Cranes, Hydraulics, Boilers, Power Plant, Cooling Towers, and Railways. The company's manufacturing facilities spread across 700,000 square feet, coupled with the strategic proximity of Haldia port, makes it one of the dominant suppliers in the whole of Eastern India. Lalbaba Seamless Tubes Pvt. Ltd.'s unparalleled commitment towards rolling out pipes with international marks of quality has helped the company to sustain its supplies in intensely competitive environment in Europe & the USA. With a view of growth with sustainability, the company has introduced the usage of solar energy in the plant.

The reason Lalbaba Seamless Tubes Pvt. Ltd. is preferred in over 20 countries is that apart from being one of the largest manufacturers of Seamless Tubes in India, it goes through unfaltering inspection levels from the input raw material to the final product. The in-house testing laboratory are all NABL accredited and are equipped with a full range of testing facilities ensuring uncompromising quality.

Apart from having a quality control system in place, Lalbaba Seamless Tubes Pvt. Ltd. also pays strict attention to the timely delivery of its products.

Lalbaba Seamless Tubes Pvt. Ltd. has a nation-wide presence across both Eastern and Western India. Besides a full-fledged plant in Haldia, there is another unit at Ahmednagar to cater to our customers in the Western markets.



BUSINESS IS DIVIDED INTO 2 MAIN SEGMENTS				
CARBON & ALLOY	STAINLESS STEEL			
SEAMLESS TUBES	SEAMLESS TUBES			

CARBON & ALLOY SEAMLESS TUBES

Lalbaba Seamless Tubes is one of the leading manufacturers of Carbon Seamless and Alloy Seamless Tubes in India. As a specialty product for certain specific applications, our plant is also capable of manufacturing Carbon Steel Seamless Tubes with an internal lining of Stainless Steel.

The Carbon & Alloy Seamless Tubes are manufactured using either of the two production processes:

Cold Drawn System

In Cold Drawing process, the Inner Dia of the tubes is controlled by an inside mandrel. Hence, the process is also referred to as Drawn on Mandrel (Drawn On Mandrel Tubes). To achieve close tolerances consistently we use Tungsten Carbide Tools.

The prime reasons behind Cold Drawing are:

- Achievement of closer wall thickness and diameter tolerance
- Improvement in surface finish
- · Enhancement of serviceability
- Prevention of premature failure
- Suitability for critical forming, such as 180° bends
- Enhancement of mechanical properties of the tube
- Expansion of the product mix towards the lower end of the OD and wall thickness scales

Hot Finished Seamless (HFS)

HFS pipes and tubes are made by heating a solid billet or bloom and then piercing it to make A hollow out of it. This hollow is subsequently passed through one or multiple stands to give It the final pipe or tube dimensions. It is possible to manufacture large diameter and thick pipes of various grades in high volume through the HFS process. With the improvement in technology, HFS pipes & tubes now can be manufactured with close dimensional tolerance & good surface finish.

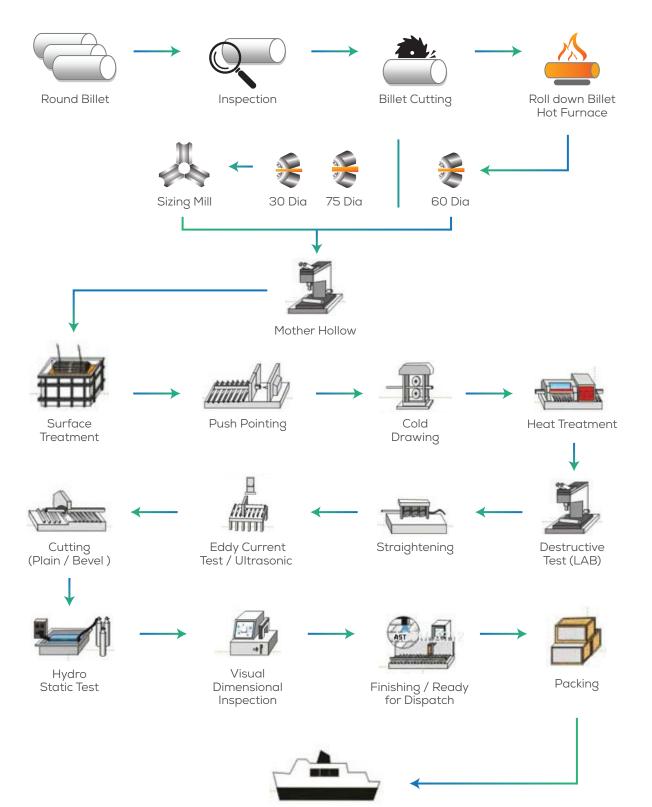
The advantages of Hot Finished Seamless process are as follows:

- Cost effectiveness
- Versatility
- Machinability
- Wide range of sizes

Cold Drawn System (CDS)

(Carbon Steel / Alloy Steel Seamless Tubes & Pipes)

Process flow chart:



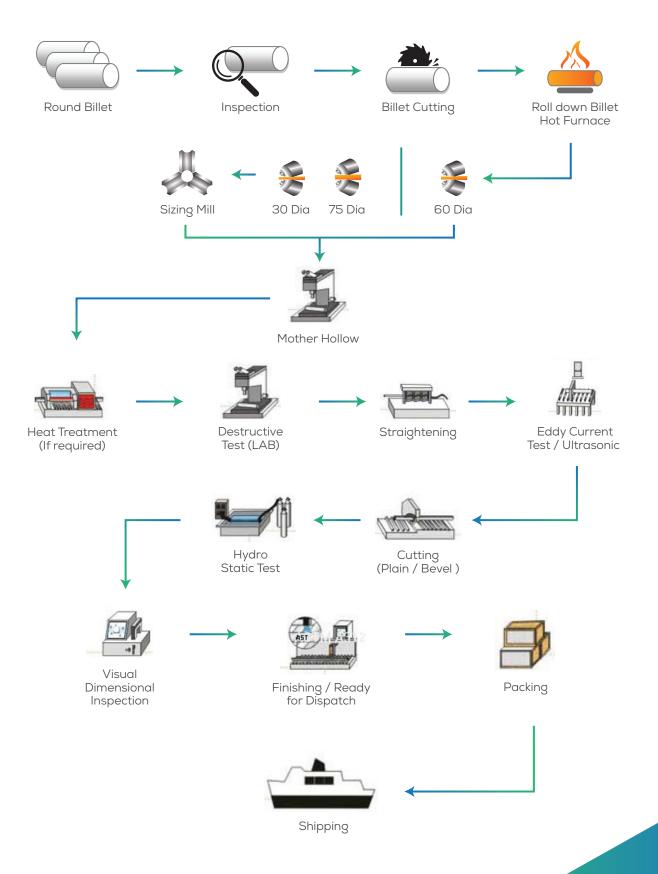
Shipping



Hot Finished Seamless (HFS)

(Carbon Steel / Alloy Steel Seamless Tubes & Pipes)

Process flow chart:





BARREL TYPE CROSS ROLL PIERCING PROCESS

This is a modified version of the Original Mannesmann's Cross Rolling Process and is implemented at the Lalbaba Seamless Tubes, Haldia plant.

COLD DRAWN BENCH

The prime reasons behind cold drawing are:

- Achievement of closer wall thickness and diameter tolerance
- Improvement in surface finish
- Suitability for critical forming, such as 180° bends
- Enhancement of mechanical properties of the tube
- Expansion of the product mix towards the lower end of the OD and wall thickness scales

BRIGHT ANNEALING FURNACE

This superior process eliminates the pickling cleaning process required to remove the scale from Heat Treated tubes. This in turn ensures that the tubes supplied by us are free from exposure to any acids or harmful chemicals thereby increasing the life of the tubes considerably. It also increases the shelf life of the tubes and enhances aesthetics.







SIZING MILL

Additionally, Induction Heating Furnace with Sizing mill installed for better dimension accuracy of HFS product.

PILGER FACILITY

A cold-rolling process is used in the shaping of metal tubes and pipes. By pilgering process, we can achieve precise OD and wall thicknesses. The roughness value of the finished tube is usually better than any other drawn process.

Cold pilgering helps to achieve a good surface finish for stainless steel tubes. After pilgering of Stainless-Steel tubes and pipe when followed by the solution annealing heat treatment process, it forms a uniform austenite microstructure, achiving superior mechanical properties for the finished products.





PRODUCT, APPLICATION & SPECIFICATION

1. Heat Exchanger Tubes & Pipes

Heat Exchanger Tubes are Seamless Tubes that are used to transfer heat for the purpose of cooling or heating a medium flowing through it. The heat exchange process is used extensively in the industry to maximise the energy usage and minimise wastage. It finds application across several industries, including Petroleum Refineries, Fertilizer Plants, Petrochemical Process Plants, Agriculture, Power Plant Boilers, and more.

We, at Lalbaba Seamless Tubes, produce a wide range of Low Carbon Steel Heat Exchanger Tubes, Low Alloy Steel & Stainless Steel Heat Exchanger Tubes. We can supply these tubes in Straight as well as U Bend Tubes as per the client requirement.

Technical Specification

Heat Exchanger Tubes					
Specification	Grade				
ASTM	A 179, A 192, A 210 (Grade A1, C), A 334 (Grade 1, 6), A 209 (Grade T1, T1a), A 213 (Grade T5, T11, T12, T22), A 556 (Grade-A2-B2-C2)				
BS 3059	Part I (Grade 320), Part II (Grade 360, 440) BS 3602 PT-1, CFS 360, BS-980 (CDS-1)				

	Heat Exchanger Pipes				
Specification	Grade				
ASTM	A 106 (Grade A, B, C), A 334, A 336				
IS 1239	Medium, Heavy				

Note: Consultation regarding Size & Grade for anything not in the table is also available.



Delivery Condition: Cold Drawn Seamless with Heat Treated Condition.

OD Size: 8 mm – 114.3 mm WT: 0.9 mm – 13 mm Length: Max 12 Mtr Straightness: ≤ 0.5/1000 Protection: Anti-rust oil on inside and outside surface, plastic caps on both ends. Packing: Bundled with steel strip and PE sheet or wooden case



2. Boiler Tubes

Boiler has played an important role in the modern world from the early days of industrial revolution. Now-a-days boilers are widely used by Utility, Industrial, Commercial & Institutional sectors for heating and power generation. With the ever-increasing demand for power, the requirements of utility boilers have gone up manifold in recent years.

A power generation boiler consists of an economizer, a furnace (evaporator), a superheater Tube, a reheater Tube, a main steam pipe, a reheat pipe, a water feed pipe, and a feed water heater tube. Size, grade, and quantity of tubes & pipes depend on the design of the boiler, which is based on fuel, temperature, pressure & volume of steam-flow. There are also continuous efforts to increase the efficiency of the boiler. With the demand for high capacity & high efficiency boilers, the demand for higher grade tubes & pipes have increased substantially.



Key Features of Boiler Tube

Lalbaba Seamless Tubes is the leading Boiler Pipe & Tube manufacturer in India. Our Boiler Pipes and Tubes are known for quality and preferred by all the boiler manufacturers in the country. We understand the criticality of the customer's applications and all our activities starting from the raw material to process are carried out with the focus on the customer's end-use. Though we follow Specification, our endeavour is always to exceed the customer's expectations. Not surprisingly, we have a long list of satisfied customers who keep coming to us year after year.

We manufacture various Carbon Steel, Alloy Steel and Stainless Steel Tubes and Pipes conforming to all popular international Specification & Grades in Codes ASME/ASTM, BS, DIN & BIS.

Lalbaba Seamless Tubes is recognized as a "Well-known Pipe & Tube Maker" by the Central Boilers Board, New Delhi for IBR certification. Lalbaba Seamless Tubes is also PED certified. We can meet customer's needs of special grades & sizes. Below is given the outline of our product range.

Lalbaba Boiler Tube is manufactured through Cold Drawn Seamless route.

The principal reasons behind cold drawings are:

- Achievement of close dimension tolerance that offers significant strength throughout.
- Improved Surface Finish
- To enhance serviceability
- Enhance mechanical properties of the tube.

We manufacture Primary Gas Cooler, Economizer Coil and Rifled Tube for this segment.

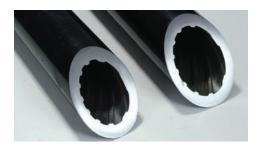
Primary Gas Cooler

There is a shell and tube heat exchanger where the service water is exchanged with the CO gas in the two crown zones and with chilling cold water in the bottom zone. In all zones the tubes are inclined at 15°, horizontal. The purpose of this is to provide easy drainage to any naphthalene condensate. However, the main purpose of PGC is to cool the gas from 90°C to 30°C.



Economizer Coil

These are boiler feedwater heaters in which the heat from waste flue gases is recovered to raise the temperature of feedwater supplied to the boiler, thereby increasing the Fuel Economy, Steaming Capacity, Life of the Boiler, and Reducing Pollution.



Rifled Tube

Rifled Tubes are used in heat exchangers and boilers to provide highly energy efficient means of heat transfer. The presence of the internal rifling induces centrifugal forces in the mass flow thereby separating the water from the steam fraction and forcing the water towards the tube wall.

Technical Specification

Size, grade, and quantity of tubes & pipes depend on the design of the boiler, which is based on fuel, temperature, pressure & volume of steam-flow.

Outside Diameter	OD 38.1 mm to OD 114.3 mm					
Thickness	WT 3.06 r	WT 3.06 mm to 12.7 mm				
Length	Up to 12 M	Up to 12 Mtr				
End	Plain-End	Plain-End				
Specification & Grade	ASTM	ASTM ASTM A213: Ferritic Steel: T5, T9, T11, T12, T22 Austentic Steel: TP 304/L/H/N/LN, TP 316/L/H/N/LN/Ti, TP 317/L, TP 321/H, TP 347/H ASTM A192, ASTM A210 Gr. A1 & C				
	BS	BS3059 Part I Gr. 320 & Part II Gr. 622 - 490				



3. Tap Hole Drill Bar

Drill Rod is one of the prime products, manufactured to the highest industry standards & tested rigorously. As a result, we can virtually guarantee that our tubes will outperform and outlast any other tube industry.



Tap Hole Drill Rods are widely used in big steel mills for delivering liquid steel especially from blast furnaces. Guided and stiff drill rods are essential to reduce excessive drill flex and secure a straight centered tap hole.

Key Features of Tap Hole Drill Bar

- Drill Rod is manufactured through Cold Drawn Seamless route. The principal reasons behind cold drawings are:
 - Achievement of close dimension tolerance that offers significant strength throughout.
 - Improved Surface Finish and serviceability
 - Enhanced mechanical properties of the tube.
- 1 in 6000 Straightness
- As per Material Grade 1045, steel is characterized by good weldability, good machinability, and high strength and impact properties in the normalized condition.

Technical Specification

SI No.	Spec/Grad	OD	ID	wт	Kg/mtr	Yst in Mpa	UTS in Mpa	E%
1	C 45 / SAE 1045	38	22	8	5.9	Min 240	Min 450	Min 20
1	C 45 / SAE 1046	38	14	12	7.7	Min 241	Min 451	Min 21

Chemical Composition

Grade	С	Min	Р	S
C 45 / 1045	0.43 - 0.5	0.6 - 0.9	Max 0.040	Max 0.050

4. Mining Drill Rod Bar & Casing

Mining operations involve the use of heavy artillery and drills, both of which cause vibrations. The components involved in this application need to be sturdy and withstand high vibrations, without getting abraded.

Wireline (Q) Series Drill Rods

We manufacture wireline rods manufactured from the highest quality steel tubes SAE 1040 / 1541 / 4130 and certify the physical and chemical properties as per BS 4019, DCDMA & Swedish Standard. Type: AQ, BQ, NQ, HQ, PQ

British Standard (W) Drill Rods

Drill rods are manufactured in two standards, the 'W' Series (EW, AW, BW, NW, HW) and the old series (E, A, B, N). The 'W' Series rods have a larger outside diameter, an increased inside diameter and are more rigid than the 'Old' Series. MMT drill rods are manufactured from premium cold drawn seamless steel tube. All these rods confirm to BS 4019, DCDMA & Swedish Standards.

'X' Series Casing

Every flush-coupled casing has a box thread at each end and is connected by a pin-to-pin coupling. This allows replacement of couplings when pin threads become worn or damaged.

'W' Series Casing

Flush-joined casing has a heavier wall section and an integral pin and box threading. Jointed casing makes up flush on both the inside and outside diameters. The heavier wall section provides internal and external mating shoulders for the threaded portion to butt, providing twice the contact area and helping to prevent the threads from climbing under heavy torgue loads.

Technical Specification

Outside Diameter	OD 8 mm to OD 114.3 mm
Thickness	WT 0.89 mm to 12.7 mm
Length	Upto 12 Mtr
End	Plain-End / Bevelled-End
Grade	SAE 1040 / 1541 / 4130

Note: Consultation regarding Size & Grade for anything not in the table is also available.

Most usable Grade SAE 1541 is a medium carbon alloy steel. The content of manganese in this alloy is significant and improves the mechanical properties associated with this medium carbon containing **SAE 1541 Steel Pipe**. As an alloying element, manganese, when added to the alloy, enhances properties such as strength, hardness, and hardenability. Manganese also improves the abrasion resistance properties of **SAE 1541 Steel Round Bar**, thus, making it well suited for high stress applications such as mining.











5. Hydraulic Cylinder Tube

Lalbaba Seamless Tubes is one of the top manufacturers of high-quality Hydraulic Cylinder Tube in India. We are committed to providing a variety of Hydraulic Cylinder Honed Tube in customizable sizes and at affordable prices. Hydraulic Cylinder Tube is widely used in various industries to serve different applications in hydraulic systems & pneumatics and are known for their unique properties that include high tensile strength and durability. The Honed Tubing can last for many years and needs very low maintenance. These tubing solutions are also known for their other properties, including corrosion resistance and robust nature.

Clients can also avail our specialized honing facility for these products which are done by using vertical & horizontal machines. Our Honed Pipes are available in different grades like ST52, CK45, 4140, SCM440, 16Mn, 42CrMo, E355 etc.

Key Features of Honed Tubes

- A. High precision tolerances: Our honed steel tube can meet ID tolerance H7, H8, H9, etc. according to the customer' requirements, and its I.D dimension.
- B. Seamless tube with high pressure resistance: We only use seamless cold drawn tubes to produce honed pipes, which means our honed tubing can work under higher pressure, thus our honed pipes are more reliable for hydraulic cylinder applications.
- C. High Smooth inside surface: The roughness of our honed pipe is Max Ra 0.4 microns ID finish.
- D. Good weldability: The weldability of our honed steel tubing is very good; this is quite helpful for manufacturing the cylinders.



Technical Specification

Material: ST52,CK45,4140,SCM440,16Mn,42CrMo,E355 etc.. Delivery Condition: BK, BK+S, GBK, NBK OD Size: 40 mm – 114 mm ID Size: 30 mm – 100 mm Length: max 12 Mtr Type: Cold Drawn Seamless Straightness: 4 0.5/1000 Roughness: 0.2-0.4 u Tolerance EXT: DIN2391, EN10305, GB/T 1619 Tolerance INT: H7, H8, H9 Protection: Anti-rust oil on inside and outside surface, plastic caps on both ends Packing: Bundled with steel strip and PE sheet or wooden case Note: Consultation regarding Size & Grade for anything not in the table is also available.

6. Precision Tubes

Precision Steel Tubes are characterized by special dimensional accuracy of outer and inner diameters or wall thickness, smooth surface resulting from drawing technology, defined mechanical properties and a large dimensional range. The Precision Tubes have exactly measured inner and outer dimensions, very tight tolerances and roughness of the surface as well. Precision steel pipes are produced with high-precision cold drawing.

Precision seamless tubes offer many advantages such as close tolerances on diameter & thicknesses, exceptional concentricity, and a smooth finish, both inside & outside of the tubes. These features enable designers to obtain uniformity of flow under controlled temperature, pressure conditions, while fabricators can exercise greater control over close bending and tube alignment in butt welding.

The high precision seamless tubes begin their journey as seamless tube extrusions, in a range of different sizes. This material is reduced in size several times until it gradually reaches the exact specifications matching our customer's requirment.

Key Features of Precision Tubes

- The precision is high, which saves the user's labour and time for machining.
- There are many specifications to shose for a wide range of applications.
- The cold-rolled product has high precision, good surface quality and good straightness.
- The inner diameter of the steel pipe can also be offered in a hexagonal shape.
- The performance of the steel pipe is superior, and is used for specific critical applications.



Technical Specification

Material: DIN 2391, EN10305-1, DIN17175 etc.

Delivery Condition: Cold Drawn Seamless with Heat Treated Condition.

OD Size: 8 mm – 18 mm

WT: 0.9 mm – 4 mm

Length: Max 12 Mtr

Straightness: ≤ 0.5/1000

Protection: Anti-rust oil on inside and outside surface, plastic caps on both ends

Packing: Bundled with steel strip and PE sheet or wooden case





7. Mechanical Tubing

At Lalbaba Seamless Tubes, we apply our metallurgical and production expertise to manufacture high-performance seamless mechanical tube products to meet customer's needs. This includes carbon, alloy and even custom steel grades; annealed, normalized and tempered; stress-relieved and quenched-and-tempered.

We provide seamless mechanical steel tubing products designed to thrive in demanding, highstress applications. Such products find application in automotive industry where performance depends on reliability and quality. In addition, the seamless mechanical steel tubing has wide industrial applications – ranging from bearings to cylinders and gears – where superior mechanical properties are essential for functionality. Oil and gas exploration is another common use for our seamless mechanical tubing, where durability and component life below the earth's surface is paramount.

We produce seamless mechanical steel tubing, in the hot-rolled condition, close to the finished part size, which makes it very competitive compared to other forging or machining processes. You may also purchase tubes in sizes close to the finished part dimensions, which allows for optimum material utilization.

Key Features of Mechanical Tubes

- The precision is high, which saves the user's labour and time for machining.
- There are many specifications to shose for a wide range of applications.
- The cold-rolled product has high precision, good surface quality and good straightness.
- The inner diameter of the steel pipe can also be offered in a hexagonal shape.
- The performance of the steel pipe is superior, and is used for specific critical applications.



Technical Specification

Material: ASTM A519 1010 - 1045 Delivery Condition: Hot Finish and Cold Drawn OD Size: 8 mm - 114.3 mm WT: 0.9 mm - 13 mm Length: Max 12 Mtr Straightness: ≤ 0.5/1000 Protection: Anti-rust oil on inside and outside surface, plastic caps on both ends. Packing: Bundled with steel strip and PE sheet or wooden case

8. Bearing

Bearing is a machine element that is formally used to reduce the friction between moving parts. Bearing can be classified based on the type of operation required, direction of load and motion.

At Lalbaba Seamless Tubes, we have invested in sophisticated facilities and developed specialized processes for manufacturing bearing tubes to steel grades such as SAE 52100 and SCM 415.

The steel used for manufacturing bearing tubes is produced exclusively through the electric arc furnace route, is ladle refined and is vacuum degassed. As a result, the steel is extremely clean ensuring a high fatigue life for the bearing.

Key Features of Bearing Tubes

- The precision is high, which saves the user's labour and time for machining.
- There are many specifications to shose for a wide range of applications.
- The cold-rolled product has high precision, good surface quality and good straightness.
- The inner diameter of the steel pipe can also be offered in a hexagonal shape.
- The performance of the steel pipe is superior, and is used for specific critical applications.



Technical Specification

Material: SAE 52100 , SCM 415 Delivery Condition: Cold Drawn Seamless OD Size: 8 mm – 100 mm WT: 2 mm – 13 mm Microstructure : Spherodize Cementite in Ferrite Matrix Grain size: 8 or Finer Decarb: 0.25 mm max to OD/ID With 100X Inclusion Rating: Type A-2.0 / 1.5 Max ; Type B- 1.5 / 0.5 Max ;Type C 0.00 / 0.00 Max; Type D – 1.0 / 0.5 Max Eccentricity: 0.5 Max Ovality: 0.5 Max



9. Free Cutting Tubes (Round & Hex)

The steels for high-speed machining, commonly called free-cutting steels, have been specially designed to be machined by chip removal with high productivity. As a thumb rule, free cutting steel normally costs 15% to 20% more than the standard steel. However, this is made up by increased machining speeds, larger cuts, and longer tool life.



Characteristics

One of the most common techniques for improving machinability is to increase the S level. S forms the compound manganese sulphide (MnS) which is soft and acts as a chip breaking discontinuity. S increases the volume of deformable MnS inclusions. Typically, the highest commercial S levels are around 0.35% and sulphur is the cheapest machinability additive.

There are four main types of free machining steel

- I. Leaded: Grade SAE 12L13, SAE 12L14
- II. Resulfurized : SAE 1117, SAE 1118 , SAE 1119, EN1A
- III. Rephosphorized : SAE 1211, SAE 1212

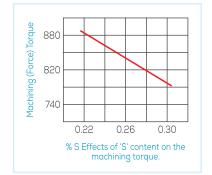
IV. Super: Super free-machining steels are alloyed with tellurium, selenium, and bismuth.

For the first time in India Lalbaba Seamless Tubes offers Low Carbon Free Cutting Steel of Grade EN1A – Cold Drawn Seamless round & hex shaped tube designed for high-speed machining for multi turned part.

Application

- Control linkages, shafts, low stress hubs, casings and handles
- Brake hose ends, hydraulic parts
- Brake pistons, wheel nuts and inserts
- Gearbox components
- Padlock shackles, vice jaws
- Studs, nuts and bolts
- Precision machined components





Hollow Tube Vs Solid Round Bar

- Lalbaba Seamless Tubes R&D team has developed hollow tubes with superior surface quality for mass production by eliminating bad traverse properties of the product that makes this engineering steel an ultimate cost-effective solution.
- As EN1A is cold drawn it can be brought much closer to the finished machine size and this has a positive impact on overall machining costs.
- Cold drawn products of this type also offer a significant increase in strength when compared to similar hot rolled bar products.

General Mild Steel Vs EN1A

- In comparison with general mild steel, EN1A offers numerous benefits including a cleaner finish, increased straightness, and much tighter sectional tolerances. Also less operation time in Parting, Machining, Drilling, and Boaring compared to general mild steel, making it a cost effective intermediate product.
- Apart from excellent machinability EN1A also offers good ductility and strength.

Key Features

- The positive machinability characteristics of EN1A also results in the extension and longevity of tooling life which makes this engineering steel a cost-effective solution.
- It is particularly suited to component manufacturing where the product is not subjected to high service stresses and where a superior finish is required under high volume production rates.
- The inclusion of manganese and sulphur in the products' chemical composition actually acts as a 'chip breaker' which allows it to be fed and machined at high speeds without impacting on overall tooling life.
- Although EN1A can be welded it is not recommended as the percentage lead content makes this difficult, we offer EN1A without lead content.

Typical Mechanical Properties

Yield Stress: Min 550 Mpa (N/mm2) Tensile Stress: Min 650 Mpa (N/mm2) E%: Min 5% Hardness: Min 85 HRB



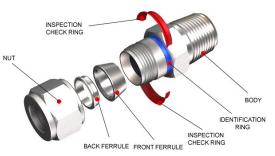




10. Railways

10.1 Double Ferrule Fittings

Double ferrule fittings are two-ferrule assemblies. The back ferrule grips the tubing while pressing up against the front ferrule, which spring-loads the front ferrule and creates a seal between the tubing and fitting body. These fittings can be reassembled multiple times without damaging components or tubing. They have good resistance to mechanical vibration.



Double ferrule compression tube fittings are largely used across multiple industries, such as downstream petrochemical, pulp & paper, laboratories, aeronautical and shipbuilding, defence, power generation, semiconductors manufacturing, and heavy industries.

Various types of Double Ferrule Fittings

There are mainly 5 sizes of Pipe used in Coaches i.e., 1'', 1/2 '', 3/4 '', 25 mm & 28 mm. For each size Front Ferrule, Back Ferrule & Nuts dimension are different.

There are total typical 218 numbers of items inclusive of 4 numbers Back Ferrule / Front Ferrule each for the 5 sizes of SS Pipe.



Parts Name	Material Grade
Body Parts	ASTM A479 TP 304 (Bar Stock) ASTM A182 F304 (Forging)
Ferrule (Back & Front Ferrule)	ASTM A276 A316
Nut	ASTM A479 TP 304 (Bar Stock) ASTM A182 F304 (Forging)

10.2 Air Brake Pipes for Wagon

Carbon Seamless Pipes are supplied to Wagon industry. Depending upon the requirement of individual wagon the pipes are bent in CNC machine according to the Drawings and supplied in Readyto-fit condition after inspection by RDSO.



For Carbon Steel Seamless

SPEC/GRADE	RDSO SPEC. NO.	OD	ID	WT
IS:1239 (PART-1) - 2004		21.3	15 mm	2.9 mm
		27.3 mm	20 mm	3.2 mm
	04-ABR- 2002 (Amendment No. 8 of	34.2 mm	25 mm	4 mm
	Sept. 2016)	42.9 mm	32 mm	4 mm
		48.3 mm	40 mm	4 mm

10.3 Slack Adjuster

The brake adjuster is one of the main parts of the railway braking part, and its main function is to automatically adjust the distance between the brake shoe and the tread according to the wear of the brake shoe (& Wheel) and to maintain a uniform braking force.



In Lalbaba Seamless Tubes we manufacture Slack Adjusters type IRSA 600 and IRSA 750 type as per Indian Railway Specification. We also manufactures LRV2 600 and LRV2 450 Slack Adjusters with 4 star rolled threads for the export markets of Africa and Southeast Asia.



STAINLESS STEEL SEAMLESS TUBES

Stainless Steel Tubes resist oxidation, making it a low maintenance solution that is suitable for high temperature and chemical applications, combined with extremely high reliability in corrosion prone environment.

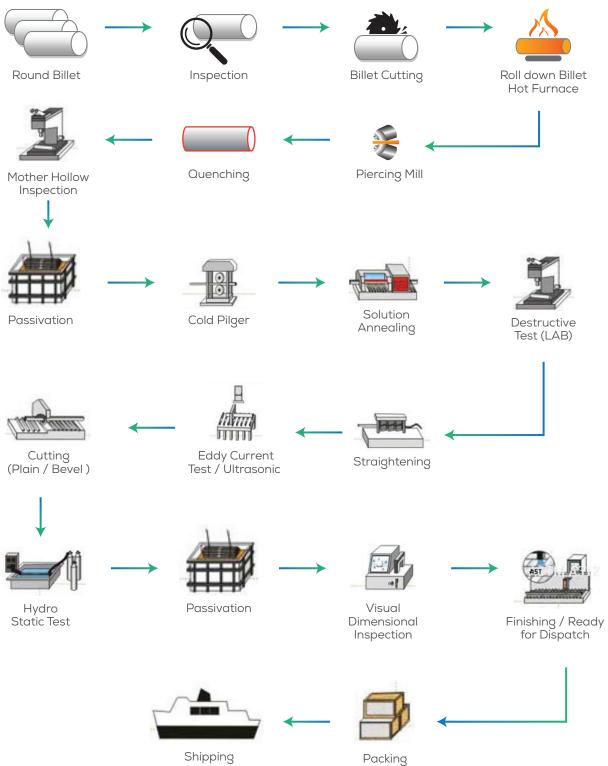
Annual Production Capacity:

10,000 MT piercing capacity and 6,000 MT of cold finishing capacity.

Stainless Steel Seamless Tubes & Pipes

Route-1 (Pilger Process)

Process flow chart:



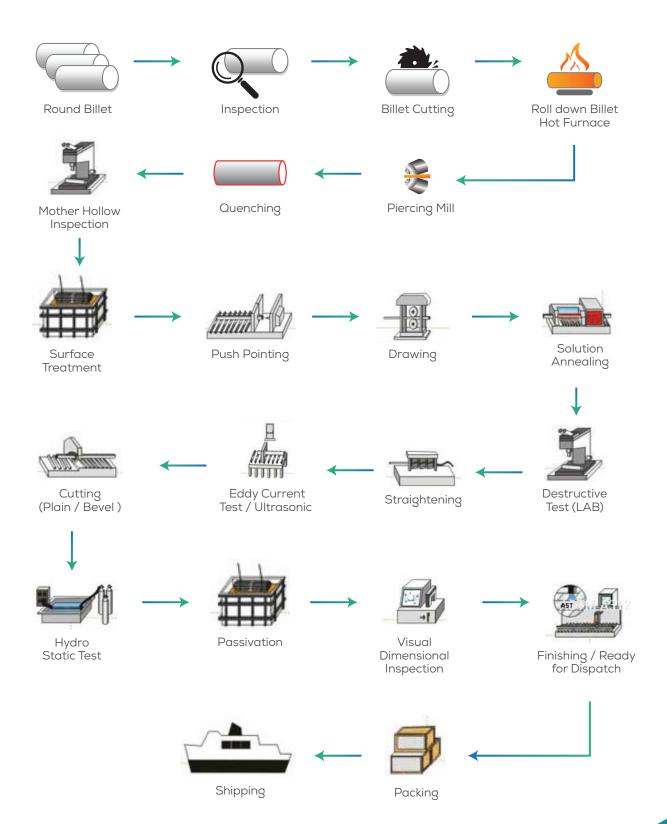
Shipping



Stainless Steel Seamless Tubes & Pipes

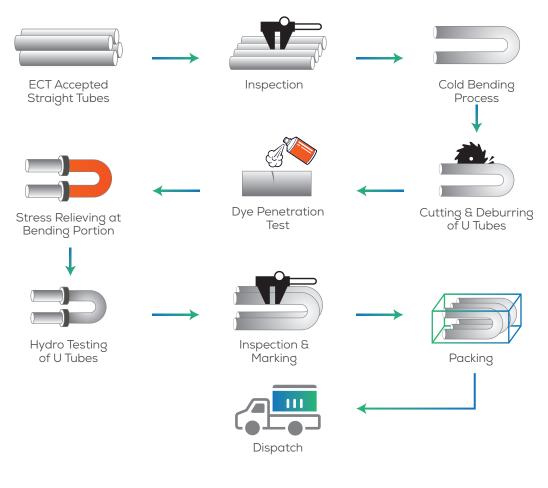
Route-2 (Draw Process)

Process flow chart:



CS/SS U Bend Tubes

Process flow chart:



PRODUCTS

1. Instrumentation Tubes & General Service Tubes

Instrumentation tubes are mainly used in Oil and Gas sector, Aerospace and Automotive Industries. We offer either A & P (Annealed and Pickled) or BA (Bright Annealed) with excellent tolerance in diameter and wall thickness.

2. Heat Exchanger Tubes & U-Tubes

We offer various kinds of straight and U-bent Heat Exchanger Tubes including Low Pressure & High-Pressure Heat Exchanger Tubes, Condenser Tubes, Feed Water Tubes and Superheated Tubes. These are utilized in power generation, oil refineries, and chemical plants.

3. Boiler Tubes

Boiler tubes are mainly used in critical and super critical boilers for power generation. The modern boilers have high temperature and pressure application to which we cater by providing tubes of superior quality and strength.



4. Mother Hollow Pipes

These being cost effective, are used widely for machining applications as RM to customers on specific requirements.

5. Process Pipes

Lalbaba Seamless Tubes offers process pipes in fixed or random length based on customers' requirements. These are used in a diverse range of application because of its key features being low maintenance and corrosion free service.

6. Railways - Air Brake Pipes

One of the largest supplier of Air Breake pipes to Wagon Industry and Zonal Railways.

• WAGON

GRADE	RDSO SPEC. NO.	OD	ID	WT
ASTM A312	04-ABR-2019,	26.7 mm	20 mm	2.9 mm
Schedule 40S GR - TP 304*	(Rev. 02 of	33 mm 25 mm 3.3	3.38 mm	
	December 2019)	42.9 mm	32 mm	4 mm

• COACH

Straight SS Seamless Pipes are supplied to Coach builders and Railway workshops for their regular maintenance requirements. These are usually supplied in 6-meter length (or as specified by the customer)



GRADE	RDSO SPEC. NO.	OD	ID	WT
		18 mm	NIL	2 mm
		22 mm	NIL	2 mm
ASTM A312	04-ABR-2019,	N 35 mm	NIL	2 mm
Schedule 40S GR - TP 304	(Rev. 02 of December 2019)	28 mm	NIL	2 mm
	,	42 mm	nm NIL 2 m	2 mm
		48.26 mm	NIL	3.68 mm

LOCOMOTIVE

GRADE	CLW SPEC. NO.	OD	ID	WT
ASTM A 269*	CLW/MS/3/029 ALT-9	25.4 mm	NIL	2.108 mm

*Now replaced by BIS specificification IS 17875 : 2022 for Indian Railways and other industries in India.

PRODUCTS RANGE

Product	Size	Wall Thickness	Length	Specification
Pipes	1/8" NB to 2" NB (OD 10.29 to 60.33 mm)	Sch. 5,10,40S,80S (WT 1.24 to 5054mm)	Upto 12 Meters Double Random Length	ASTM A312 & Its Equivalent ASME, DIN & EN Standards IS 17875 : 2022
Tubes	OD 12.70 to60 mm	WT 1.2 to 6.5 mm	Upto 12 Meters Straight Length	ASTM A213, A269 & Its Equivalent ASME,DIN & EN Standards - IS 17875 : 2022

Grades: TP 304/L/H/N/LN, TP 316/L/H/N/LN/Ti, TP 317/L, TP 321/H, TP 347/H

TESTING FACILITIES

We at Lalbaba Seamless Tubes Pvt. Ltd. are committed to uphold our reputation for providing quality seamless tubes at a competitive price by incorporating the latest technology. Our In-House testing Laboratory is accredited by NABL

Some of the testing protocol used are listed below:



Universal Tensile Testing Machine

Hydro Tester



Eddy Current Tester



Impact Tester



Ultrasonic Tester



TESTING FACILITIES			
Destructive Testing Facilities	Non-Destructive Facilities		
Chemical Spectrometer	Positive Material Identification (PMI) Test		
Tensile Test	Online Eddy Current Test		
Hardness Test (Rockwell/Brinell/Vickers)	Ultrasonic Test for Flaw Detection		
Flattening Testing	Portable Ultrasonic Machine		
Flaring Test	Surface Roughness		
Flange Test	Microscope with photograph facility		
Bend Test	Hydro Test-Straight Tubes & Pipes & U Bend Tube		
Impact Test at Controlled Temperature	Die Penetrant Test		
Microstructure Examination Test/Analysis	Magnetic Particle Testing		

Quality Assurance & Certifications

Commitment to customers, flexibility in manufacturing, and total quality management are the principles which have enabled Lalbaba Seamless Tubes to deliver value to our customers. Stringent system-based quality control is implemented at each stage of production. Our service standards focus on customer requirements, and we strive for the highest user satisfaction.

We are a reputed Tube and Pipe maker under Indian Boiler Regulation. Leading third party inspecting authorities, like EIL, BV, DNV, TUV, IRCLASS etc., regularly visit our manufacturing facilities for inspection, ensuring compliance to customers' requirement.

CERTIFICATIONS





ISO 14001:2015





ISO 45001:2018







RDSO Approval







NABL Accredited

BIS Certificate

OUR GLOBAL FOOTPRINT

Lalbaba Seamless Tubes Pvt. Ltd. not only caters to various national clients like SAIL, BHEL, Tata Steel, Indian Railway, Garden Reach Shipbuilders Ltd., Hindustan Shipyard Ltd., Maruti Suzuki, ISRO, Indian Navy, Godrej, L&T, NTPC and many more, but it is also globally present in countries like USA, Germany, UK, France, Belgium, Spain, Netherlands, UAE, Sri Lanka, Bangladesh etc.



Asia	Africa	North America	Europe	Australia
India	Ghana	Canada	Belgium	Australia
Bangladesh	South Africa	Mexico	Czech Republic	
China	Tanzania	USA	France	
Myanmar		South America	Germany	
Sri Lanka		Brazil	Italy	
			Poland	
			UK	





أدنــوك ADNOC



LALBABA INDUSTRIAL CORPORATION PVT. LTD.

Lalbaba Industrial Corporation Pvt. Ltd. is one of the leading manufacturers of critical forgings and fabrication items in Eastern India with RDSO approvals and in-house manufacturing & testing facilities for application in various industry segments like Zonal Railways, Wagon Industries, Defence and Steel Plants. The plant located in Uluberia is well equipped with cutting-edge technology that ensures uncompromising quality of products manufactured. We at Lalbaba Industrial Corporation believe that "Innovation is the only way to win" and which is at the core of our values and has enabled us to become an Industry leader in our segment.



INFRASTRUCTURE

One of the most important assets of the Lalbaba Group is its forging unit. The plant is well equipped with various forging equipment and set-up like pneumatic and drop forging hammers. To meet the increasing demand of quality, forging in various industries, the organization is in the process of expanding its forging division. The company has recently introduced induction furnaces, replacing its oil-based predecessors, which not only increases efficiency but also greatly benefits the environment.

The Forging Unit is equippeed with ultra modern machineries, like:

- Drop forging hammers
- Trimming & punching mechanical press
- Induction heating furnaces (Capacity 250 kW and 400 kW)
- Automatic High speed band saw
- Short Blasting MC
- Heat Treatment Furnaces
- Die Shop with CNC Vertical milling M C & Turner
- Conventional MC Shop



PRODUCTS

We are involved in below mentioned industry leading products.

1. CORE FORGINGS (Forgings of Indian Rolling Stock)

1.1. WAGON

a. CBC Coupler Forging Components:

- Knuckle Thrower
- Lock Lift Lever Hook
- Lock
- Connector
- Toggle

b. Draft Gear Forgings:

- Top Follower
- Wedge
- Shoe

c. Container Forgings:

- Cam
- Keeper
- Handle
- Hinge

d. BOXNHLMBS Wagon:

- Towing Hook
- Retaining Ring

e. BOBRN Wagon:

- Lever Central
- Lever X end
- Lever Y end
- Hopper Door Pinion
- Door Hinge

f. Bevel Wheel for Bobyn Wagon

- g. Spring Loaded Side Bearer for Wagon as per specification WD-62-MISC-17
- h. Handle for Angle Cock
- i. Tier Tie Rod
- j. Control Rod Head
- k. Adjuster Ear
- I. Side Frame Key
- m. Transition Screw Coupling



















1.2. COACHES

- a. Enhanced Capacity Screw Coupling
- b. Hanger for Bogie Bolster Suspension
- c. Hanger Block for Bolster Suspension
- d. Swinging Link with Nut
- e. Anchor Link
- f. Rubber Spring Centering
- g. Center Pivot Assembly
- h. Yaw Damper Bracket
- i. Roll Link
- j. Brake Block Hanger
- k. Knuckle Pivot Pin
- I. Yoke Pin
- m. Shackle Stone
- n. Shackle

1.3. LOCOMOTIVE

Revised Arrangement of Transition Scerw Coupling for Centre Buffer Coupler as per RDSO Drawing No. 2494

1.4. DEFENCE (Belly Bridge Products)

- a. Machine Male Eye Lug
- b. Forged Eye Plate

2. Some other key products in our portfolio:

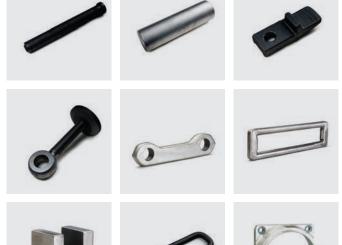
2.1 SCHAKU COUPLER FOR

EMU, MEMU, DEMU & METRO RAILWAYS

2.2 MCA COUPLER ASSEMBLY AND ITS COMPONENTS

2.3 STEEL PLANTS:

a.Different types of Forged Grate Bar for Sinter Plant b.Different type of Crusher Hammer for Sinter Plant





QUALITY & TESTING

Stringent measuring and monitoring systems from raw materials to finished products ensure in-built conformance to quality. All products are compliant with BIS, IEC and various customers' requirements

Our in-house testing facility includes the following:

CHEMICAL TEST

Chemical Analysis by Spectrometer

MECHANICAL TEST

- Hydraulic Fatigue Test MC
- Horizontal Proof Load & Breaking Load Testing MC
- Universal Testing Machine
- Impact Test Izod-Charpy
- Meteorological Microscope
- Rock Well Hardness
- Brinell Hrdness Tester

- Profile Projector
- Deep Frizzer
- Non-Destructive Testing Machine (Magnetic Particle Test)
- Vertical Impact Testing Machine
- Different Types of Measuring Equipment



Brinell Hrdness Tester



Universal Testing Machine



Spectrometer



ACCREDITATION & CERTIFICATIONS

Quality Control & ISO Certification

Quality Control is the most vital pillar of our company. We believe quality always comes first in order to be able to satisfy our customers. Strict quality control is exercised at all levels of production to ensure reliability and complete customer satisfaction. The Q.C Dept. is headed by a qualified and experienced Engineer who works under the guidance of the Manager (QA&I) We are an I S O: 9001: 2015. Certified company by JAS & ANZ



Accreditations & Approvals





PEW ENGINEERING PVT. LTD.

PEW Engineering Pvt. Ltd. was established in the year 1991. It is a multi-product engineering unit of the Lalbaba Group, located in Ghushuri, at the heart of the industrial belt in the state of West Bengal. The company is an RDSO approved supplier for The Indian Railway wagon, coach, and OEMs for various critical Air Brake components like Brake Cylinder, angle cocks, isolating cocks, etc.



PRODUCTS

WAGONS

Air Reservoir

We manufacture five different capacities of air reservoirs from 75 liters, 80 liters, 100 liters and 150 liters as per customer's requirements, approved by RDSO.

Empty Load Device

It is a mechanical device which provides two different leverage ratios to the brake rigging of the wagons for the empty and loaded conditions. Presently we cater to all wagons which use conventional brake system.

Air Brake Cylinder

Brake Cylinders receive pneumatic pressure from Auxiliary Reservoirs after being regulated by distributor valve in case of brake application and develops mechanical brake power by outward movement of the piston assembly.

Available in three different sizes – 228 mm, 300mm and 355 mm

Cut-off Angle Cock

Cut-off Angle Cocks are attached at the end of brake pipes which feeds the pipe on each vehicle to maintain flow of air in the air system during the motion of the vehicle. These cocks are closed while isolating the vehicle from the train.

Check Valve

Check valves are used between feed pipe and auxiliary reservoir to permit flow of fluids or air.



COACHES

Auxiliary Reservoir

Auxiliary Reservoirs feed the brake cylinder through distribution valve in brake application position. For coach application we manufacture 200 liters reservoir.

Centrifugal Dirt Collector

Centrifugal Dirt Collector is provided for the removal of dirt as well as heavy dust particles prior to the entry of air in the system by centrifuge action, both 2 way and 3 way.

Brake Cylinder with Integral Slack Adjuster

These are manufactured in various diameters and stroke length. This is a brake cylinder with integral slack adjuster for application in the brake systems of the Indian Railway. This eliminates the use of separate slack adjuster and reduces rigging & levers to a considerable extent. We supply in 203 mm size

Isolating Cock

Ball type isolating cocks are used to provide facility for cutting of air supply to auxiliary reservoir from feed pipe as well as isolating of the brake cylinder. Isolating cocks are available with vent and without vent.

Drain Cock

The drain Cock is provided with Auxillary Reservoir to drain out accumulated dirt during the service.





QUALITY ASSURANCE

The company's quality policy is to manufacture and supply products of consistent quality and satisfying the customer's needs through continuous improvement of the Quality Management System. The company has been approved for The Quality Management System i.e., ISO - 9001:2008. PEW Engineering Pvt. Ltd. has been an approved source for supply of its products to the Indian Railways, Wagon Builders, OEM by RDSO (Research, Design and Standards Organisation) for more then two decades.

The company maintains its high-quality assurance with the following factors:

- High Strength to Weight Ratio
- High Flexural Strength
- High Resistance to Environmental Extremes
- High Resistance to Chemicals and Other
- Exposure to Corrosive Environments
- High Degree of Design Flexibility
- Outstanding Finish
- Light Weight With Engineering Technology
- Energy Saving



OUR CLIENTS













































RAILWAY EXPORT

Lalbaba Engineering Group has diversified verticals in its portfolio and amongst all its activities we are having a full-fledged export vertical for railway products, being manufactured at Lalbaba Industrial Corporation Pvt. Ltd and PEW Engineering Pvt. Ltd, the two subsidiaries of the Group. These two divisions take care of the railway exports products for rolling stocks for wagons, locomotives and coaches along with track items. We have a vast range of product portfolio which comprises of air brake equipment for wagons, coaches and locomotives and various types of fabricated, forging and cast components. We are also manufacturing various types of Couplers like MCA-DA Coupler, MCA-PH Coupler, ATLAS Coupler, SASCOP Coupler, Locomotive Couplers ALLIANCE Coupler, CBC Coupler and many more. We are also capable of manufacturing tailor made components and couplers based on engineering drawings in-house with our state-of-the art manufaturing facilities. Critical components like Slack Adjuster, Coupler spares, Turnouts, Pandrol clips etc. are also being manufactured at our facilities.

We are approved source for all major components of Wagons, Coach and Locomotives for:



We have major tie-ups with global distribution houses like:

Greco International UK Cim UK & France Holtrade Uk & Germany Bureau Mertens, Belgium Vecturis Belgium Impex Dynamics South Africa Gear Africa Holdings -South Africa Van Rail South Africa ONCF Morocco RTI Turbo Canada Haiduo Railways China Boise Rail USA Comilog - Setrag Group, Belgium and Gabon Smh Rail Malaysia Grindrod Locomotives South Africa BV Engineers USA



LALBABA PROJECTS PVT. LTD.

The Lalbaba Projects Pvt. Ltd. has dedicated unit for undertaking retrofitment, repair as well as refurbishment of Railway Rolling Stock.

ACHIEVEMENTS

- Group did the work of complete furnishing work on 6 DEMU rakes in the year 2014-16 for South-Eastern Railway
- Twin pipe conversion work on 1000+ LHB coaches of SE Rly and E rly from 2016-2020
- Twin pipe conversion work on Freight wagons at more than 30 locations of Indian Railways, so far over 80,000 wagons have been completed starting in the year 2017.
- Now such Twin Pipe conversion work has been started for various container Train operators and other private companies owning rolling stock.





The group has been awarded with contracts, by the Zonal Railways to supply and commission the Brake system to Twin-Pipe on 100,000 Railway wagons.

Accordingly, the group has developed a dedicated workforce of more than 300 technicians and supervisors, to work very closely with all the Zonal Railways at their Workshop and Maintenance depots in Railway yards, all the materials required are sent in a kit form to the sites from plants in Howrah.



The group has now started working with Container Train Operators and other Private sector entities owning wagons. We are thus providing our customers "end-to-end" solutions to convert and upgrade their wagon fleet according to their requirement and ensuring liaising with local Railway authorities for providing a seamless service and least detention to their fleet.

We are also developing capabilities to undertake ROH and POH on Wagons for private operators (subject to regulatory approval from Indian Railway

OUR CLIENTS



















We, at Lalbaba Engineering Group, take our responsibility very seriously towards our stakeholders and our passion to build a value proposition to all our customers in a sustainable business environment. We also understand our responsibility to the communities in which we are operating and towards the natural environment. We pride ourselves in contributing to economic prosperity and social well-being in the communities we call home.

IMPLEMENTATION OF CII YES KENDRA FOR PLACEMENT OF 125 UNPRIVILEGED YOUTH AT HALDIA

We have partnered with CII MCC to ensure that the college implements a successful Electronic Assessment and provide placement to the unprivileged students in Haldia.



BLOOD DONATION CAMP

Lalbaba Seamless Tubes Pvt. Ltd. joined hands with Lions B.B.D. Bag Foundation in a mega blood donation drive organised at Haldia Plant with the support of Lion's Club II and Haldia Sub Divisional Government Hospital.







HOME FOR THE AGED - ANANDAM

A project of Ministry of Social Justice and Empowerment, set up in 2019 at Pancharul, Howrah. Since then, we have been contributing a dedicated monthly amount towards the welfare and development of the Old Age Home.

THE CAREGIVER TRUST'S HOME AT UTTARBHAG

A group of people, bound by the concern that their children with special needs will be all alone after their parents' death, have come up with the idea of a community living centre for the families in Baruipur's South Ramgarh, Canning Street.



The Caregiver Trust tries to address the

principal parental anxiety "what after us?" Supporting this cause, Lalbaba Group has been funding this society for the last few years.

FREE COACHING CENTRE FOR THE UNDERPRIVILEGED & EDUCATIONAL ASSISTANCE TO THE NEEDY STUDENTS

The project aimed to promote & inculcate education among underprivileged children, and create the process of embarking these children into the mainstream in a sustained manner & to help them emerge as productive assets.

The free coaching centre funded and supported by Lalbaba Seamless Tubes has aided 25+ students from poor economic background get the basic education and perform well and make progress into the higher tiers of the education system.



ENSURING SUSTAINABILITY

PRIORTISING SAFETY

Lalbaba Health & Safety policy is the foundation for supporting a thriving 'safety first' culture in all its plants and manufacturing facilities as well as Project sites.

To achieve the objective of "Zero Loss Time Injury" we have implemented the following:

- Build safety leadership capability from senior leaders to front line supervisors.
- Develop the competency of all employees to proactively identify hazards and manage risks to prevent safety incidents.
- Ensure contractor safety risk management.
- Integrated emergency response
- Maintaining Occupational Health and Industrial Hygiene



EMPLOYEE FIRST

Contributing positively to the quality of life of the people and communities is fundamental to Lalbaba's approach to business.

Today, the Human Resource Management function is a strategic partner in the business.

- Work from home and extended maternal leave.
- Welfare and improvements for the employees
- Feedback initiatives from the Labour union
- Employee Committees and Welfare Committees to improve facilities and working environment
- Knowledge sharing sessions on regular basis with involvement of senior managers and subject experts to build workforce capability.
- A continuous emphasis on feel-good initiatives like reward and recognition to keep the morale high of the line supervisors and shop floor workers.
- A conscious effort is underway for gender diversity at all levels and to increase the number of women in senior leadership roles.

STAYING GREEN

With sustainability at our core, we have adopted new and improved measures that bring us one step closer to a greener environment. We achieved this feat by switching to Induction Based Furnaces.

The forging facilities at the Uluberia Plant, WB have been upgraded with the commissioning of two brand-new state-of-art Continuous Induction Forging Furnaces with a capacity of 250kW and 400kW for billet heating. The induction heating process will improve the quality and consistency of the product manufactured by the company for all its customers.

It contributes to migrating towards a greener and more environment-friendly manufacturing process in line with the stated policy of the Government



ENERGY EFFICIENCY

In March 2022, the project of 1 MWp Roof Top Solar PV facility got commissioned at Lalbaba

Seamless Tubes - Haldia Plant in West Bengal. It has started generating 3500 Kw/hr daily which is being used for the power required inside the plant. We have used a 545 Wp Trina Solar Monocrystalline PV module for this project.

By installing the solar panels, we have reduced the net carbon footprint at our Haldia manufacturing plant by 1100 Mt of CO2 equivalent per annum.







Corporate Office: 27, Shakespeare Sarani, 3rd Floor, Kolkata 700017

Haldia Unit Kashberia, Bardhanyaghata, Midnapore (E), Haldia -721 657, W.B. **Uluberia Unit** Vill-Palora, Mahisrekha, Uluberia, Howrah-711303, W.B **Ghusuri Unit** 40/107, Joy Bibi Road, Ghusuri, Howrah -711107, W.B. Ahmednagar Unit Plot No. F - 48, Ahmednagar, MIDC adustrial Area, MH - 41411

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