



ENGINEERS
Lets Convey Quality



**Performance
Dependability
Durability
Quality**

www.ibengineers.co.in

ABOUT US

Established in 1986, I & B today has grown from a humble beginning to India's premier manufacturer of Bulk Material Handling Equipments like Belt & Tripper Conveyor & Conveyor Components like Idlers, Pulleys etc. I & B has set unique standards in quality performance & durability which has ensured that brand I & B has become symbolic mark of reliability & efficiency in Cement, Steel, Power, Port, Mining & various other industries in India.

Our product range includes design, engineering, manufacture & supply of:

1. Belt Conveyor
2. Mobile / Fixed Tripper
3. Roller Chain Conveyor
4. Screw Conveyor
5. High Angle Conveyor
6. Telescopic Belt Conveyor
7. Truck Loading / Unloading
8. Equipment for LPG Cylinder / Unit Items
9. Bucket Elevator
10. Apron Feeder
11. Belt Feeder
12. Rack & Pinion Gate
13. Rod Gate
14. Diverter Gate
15. Flap Gate
16. Telescopic Chute
17. Bearing Housing & Sealing
18. Conveyor Idler Assemblies
19. Drums & Pulleys

Our Team has rich management & engineering experience in bulk material handling industry. Backed by continuous R&D product intelligence, customer interaction, manufacturing excellence & design competence, team IB is well equipped to produce finest quality products suited to match clients technical and commercial expectations.

Our dedicated Design & Engineering Department is well equipped with latest hardware & software tools for designing, engineering, drafting & drawing. Our highly experienced team of Innovative design engineers is supported by specially designed software for designing based on national & international standards like IS, JIS & CEMA.

Our modern manufacturing facilities at Unit-1 Baltikuri & Unit-2 Jungalpur located in the industrial belt of Howrah, near Kolkata is spread in an area of about 51000 sqft with about 30000 sqft under crane area is well equipped with state of art manufacturing facilities. To ensure that every I & B product exceeds client expectations on quality performance and on time delivery.

Our quality assurance plan ensures stringent quality control norms right from procurement of raw materials to packaging of finish products Our QAD Department is committed to make brand IB synonymous to quality.



SEALINGS

Salient features of I & B Sealings:

The bearing housings are manufactured from Extra Deep Drawn CRCA / HRCA sheets. The Bearing seating, flange diameter and back facing of the bearing housing are machined in a single setting on a CNC machine to ensure absolute concentricity.

The set of five sealing system consists of :

- Nylon-6 Multi-lip External & Internal Labyrinth Seal
- Nylon back seal to be placed at back of the bearing to avoid grease entering inside the pipe
- Metallic Dust Cover with neoprene rubber seal and
- Nylon 6 Rain Cap to prevent water and dust from entering inside the idler.

Spring Steel Grease Seal Rings for avoiding spillage of grease from bearing



CONVEYOR IDLER ASSEMBLY

Idlers are the heart of a conveyor, since reliability and longer life can reduce down time for the conveyors, effect reduction in power consumption and increase belt life. I & B idlers operate with very low coefficient of friction and are designed for reliable and guaranteed performance of upto 60,000 hours

We manufacture all types of Idlers/Roller like

- Troughing / Flat Carrying Idlers
- Troughing / Flat Impact Idlers
- Self Aligning Carrying/Return Idlers
- Flat / V Roll Return Idlers
- Self Cleaning Return Idlers
- Transition Idlers
- Garland Idlers

Salient features of I & B Rollers:

- Rollers are manufactured from ERW pipes as per IS: 9295, which are specially made for Idler applications. These pipes are specially made with tight tolerances related to straightness and ovality.
- Pipes are bored at both ends simultaneously using a special purpose Double Headed Boring machine. This will maintain concentricity of shaft at both ends of idlers and will limit the run out of the idlers.
- The bearing housings are manufactured from Extra Deep Drawn CRCA / HRCA sheets.
- The Bearing seating, flange diameter and back facing of the bearing housing are machined in a single setting on CNC Lathe Machine to ensure absolute concentricity.
- Bearing Housings are welded to the pipe at both ends simultaneously by CO2 welding.
- Roller shafts are made of bright bar.



DRUMS / PULLEYS

Rubber & Ceramic Lagged

At I & B, all pulleys are custom designed to suit customer's specifications and precision engineered for perfect performance. I & B pulleys are suitable for continuous operation and designed as per relevant IS and other international standards.

Salient features of I & B Pulleys are:

- Pulley shafts are made of C45 steel and ultrasonically tested.
- All Pulleys will be stress relieved before machining.
- Out of roundness of shell is maintained as per IS- 8531
- All pulleys are statically balanced.
- Pulleys are provided with minimum 8mm thick fillet weld joint.
- The lagging sheets are of natural rubber and are hot vulcanized to the shell.

IB's Ceramic Pulleys are the best solution to all industrialists while they stop trying to overcome the issues of belt slippage and premature wear as well! No material build up resulting minimum belt misalignment is its added advantage. Being available for any belt width and pulley diameter, our Ceramic Pulleys cater an excellent performance irrespective of environmental condition where it'll be installed as well as any conveyor parameter e.g. capacity, speed, length etc.



BELT CONVEYOR

I & B Designs, Manufactures, Supplies & Supervises Erection of various Flat and Troughed Belt Conveyors for handling of Bulk Material like Coal, Cement, Iron Ore, Clinker, Lime Powder, Fertilizers etc.

We have the experience and expertise to provide "Concept to Customer" solutions in Belt Conveying for various industries and applications. From very short and steep to long conveying, our conveyors can be designed to handle different terrains and tough operating conditions. We have supplied upto 3000mm wide belt conveyors and have in house design capability for conveying capacity of 10000 TPH.

Our Multi-point Conveyor Design Check, ensures that the smallest aspect of conveying is factored in to ensure client have a trouble free performance and life for the conveyor.

The fact that we manufacture the Conveyor Components like Idlers, Pulleys, & Technological Structures also in house, ensures that the quality standards are consistent and you have a reliable partner for genuine spares and replacements in future.



TRIPPER CONVEYOR

Tripper Conveyors from I & B are uniquely designed and manufactured for various Belt Widths and applications. Our plant is equipped with special test beds to undertake complete assembly and trial run for the Tripper assembly.

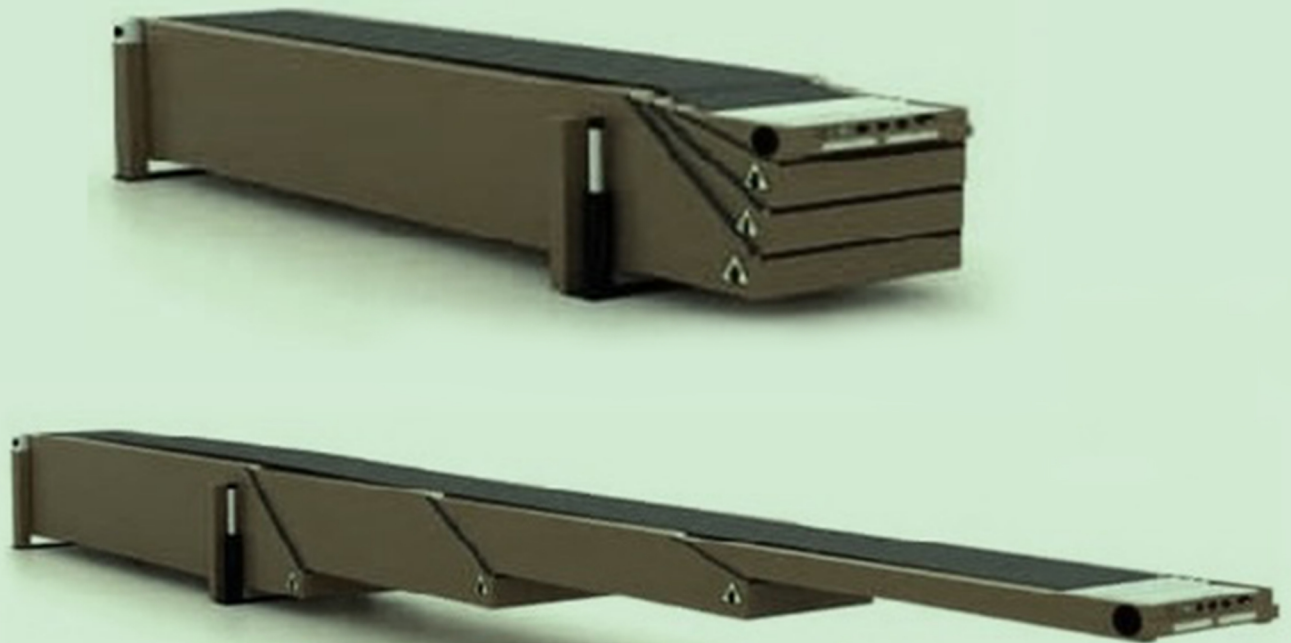
The unique design ensures minimum erection time and integration with the belt conveyor. As in other conveyors, idlers, pulleys, and all fabrication work is done in house which ensures a quality product at most reasonable cost.



TRUCK LOADING TELESCOPIC CHAIN CONVEYOR

This type of Telescopic Conveyor is widely used in various modern LPG plant to load filled cylinders to the truck as well as unload empty cylinders from truck. Use of this conveyor is very useful to minimize the numbers of workers as well as facilitate cycle time both for LPG as well unit handling items during loading and unloading operational of the LPG cylinders.

Telescopic Chain Conveyors made by IB are custom designed to suit client's requirement. Our uniquely designed and shop tested equipments are hazard free and steady to carry the load of material, even at extended condition. Our vast experience makes us capable to cater very economic Telescopic Chain Conveyors as well as ensures compact design, quick erection, smooth operation and easy maintenance of the equipment.



TELESCOPIC BELT CONVEYOR

Telescopic Belt Conveyor is special equipment developed by I&B to load or unload any type of parcel, small cargo etc. to or from truck, trailer or any other vehicles. However, it's not mandatory that IB's Telescopic Belt Conveyor is used only at dock, loading or shipping areas rather it can be utilized at any type of case related to material conveying based on the requirement of customers, even at different levels. It has high demand in all industries which still depend upon manual labours.

Our Telescopic Belt Conveyors are specially designed by our highly experienced design team to cater its trouble free operation to the end users. It comprises few numbers of steel sections which remain overlapped by each other as such big space is also not occupied while it's not in use. It's robust in construction and with its smooth boom movement it can reach inside the vehicles to make the loading or unloading process easy.



ROLLER CHAIN CONVEYOR

Roller to Roller Chain Conveyor is well known industrial conveying equipment used to move various types of materials such as parcels, drums etc. The conveyor comprises rollers which are rolled by motors by means of numbers of chain loops.

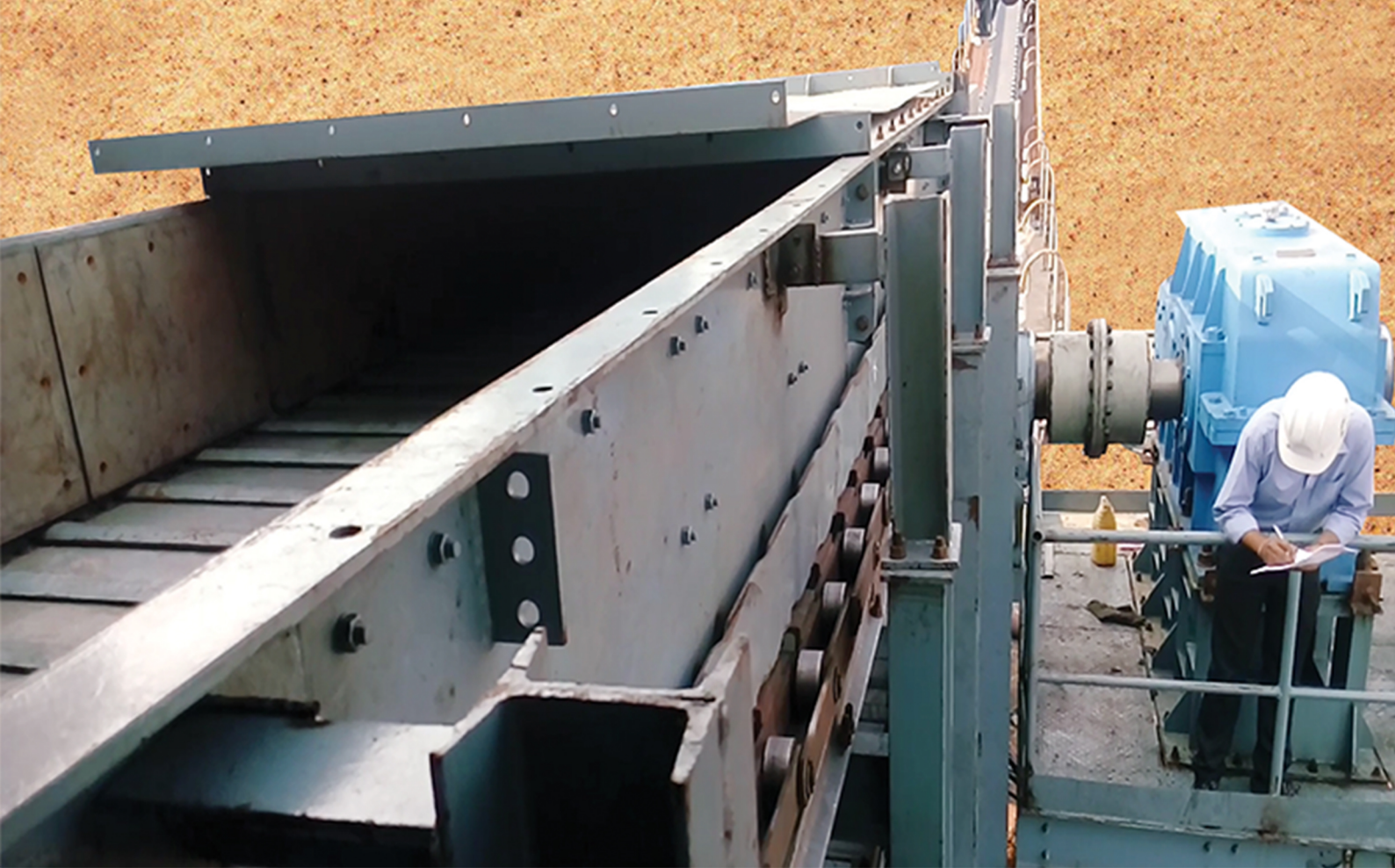
Roller Chain Conveyors from I&B are distinctively designed by our expertizing group of design engineers, manufactured and tested in our workshop by latest technology and machineries. Our expertise also ensures less power consumption as well as smaller pitch of chain & sprocket resulting cost effective but most efficient Roller Chain Conveyor System in line to the requirement of customer.



STEEP ANGLE BELT CONVEYOR

Steep Angle Belt Conveyor, also known as High Angle Belt Conveyor, is used to lift any bulk material at a very high inclination varies from 00 to 900. In this modern age, it is high demanding equipment which industries are asking for to replace highly maintenance prone Bucket Elevator.

IB's High Angle Belt Conveyor is comprises series of specialized buckets mounted on the Belt to convey materials vertically with zero spillage. Our exclusive design creates efficient resistance on return side supports with very less wear and tear even for abrasive or corrosive materials.



APRON FEEDER

Apron Feeder is the most preferred choice for any bulk material all over the world while it's to be conveyed in addition to controlled feed to the down-stream as well as to extract from a bunker or hopper which is basically beyond any other feeders. Its rugged surface ensures its capability to take heavy column load of the material stored in the bunker.

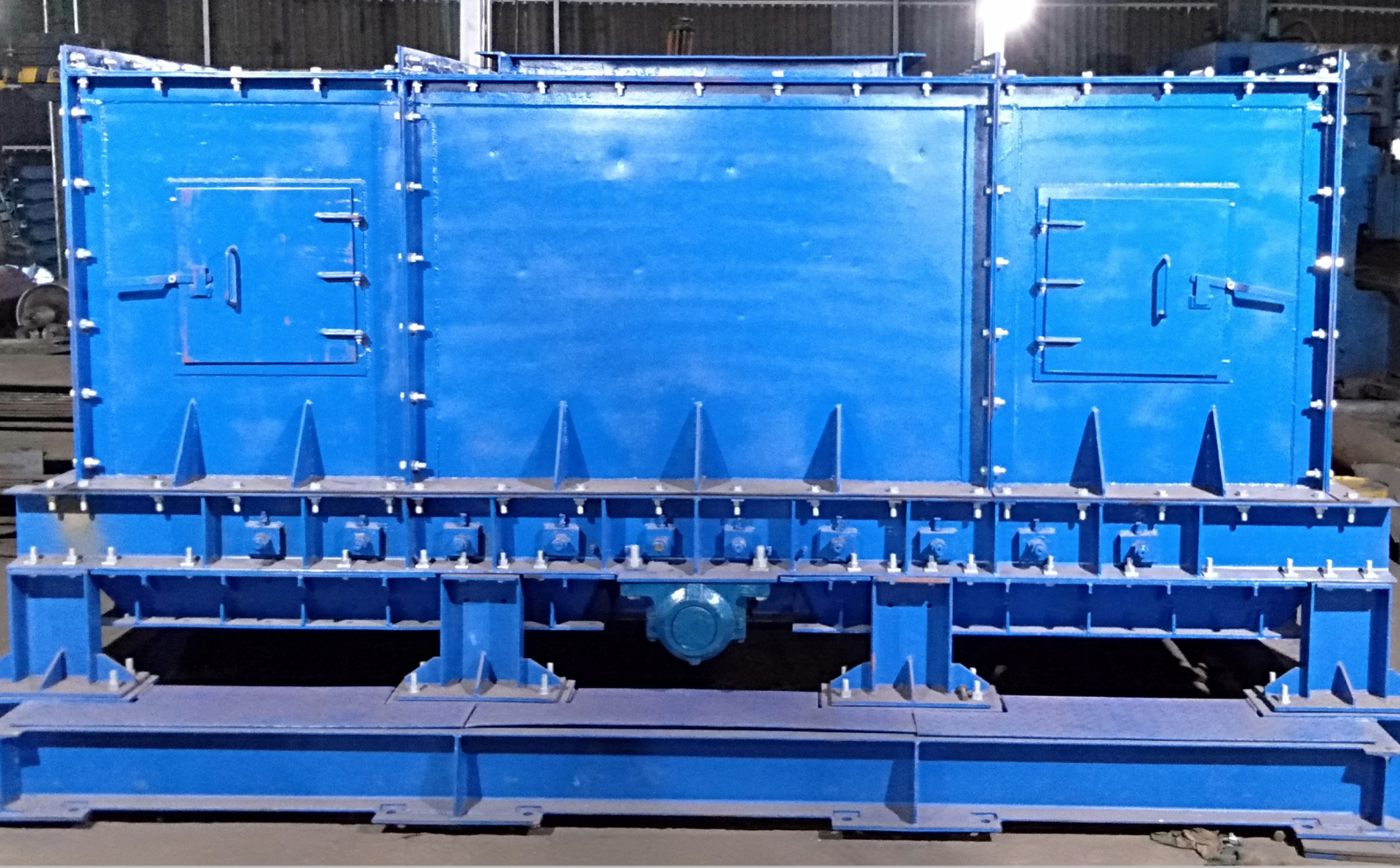
Apron Feeders from I&B confirm no leakage due to its special design. It is robust in construction with a long life for continuous application. IB's Apron Feeders ensures highest efficiency of Crushers while feeding it and in case it feeds to downstream system, pick operating performance of the system is guaranteed.



BELT FEEDER

Belt feeder is the short form of belt conveyor which is applicable to extract as well as convey bulk material from a storage hopper. Integration of a variable speed drive provides ultimate material flow regulation.

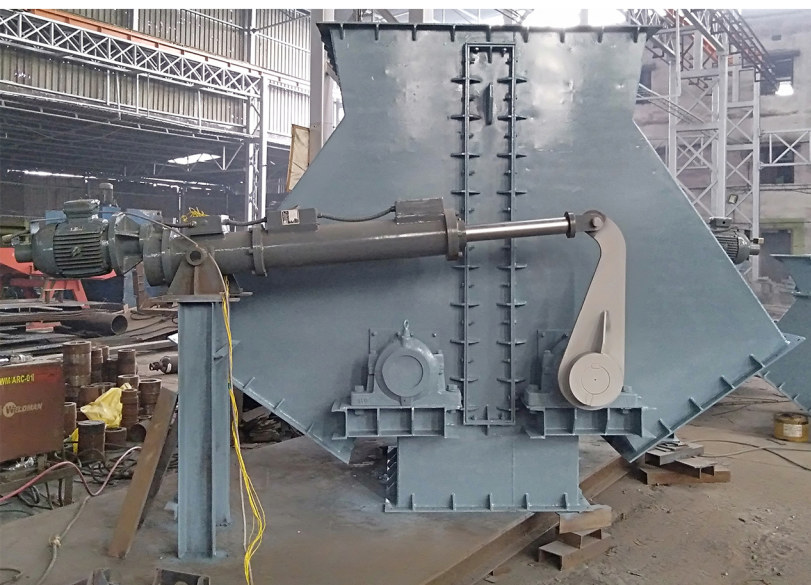
IB's Belt Feeder comprises robust heavy duty impact rollers, very good quality belt etc. depending upon the capacity and geometry of the feeder as well as the characteristic of material being moved. Our complete Belt Feeder is manufactured, assembled and tested in our own shop.



DIVERTER GATE

Flow Diverter Gates from I&B are uniquely designed and manufactured for various belt widths and applications. They provide full gravity flow of the materials towards any of the two outlets both simultaneously or individually as required with both electrical and manual operation.

They are robust in construction and suitable for smooth, efficient and perfect working even in tropical humid and dust environments prevailing in plant. Our Diverter Gate is also capable to trip off in case of material jamming during its travel on either direction to avoid major damage of the equipment.



FLAP GATE

Flap Gates from I&B are uniquely designed and to suit for and capacity of operation as required by the client. It diverts material towards a specific outlet in a two-way or three-way transfer chute without any leakage of material towards other outlets to prevent unwanted material deposition there being operated manually or electrically.

Our gates are robust in construction and suitable for trouble free operation even in frequent switching. The gate travel is generally in a range of 55° to 70° to maintain smooth and continuous material flow. Our Diverter Gate is also capable to trip off in case of material jamming during its travel on either direction to avoid major damage of the equipment.

INFRASTRUCTURE

Our Manufacturing facilities Unit-1 & Unit -2 are located at Howrah Baltikuri & Jungalpur respectively (about 20 kms from Kolkata, India). Our plants are equipped with state of the art manufacturing and testing facilities to enable us deliver the best products to clients in the least possible time. These plant are spread over an area of 51,000 sq. ft., with under crane area of 30000 sq. ft. and have dedicated manufacturing facilities and various CNC SPMs to produce large conveyor and conveyor components like Idler Assembly, Drums & Pulleys, Technological Structures etc.

Key Manufacturing facilities include :

- SPM Double Head Pipe Simultaneous Boring Machines
- SPM Double Ended Welding Machine
- CNC for bearing housing machining
- Hydraulic Idler Assembly Machines
- Hydraulic Deep Drawing Press
- Idler Freeing machines
- Sand Blasting Plant
- Series of Lathe machines, maximum length of 5 meters
- Shell Rolling machine
- Various types of welding and fabrication equipment
- Various types of drilling machines
- Pug cutting
- Shearing & Punching Machines
- Test bed for Trial run and Assembly

Key Testing facilities include :

- Friction Testing Machine.
- Water Ingress Testing Machine.
- Dust Ingress Testing Machine.
- Break Off Force Testing
- Thickness Testers
- Hardness testing equipment for rubber rings
- Dye Penetration testing



OUR VALUED CLIENTS





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