

The India Thermit Corporation Limited



"Bearing Division"



Company Profile

THE COMPANY

The India Thermit Corporation Limited, established in 1951 is a pioneer company engaged in the welding of Railway Track. The company was also engaged in many other activities since its inception like repair welding of broken heavy industrial components, manufacturing of tin base and lead base white metals conforming to National and International specifications, manufacturing and relining of bearings, bushes, pads, liners etc., and also machining of components like tools, dies, jigs, fixtures etc.,.

The "Bearing Division" of the company was started in the year 1984, at C-27/28, Panki Industrial Estate, Kanpur. The Bearing Division has undertaken numerous challenging jobs and done import substitution of many white metal lined bearings.

We have complete infrastructure for manufacturing & relining of bearings to the best international standards. Our plant is equipped with high precision machine tools and highly skilled manpower.

We are serving OEM's and all types of industries, where white metal lined bearings are used viz., Power Plants, Steel Plants, Cement Plants, Fertilizer units, Chemical Plants, Sugar Mills, Metal and Mining sector etc.,.

Our quality control section is well equipped with necessary testing facilities like Chemical testing, Physical testing, Non- destructive testing, 25-channel Spectrometer, Micro & Macro analysis etc. and measuring devices for dimensional inspection to maintain and ensure the quality of raw materials and finished products for meeting the requirements of specification / drawing. The quality Management System of the company is certified by M/s International Certification Services (Asia) Pvt. Ltd., for ISO 9001: 2000 standard.

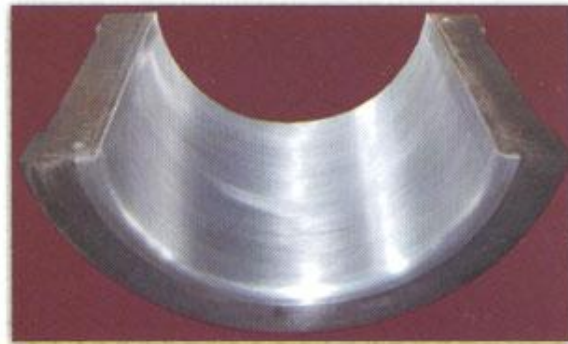
THE PRODUCT

We manufacture bimetallic bearings, bushes, pads, liners etc. in different sizes & shapes for various applications and industries. Our product range is as under -

By weight of the job	By size of the job	By composition of the lining material
Up to 10,000Kg.	Up to 3.5m in diameter	Any material as per the customer requirement



We are capable of manufacturing any kind of bimetel bearing as per the requirement / drawing of the customer, falling within our production capacity and meeting the requirements of various industries viz., Power generation, Iron & Steel, Fertilizer, Sugar, Cement, etc.,



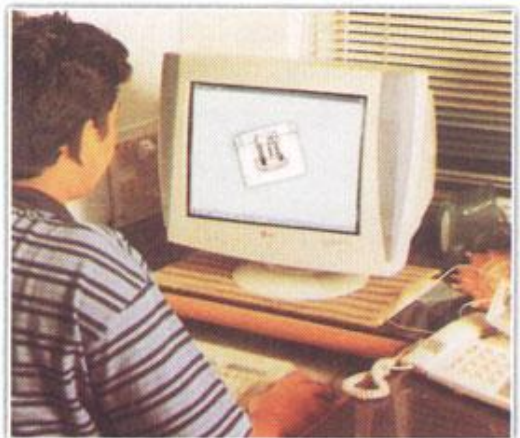
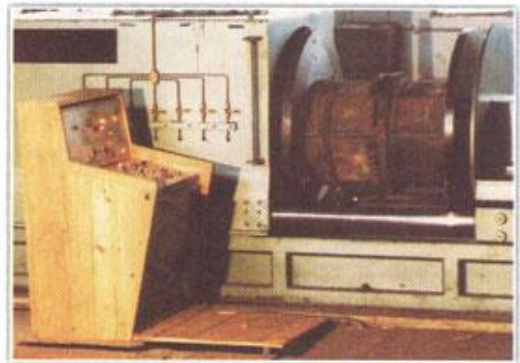
White metal for bearing lining is manufactured by us using virgin raw materials conforming to various National and International standards viz., IS, BS, ASTM, DIN, JIS, GOST, ISO etc., and also as per special grades to meet customer's specific requirements



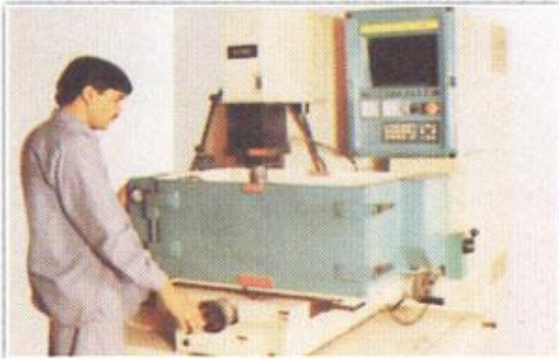
THE PROCESS

Our shops are well equipped with high precision equipment for following processes:

1. Cleaning & degreasing
2. Dehydrogenation & stress relieving
3. Shot Blasting
4. Tinning
5. Centrifugal casting / gravity casting / thermo soldering
6. Conventional machining with high precision (upto 10 microns)
7. CNC machining with high precision (upto 5 microns)
8. Electric discharge erosion machining (EDM) upto 5 microns
9. Programming & designing on pro-engineer CAD - CAM Software
10. Testing and Inspection facilities for maintaining the quality of product as per the requirement of customer



MANUFACTURING FACILITIES



Major Facilities

Babbitting

- Shot Blasting.
- Heating and dehydrogenation furnaces (Electric), melting furnaces.
- Centrifugal Casting machines, programmable with hydraulic clamping, capable of accommodating 1500 mm dia. bearings.

Turning

- CNC lathe.
- Modular design facing lathe, for jobs upto 3000 mm dia.
- Vertical turret Lathe cum boring machine with hydraulic tracing (copying) attachment.
- Jumbo Lathes (bed length upto 6300mm)
- Centre Lathes

Milling

- CNC Vertical machine centre
- Horizontal boring machine
- Universal Milling machine
- M1TR Milling machine

Other Machines

- Electric Discharge Erosion machine (EDM)
- Shaper machine
- Radial drill and Pillar drill machines
- Surface grinder, Tool & Cutter grinders
- Power Hack saws

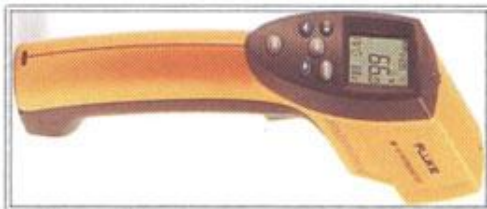
QUALITY CONTROL FACILITIES

In house inspection of materials is carried out at different stages right from raw material procurement to in-process and finish stages of manufacturing to ensure excellent quality of end product.



Facilities for in house R&D are available and regular study is being done for the improvement in product quality to match developments in National and International arena. Olympus make metallurgical microscope is available with image analysis software to study the micro structure of shell and babbitt metal.

White metal is checked for its chemical composition on **25-channel Spectrometer** having channels for determining the elements being present in white metal viz., Tin, Lead, Antimony, Copper, Cadmium, Nickel, Arsenic, Iron, Aluminum, Bismuth, Zinc etc.,



For better bonding between the backing material and lining metal Tinning and Babbiting is done at controlled temperature by using infrared thermometers.

Bonding between backing materials and white metal is checked by Ultrasonic flaw detector, Liquid dye penetrant and magnetic particle testing methods as per relevant National and International standards or as per customer's specific requirements.



Physical testing facilities such as Tensile Strength, Yield Stress, Elongation Percent, Hardness Testing (Brinell, Vickers & Rockwell) etc., is available. The Shell procured for manufacturing the bearings, bushes, liners etc., are tested for its' conformance to National / International specifications or as per the Customer's requirement.

SOME PRODUCTS MANUFACTURED BY US



SPLIT BEARING FOR ROLLING MILL



MOTOR BEARING - 200mm BORE



**ONE SET OF SMALLEST PADS OF
STEAM TURBINE**



BUSH FOR STEEL PLANT



JOURNAL PADS OF STEAM TURBINE



COAL MILL LINER FOR POWER PLANT



BEARING WITH REPLACEABLE PADS



CERTIFICATE OF COMPLIANCE



This is to certify that the
QUALITY MANAGEMENT SYSTEM of

THE INDIA THERMIT CORPORATION LTD. (BEARING DIVISION)

C-28, Panki Industrial Estate, Site-1, Kanpur - 208 022, Uttar Pradesh, India.

has been assessed by International Certifications Services (Asia) Pvt. Ltd. and registered
as complying with the requirements of the following International Standard :

ISO 9001:2000

The Quality Management System applicable to:

- Scope : 1. Manufacturing And Relining of White Metal Lined Bearings, Bushes, Pads, Liners.
2. Machining of Components e.g. Tools, Dies, Fixtures, Jigs.
3. Manufacture of Small Track Machines For Railways.

Registration No. : RQ91/3869
Registered Date : 25th September, 2006
Valid for : 3 Years
Expiry Date : 24th September, 2009



S. K. Kadi

Managing Director
International Certifications Services

Accredited by Joint Accreditation System of Australia and New Zealand

Validity of this certificate is based on periodic audits of the management system defined by the above scope and is contingent upon prompt, written notification of significant changes to the management system and/or its components thereof shall be immediately communicated to ICS.
Further clarifications regarding the scope of this certificate and the applicability of ISO 9001 : 2000 requirements may be obtained by consulting the above certification body.

ADDRESS

**C-27/28, PANKI INDUSTRIAL ESTATE
KANPUR 208022, U.P. (INDIA)**

Phone : 0512 2691523, 2691927; FAX : 91-512-2691524

e-mail thermitpanki@sify.com

web site www.indiathermit.com