
COMPANY PROFILE

❖ FACILITIES

1. Annual Capacity of manufacturing quality casting of 360 metric tons.
2. Job Handling:
 - Weight: Minimum weight of casting per piece: 10 Grams.
 - Maximum weight capacity per piece: 51 Kilogram.
 - Surface Finish: Varies from 3 to 6 Microns Ra.
 - Dimensional Tolerance: The linear Tolerance of +/- 0.25 mm up to 25 mm and +/- 0.25 mm for each additional 25 mm thereafter.

❖ TECHNOLOGY

Our technology is totally indigenous and in modified form, from that of the existing recent developed technology, used in major developed countries. One of the striking features of our unit is that it is using indigenous materials for most of its application. Synthetic wax used is produce patterns with water- soluble wax and urea, and ceramic for core. Both water based colloidal silica and alcohol base Ethyl Silicate binders, are used with Zircon, Zirconium dioxide, Fused Siliminate, Fused Silica and Aluminum Silicates as fillers and stucco depending on the size, shape, and metal selected for construction of casting. Ammonia drying can be applied for quick drying / setting of the moulds.

❖ TOOLS DESIGN AND MANUFACTURING

Well sourced tool rooms are developed to manufacture and modify multi cavity complex dies. The basic facilities are comprised of the following:

- Basic machines like CNC turning VMC Milling, Lathe, Drilling, and other miscellaneous machines.
- Basic Instruments like Digital Vernier, Height Gauge, Micrometer, Granite Surface Plate, etc.

Since we have been in the field of mould, since several years, we have close contacts with the good tool rooms situated in our vicinity which are equipped with machines like Wire cut, Spark erosion, 3 D Pantograph, CMM, etc. to execute our critical requirements. In order to handle the most critical and intricate design we seek these external facilities described above.

❖ MELTING AND ALLOY MAKING

Melting department is equipped with "Medium Frequency Induction Melting Furnace" supplied by Inductotherm (India) Ltd., Ahmedabad for quick melting and alloy making at high temperature. We make our metals / Alloys which suit all customers' specific needs. Our melting department is attached with an in-house well-equipped laboratory with spectrometer, to produce accurate composition of alloy castings. We make castings of high alloys like Hastalloy, Stallite, and Alloy 20 apart from many stainless steel and carbon steel grades etc.

❖ Machining and Finishing

We have in-house machining facility comprising of CNC, VMC, Conventional drilling and lathe etc. well-resourced with modern checking equipment's like Vernier calipers, micrometers, qualifying gauges etc. to produce finished castings. We also have in-house facility for electro-polishing and passivation and Zinc plating.

❖ INSPECTION AND QUALITY CONTROL

Inspection is conducted at three different stages by qualified persons in our quality control process.

- Inspection of incoming raw material and consumables.
- In-process inspection including dimensional inspection of all patterns, slurry, coating applied, it's assembly etc..
- Inspection of finished products dimensionally, visually, physically and chemically.

Further we supply the castings duly heat treated as required by our customers. Our heat treatment furnaces are approved under stringent norms of API-6 standards

❖ Facilities available.

Following **Quality control equipment's** from standard vendors are procured for in-house testing of castings and all these are calibrated periodically including the heat treatment furnaces and other heating elements with their relevant standards.

- Optical Emission Spectrometer
- Universal Testing Machine
- Hardness Testing Machine
- Die penetration Test.
- Magnetic Particle Test.
- All Types of Measuring Instruments.
- Coordinate Measuring Machine.

NDT Test which can be conducted on specific casting requirements:

- Micro Structure, Crack Detector, and Impact Tests:
- Radiography and Ultrasonic test:
- Salt Spray Test, Inter granular corrosion test etc.

❖ HUMAN RESOURCES

We have strong technical personals that are backed with decades of experience in Investment Casting to strengthen our organization. All qualified and experienced personals are employed to head the departments such as Process, Melting, Fettling, Development, Machine shop, Quality Assurance etc.

❖ CERTIFICATIONS & APPROVALS

- IATF 16949
- ISO – 9001 – 2015
- PED 2014/68/EU
- AD 2000 Merkblatt W0
- RoHS, approved by TUV
- IBR Approved

We are sure that now you have a brief overview of the company and our quality commitments.

**Best Regards,
For, Apurvi Industries**