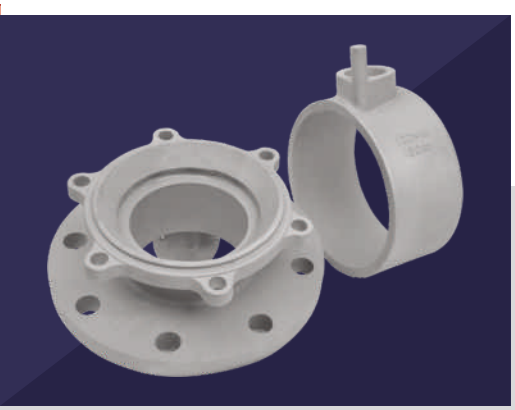
A COMPLETE RANGE OF
INNOVATIVE PRODUCTS FOR

INVESTMENT CASTING







LUMINOUS
TECHNOCAST

LUMINOUS TECHNOCAST PVT. LTD.

www.luminoustechnocast.com

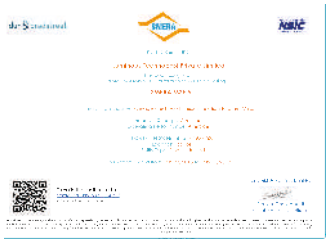
About Us

Ours is an engineering group, engaged in investment casting since 2015. Having been catering to a host of domestic as well as international markets, we have the luxury and the advantage of highly qualified and experienced manpower, totally dedicated to high precision and perfection. We have all the modern facilities to augment our production and to keep pace with the times. We are well equipped to meet international standards. Here, we are together with joined hands, committed to contribute our bit in the development of the nation and march well ahead in the industry.

Goal of Our Company

- On time delivery
- Improved productivity
- Enhanced human skills
- Reduced rejection and wastage





Design and Development

- Development of components as per customer's sample drawing and specification.
- We have in house capabilities to design products and manufacturing process.
- CAD & CAM softwares are used for designing and machining.
- In consultation with the customer, we can redesign the products to improve the quality of products at a reasonable price.



Infrastructure

Land area: 28000 sq. ft.

Administrative office: 3500 sq. ft.

Product Capabilities

Production Capacity: 50 Ton/Month

Product Range:

Weight: 10gm to 150 Kg. per pc.

Minimum thickness: 3mm

Max size: Ø750XH750X750mm max.

Dimensional Tolerances

These tolerances apply as general. Closer tolerances can be achieved depend upon part geometry and application of component.

Up to 25mm	- ± 0.12mm
25 to 50mm	- ± 0.25mm
50 to 75mm	- ± 0.38mm
75 to 100mm	- ± 0.50mm
100 to 125mm	- ± 0.62mm
125 to 150mm	- ± 0.76mm

Dimensional Measuring Instruments

- 0-150mm Digital Vernier Baker
- 0-300mm Digital Vernier Baker
- 0-600mm Vernier Baker
- 0-25mm Micro Meter
- 25-50mm Micro Meter
- 0-300mm Height Gauge
- 0-300mm Depth Gauge
- Inside Outside Caliper
- Inside Outside radius Gauge
- Combination Set
- Surface Plate





Process

Preparing the 3D Model from sample & drawing.

Submission of 3D Model to customer for approval and necessary correction and approval as per customer requirement.

Die Tool Manufacturing: A Single or Multi cavity of product is prepared in form of metal with adding all the contraction of wax & metal to make wax pattern, Which will match shape & dimension of casting parts.

Wax Injection: Virgin wax in semi liquid form is injected into Single or Multi-Cavity die tool by using Wax injection press (Fully Auto, Manually Operated). These processes will give wax pattern which will be the model of parts intended for casting.

Wax Pattern Assembly: Clean Wax pattern are assembled on Runner with all handling and knock off arrangements for next processes. This process is backed by Methoding Engineer and Supervisor.

Shell Building: First, Primary Coating get applied on wax-pattern and after that get assemble by using ceramic slurry & sand casting. Surface finishing depens on Primary coating & wax pattern surface. Then repeated Back-up coating get applied with defined drying time to form a self supporting "Shell".

De-Waxing: At De-Waxing stage wax are melted out by applying heat (Using Auto-Clave). Now, shells having cavities inside.

Melting & Cast shells: Shells get pre-heated at specific temperature & time. Specific molted metals get melted in Induction melting furnace (With 350 & 150 kg. crusible.) De-gassed & De-slaged Molted metal get poured in pre-heated shells at specific temperature.

Cast shells release: After cooling of cast shells, ceramics are removed by mechanical vibration and then parts get separated by cut-off machines or gas - arc cutting machines.

Castings: Separated parts get Heat-Treated, Gate grinded & Surface cleaned depending upon requirements of finish products.

Final Inspection: Finished Products of investment casting are inspected visually & dimensionally as per customer supplied drawing, purchase order & technical data sheet.

Packing & Dispatching: As per approval from party, the packing and dispatching of products get done.

NOTE

- We have a special designed ERP system to run the foundry processes.









Type of Product

- All types of industrial valve products like
  - Ball valve parts
  - Butterfly valve parts
  - Check valve parts
  - Gate valve parts
  - Globe valve parts
  - Plug valve parts
- All type of pump products like Casing, Impeller, Cover etc...
- General Engineering parts
- Dairy parts
- Fitting parts
- Lifting parts
- Auto parts
- Orthopedic implant parts



Testing Facilities

CHEMICAL ANALYSIS

Spectrometer: Fe, Ni, Al, Cu, Co base Spectrometer up to 45 elements with Nitrogen analysis



MECHANICAL TESTING

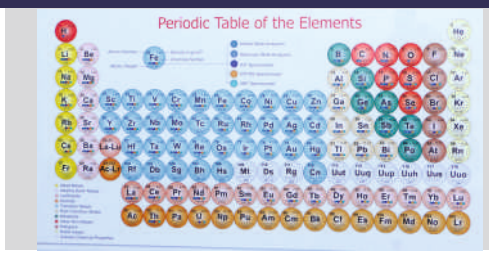
- Universal Testing machine 20 KN capacity with electronic extensometer
- Impact Testing : Impact Testing Machine up to 300 J
  Test temp range - Ambient to -196°C
- Hardness Testing: Brinell & Rockwell Hardness Tester
- Inter Granular Corrosion Test: Unit for IGCT practice A,B,E, C & F (Done in NABL)
- Microscope: Microstructure Examination (Done in NABL Lab if customer required)



NON-DESTRUCTIVE TESTING

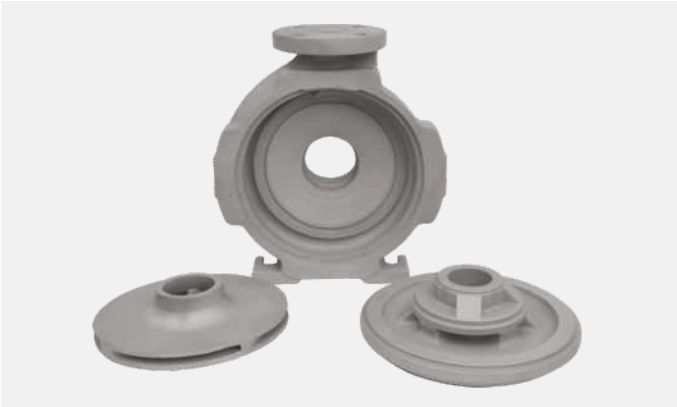
- Dye (Liquid) Penetrate Test
- Magnetic Particle Testing
- Radiography Testing (Done in NABL Lab if customer required)
- Ultrasonic Testing (Done in NABL Lab if customer required)

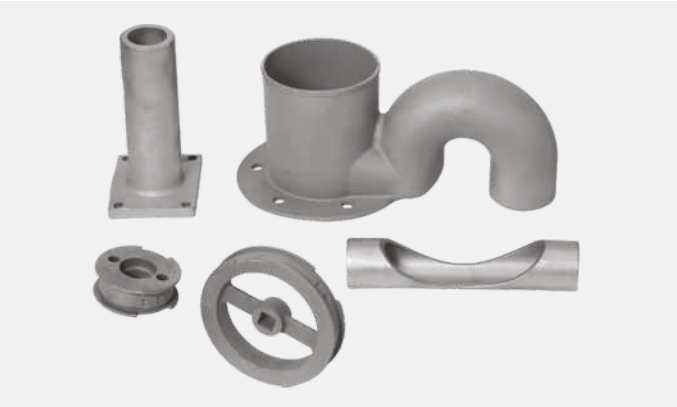


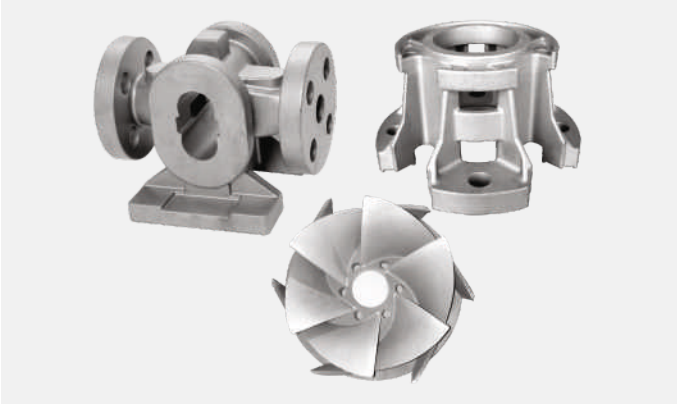


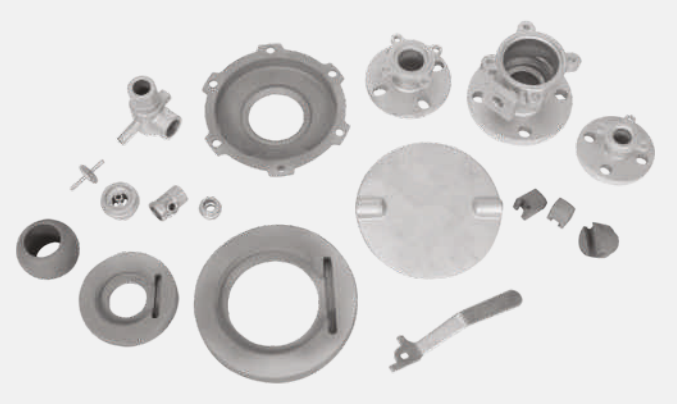


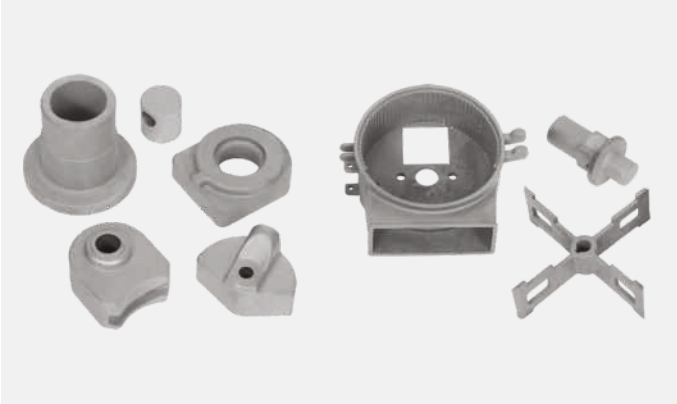
Products















Materials Manufactured at LTCPL

CARBON STEEL	
ASTM	DIN
A216 - WCB	1.0619
A216 - WCC	
A352 - LCC	1.1138
A352 - LCB	

LOW ALLOYS STEELS	
ASTM	DIN
A217 - WC1	1.5419
A217 - WC4	
A217 - WC5	
A217 - WC6	1.7356
A217 - WC9	1.7379
A217 - WC11	
A217 - C5	1.7363
A217 - C12	
A217 - C12A	

COBALT BASED ALLOYS	
	DIN
STELLITE 3	
STELLITE 6	
STELLITE 12	
STELLITE 21	
STELLITE 23	
Triballoy T 400	

AUSTENITIC STAINLESS STEEL	
ASTM	DIN
A351 - CF8	1.4308
A351 - CF8M	1.4408
A351 - CF3	1.4306
A351 - CF3M	1.4404 / 1.4409
A351 - CF8C	1.4827
A351 - CF10	1.4308
A351 - CK20	1.4843
A351 - CH20	
A351 - CN7M	1.4500
A351 - CG8M	1.4431
A351 - CG3M	

NICKLE BASED SUPER ALLOYS	
ASTM	DIN
A494 - M-35-1	2.4365
A494 - M-35-2	
A494 - M 30 C	
A494 - N-12MV	
A494 - N-7M	
A494 - CY40	2.4816
A494 - CW12MW	2.4686
A494 - CW6M	
A494 - CW2M	2.4610
A494 - CW6MC	2.4856
A494 - CX2MW	2.4602
A494 - Cu5MCuC	2.4858
A560 - 50Cr50Ni	
A560 - 50Cr50Ni-Nb	2.4813
A560 - 60Cr40Ni	

MARTENSITIC STEELS	
ASTM	DIN
A743 - CA15	1.4008
A743 -CA40	1.4028
A743 CA-6NM	1.4313

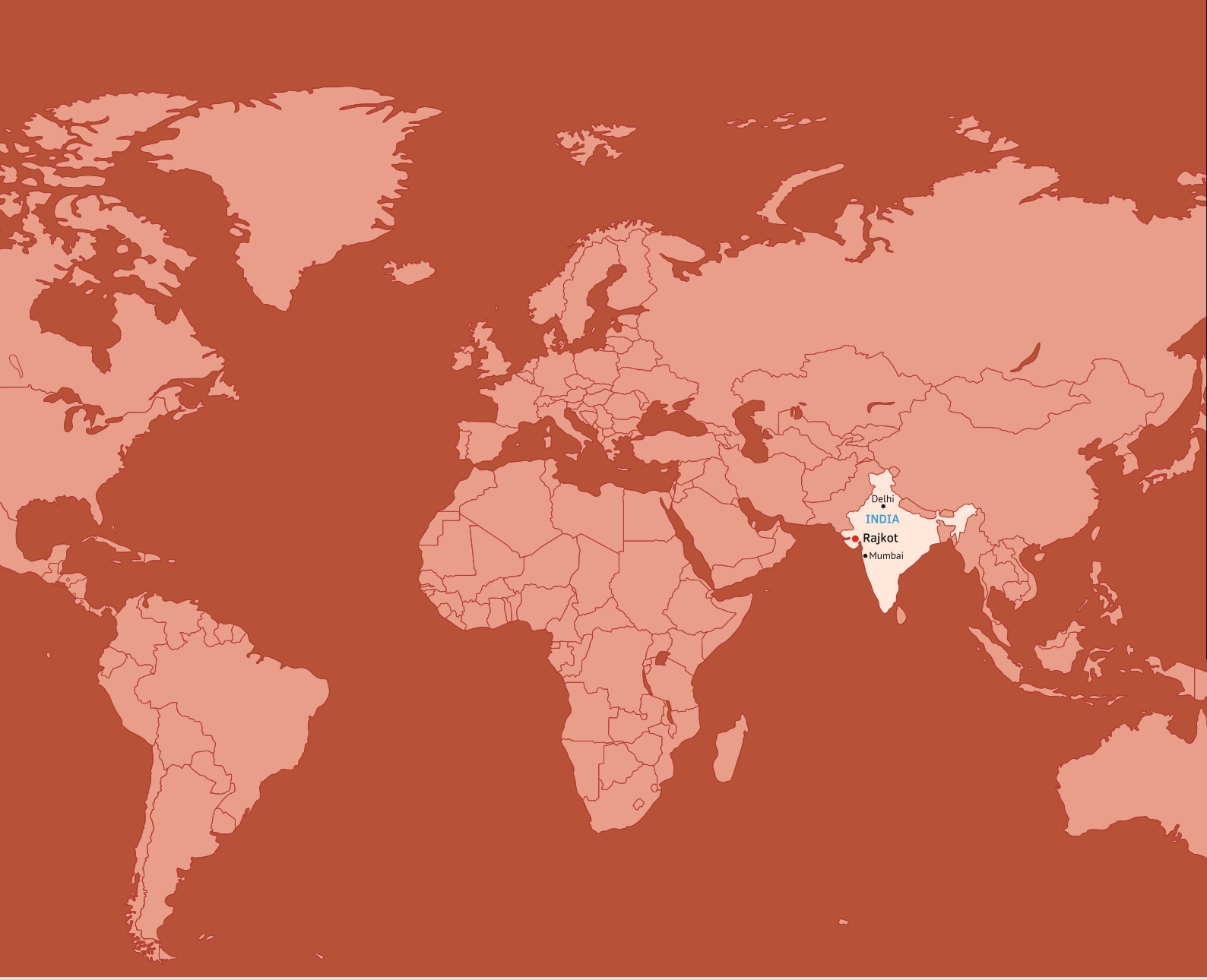
SUPER DUPLEX STAINLESS STEEL	
ASTM	DIN
A890 - GR1B	
A890 - GR1C	
A890 - GR2A	
A890 - GR3A	
A890 - GR4A	
A890 - GR5A	
A890 - GR6A	
A890 - GR7A	

HEAT RESISTING STEEL	
ASTM	DIN
A297 - HF	1.4825
A297 - HH	1.4837
A297 - HI	1.4846
A297 - HK	1.4848
A297 - HD	1.4823

AUSTENITIC FERRITE DUPLEX STEEL	
ASTM	DIN
A351 - CF3MN	1.4435
A351 - CG6MMnN	1.3964
A351 - CK3MCuN	

S.G. IRON & NON FERROUS MATERIAL





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