## MFG. OF ALL TYPES

Of Casting And Forging Parts.



VASUDEV TECHNO SYSTEM





■ "The choice of a partner is the single most important decision most people will ever make about their businesses. The essential elements of a successful partnership are: a good fit between the partners' personalities, similar values, the ability to be a team player, compatible goals and clear expectations, and mutual trust and respect."



### **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.

## **ISO Certified Industry**



### **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**

Total land area of industry

56000 sq.ft.



## **Forging Process Details**

**Forging**, a metal shaping technique using compressive, localized forces, has been a staple metal fabrication technique since the time of the ancient Mesopotamians. Since its origins in the fertile crescent, forging has experienced significant changes, resulting in a more efficient, faster and more durable process. This is because today, forging is most commonly performed with the use of forging presses or hammering tools that are powered by electricity, hydraulics or compressed air.

## **Forging Parts**

- Flanges
- Auto parts
- Valve Parts
- Connecting Road
- Bearings
- Gears
- Crank Shaft, etc......



## **Forging Machine Capacity**



**MACHINE CAPACITY** 

0.100 Kg To 150 Kg

**HAMMER DETAILS** 

2.5 Tone Hammer

4.0 Tone Hammer



## **Casting Process Details**

**Casting**, manufacturing is a process in which liquefied material, such as molten metal, is poured into the cavity of a specially designed mold and allowed to harden. After solidification, the workpiece is removed from the mold to undergo various finishing treatments or for use as a final product. Casting methods are typically used to create intricate solid and hollow shapes, and cast products are found in a wide range of applications, including automotive components, aerospace parts, etc

## **Casting Parts**

- Valve Parts
- Pipe parts
- Auto Parts
- Body Parts
- Joint Parts
- Gears Parts
- Knuckle Joint, etc......



## **Casting Job Capacity**



**JOB WEIGHT** 

0.010 Kg to 150 Kg Per Pcs.

JOB DIE

 $750 \times 750 \times 750$  mm Max



### **Dimensional Tolerances**

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

## **Process Of Measuring Instruments**

Instruments are used to measure and control the condition of process streams as they pass through a Plant. Instruments are used to measure and control process variables such as: Temperature; Flow; Level; Pressure; Quality.

## **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
- Bore gauge
- 0-300mm Depth Gauge
- Inside Outside Caliper
- Inside Outside radius Gauge
- Combination Set
- Surface Plate
- AIR Gauge
- Slip Gauge





## **Testing Instruments And Facility**

#### **MECHANICAL TESTING**

- Universal Testing machine 20 KN capacity with electronic extensor metre
- Impact Testing Impact Testing Machine up to 300) 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: Microstructures 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)







# **Spectro Machine**





## **Machining Process Details**

During the manufacturing of a part, a variety of machining operations and processes are needed to remove excess material. These operations are usually mechanical and involve cutting tools, abrasive wheels, and discs, etc. Machining operations may be performed on stock mill shapes such as bars and flats or they may be executed upon parts made by previous manufacturing methods such as casting or welding.

### **Machining Shop Details**

#### CNC MACHINE - 14 Pcs.

The term CNC stands for 'computer numerical control', and the CNC machining definition is that it is a subtractive manufacturing process which typically employs computerized controls and machine tools to remove layers of material from a stock piece

#### **WORK CAPACITY IN MACHINE**

- CNC Machine capacity Diameter ø = 5 mm to 600 mm
- CNC Length Capacity = 300 mm to 1000 mm
- CNC Weight Capacity = 150 Kg. Max.



#### VMC MACHINE ROTARY TABLE - 5 Pcs.

A VMC is a machine with a CNC (Computer Numerical Control) controller. As mentioned, the cutting head in this milling machine is vertical and is a particular type of milling machine where the spindle runs in a vertical axis known as the "z" axis. They are typically enclosed and most often used for cutting metal.

#### **WORK CAPACITY IN MACHINE**

- CVM 1060 = 1200 x 600 x 600
- Rotary table = 250 ø capacity 400 mm OD Machining.
- VMC weight capacity = 1000 Kg.





## **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
- Orthopaedic implant parts

## **Materials Manufacturing at VTS**

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

| LOW ALLOY STEEL |        |
|-----------------|--------|
| ATSM            | 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 |     |
|---------------------|-----|
| ATSM                | DIN |
| STELLITE 3          |     |
| Triballoy T 400     |     |

| AUSTENITIC STAINLESS STEEL |               |
|----------------------------|---------------|
| ATSM                       | 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                | 1.4808        |
| A351 - CF20                | 1.4843        |
| A351 - CF20                |               |
| A351 - CF7M                | 1.4500        |
| A351 - CF8M                | 1.4431        |
| A351 - CF8M                |               |

**NICKLE BASED SUPER ALLOY** 

| ATSM               | 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 - CW12MV      | 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 |        |
|--------------------|--------|
| ATSM               | DIN    |
| A743 - CA15        | 1.4008 |
| A743 - CA40        | 1.4028 |
| A743 - CA-6NM      | 1.4313 |

| SUPER DUPLEX STAINLESS STEEL |     |
|------------------------------|-----|
| ATSM                         | DIN |
| A890 - GR1B                  |     |
| A890 - GR1C                  |     |
| A890 - GR2A                  |     |
| A890 - GR3A                  |     |
| A890 - GR4A                  |     |
| A890 - GR5A                  |     |
| A890 - GR6A                  |     |
| A890 - GR6A                  |     |

| HEAT RESISTING STEEL |        |
|----------------------|--------|
| ATSM                 | DIN    |
| A297 - HF            | 1.4825 |
| A297 - HH            | 1.4837 |
| A297 - HI            | 1.4846 |
| A297 - HK            | 1.4846 |
| A297 - HD            | 1.4823 |

| AUSTENITIC FERRITE DUPLEX STEEL |        |
|---------------------------------|--------|
| ATSM                            | DIN    |
| A351 - CF3MN                    | 1.4435 |
| A351 - CG6MMnN                  | 1.3964 |
| A351 - CK3MCuN                  | 1.1138 |





Mob : +91 85111 11821, +91 96878 84809

Email: vasudevtechnosystem@gmail.com

NH - 8B Gondal Road Somnath Industrial Area - 5, Somnath Weight Bridge Street, Plot No.26, Kotharia, Rajkot-360006(GUJ.) INDIA