



## **Trushape Precision Castings**



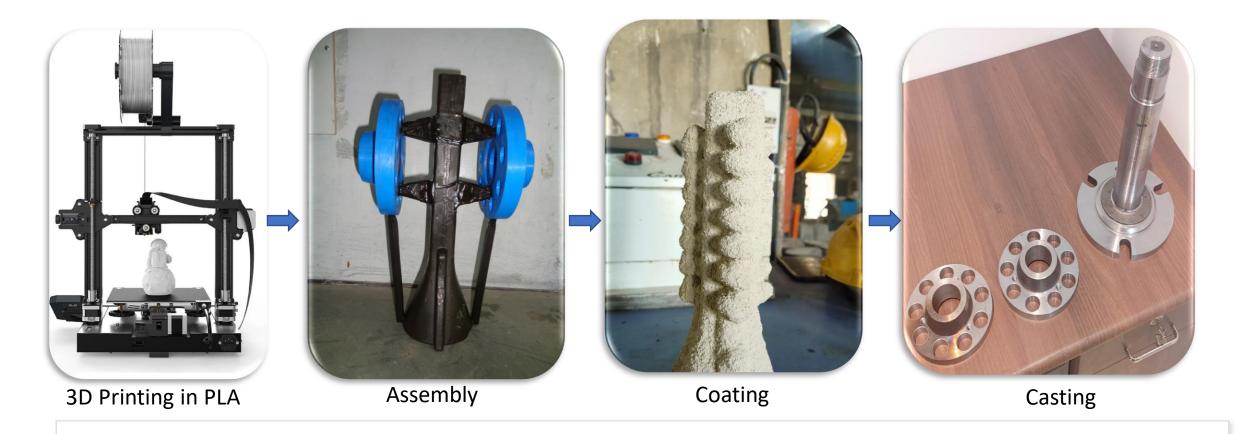
#### About Us

Ferrous and Nonferrous

Precision Investment Casting

# Manufacturing precision components since past 21 years

- Heat Treatment
- Electroplating & Polishing
- CNC Machine Shop
- Assembly
- Mechanical and Chemical Testing
- NDT Testing



#### **Process Flow**

- A pattern gets printed on a 3D Printer.
- It is then assembled on a Wax Gating System.
- Various coatings are applied through a ceramic slurry.
- Molds are formed after curing the material and melting the wax.
- Casting process: Molted metal is poured in the molds.

## **Advantages**

Mechanical welding from components can be replaced or minimised

Parts with demanding mechanical properties or complex geometries can be produced

Finishing operations needs can be minimised

Multi functional parts with dimensional accuracy and design flexibility

No constraints in terms of geometry or shape as the ceramic mold is broken once the metal is cast

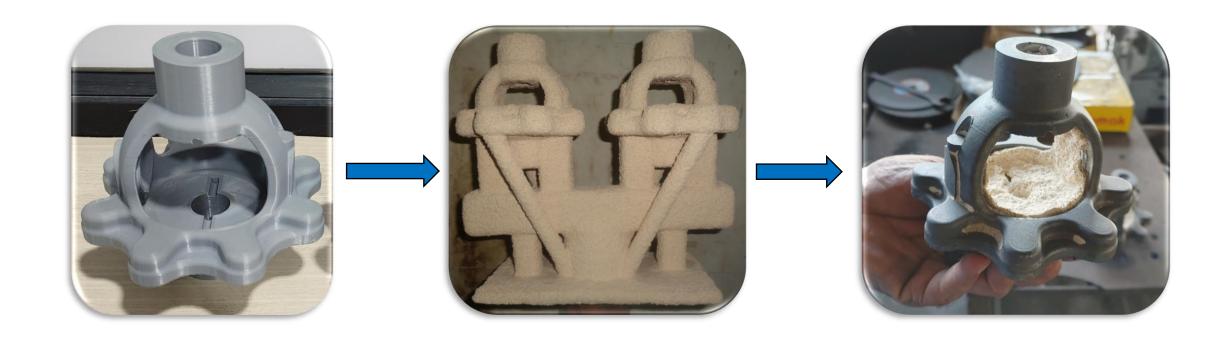
Dimensional precision reduces the need for post-casting finishing operations

Low Die Mold Cost and Higher life

Process is applicable to a one-off part or to large or very large production runs

Enables inclusion of very fine and complex, embossed or stamped internal or external details

#### **Prototyping: Automotive Component**

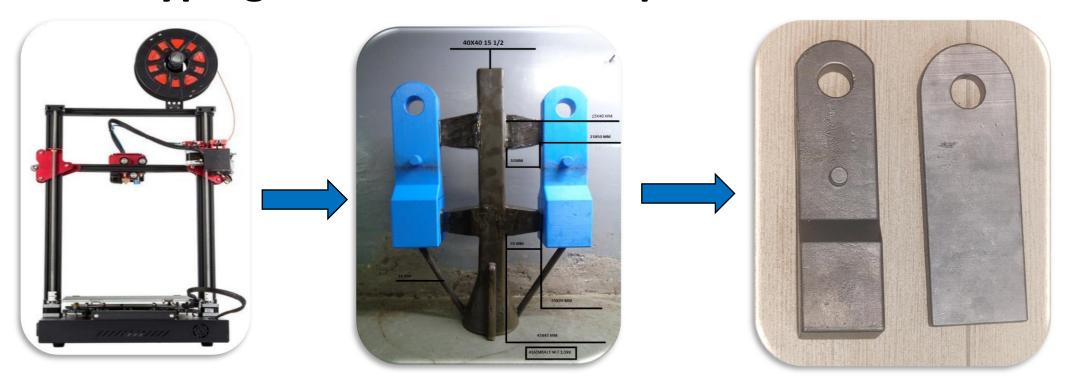


Metal – SG Iron [Heat Treated and Machined]

Weight – 2.4 Kgs

Customer requirement: 4 no's

#### **Prototyping: Earth Mover Component**



Metal – SG Iron [Heat Treated]

Weight – 3.5 Kgs

Customer requirement : 10 no's

#### **Reversed Engineered: Cutting Machine Parts**





Metal – EN 8 [Heat Treated and Machining]

Weight – 3.8 Kgs

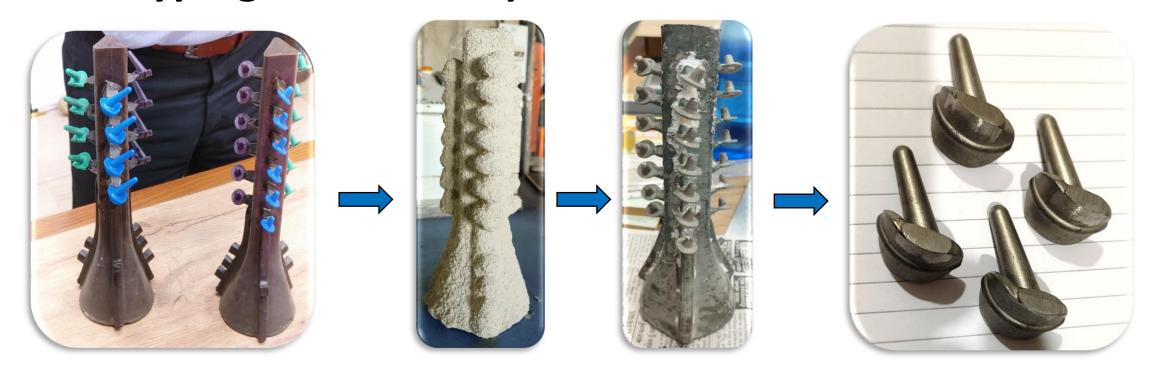
Cust Req: 01 Nos

Metal – SG Iron [Heat Treated and Machining]

Weight – 6.5 Kgs

Customer Req: 01 Nos

#### **Prototyping: Medical Implants**

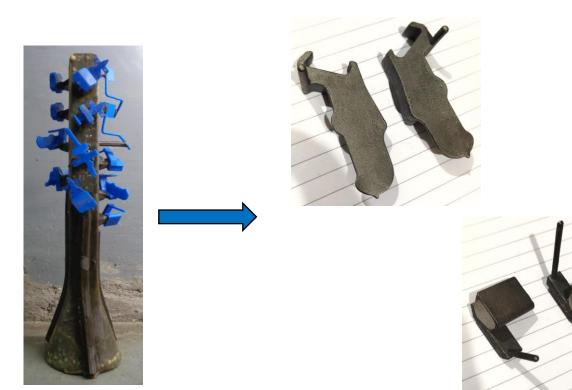


Metal – F75 [As cast condition]

Weight – Met: 28 Grams - Pha: 15 Grams

Customer Req: 100 Pcs via Castable Resin before Serial Production

#### **Prototyping: Surgical Guide Parts**



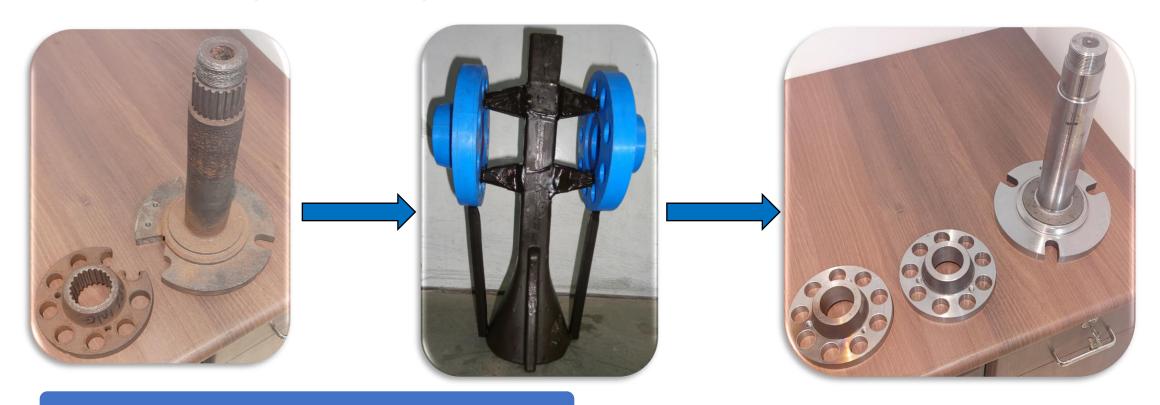




Metal – ANC22 / 17-4 PH [As cast and Blasted condition]

Customer requirement: 5 Sets before serial production

### **Prototyping: Cutting Machine Component**



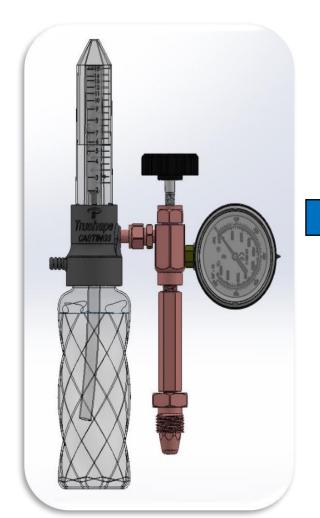
Metal: SS 304 [Heat Treated then Machined]

Weight: Centre Shaft: 2.8 Kgs

Hub: 850 Grams

Cust. Req.: 01 no's each

# COVID 19 Initiative [Oxygen Flow Meter] – Designed and Developed by Trushape







Indigenously developed an Oxygen Flowmeter during COVID - 19 second deadly wave.

150 Oxygen Flowmeters were manufactured, assembled and tested in house to provide the best quality flow meters for the needy.

The Oxygen Flowmeter was manufactured using casting, 3D SLA printing and machining,.

which then was made open-source on GitHub so that anyone around the world could manufacture the same.

#### Certifications

- ISO 9001: 2015
- ISO 14000 in Progress
- ISO 13485:2016 Medical devices
- Quality management systems
- Requirements for regulatory purposes.





#### Management System Certificate

Certificate No.: 10000317569-MSC-NA-IND Rev.D.0 Initial Certification Date: 19 May 2021

This is to certify that the quality system of:

#### Trushape Precision Castings Private Limited

Survey # 160, Bhavnagar - Rajkot Road, Village: Shampara, Dist: Bhavnagar - 364060, Gujarat

has been found to conform to the Quality Management System standard: ISO 13485:2016/NS-EN ISO 13485:2016

This certificate is valid for the following scope:

Manufacture and Sales of Non-sterile Prosthetic & Orthotic Components, Metal Components for Artificial / Prosthetic Limbs.



For the issuing office: DNV Produot Assurance A8



Accredited Body: DNV Product Assurance: AS: Verifasseien 3, 1383 Hevik, Norway, Tell+47 67 57 55 00, were dry or

#### **Green Initiatives**



Green vegetation Plantation : 2500 square meters

35 Mango Trees and other fruit trees along with organic vegetables are also grown which are distributed to Trushape Family

# Thank You