



# Trushape Precision Castings



*Ideas Shaped, Quality Delivered*



## 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



3D Printing in PLA



Assembly



Coating



Casting

## 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: Molten 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

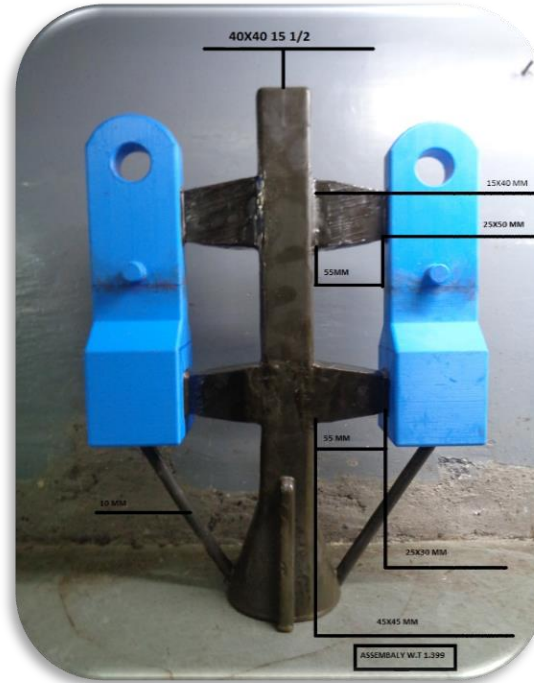


Metal – SG Iron [Heat Treated and Machined]

Weight – 2.4 Kgs

Customer requirement: 4 no's

# Prototyping: Earth Mover Component

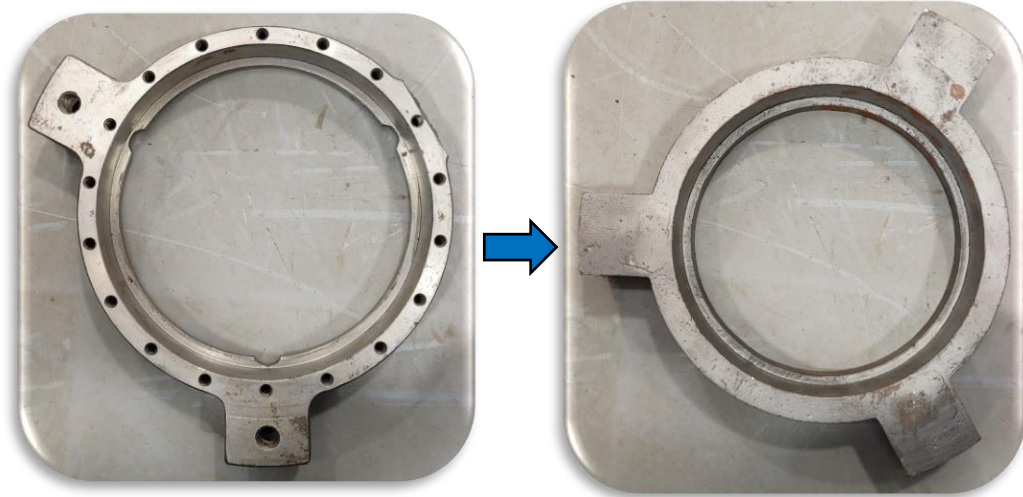


Metal – SG Iron [Heat Treated]

Weight – 3.5 Kgs

Customer requirement : 10 no's

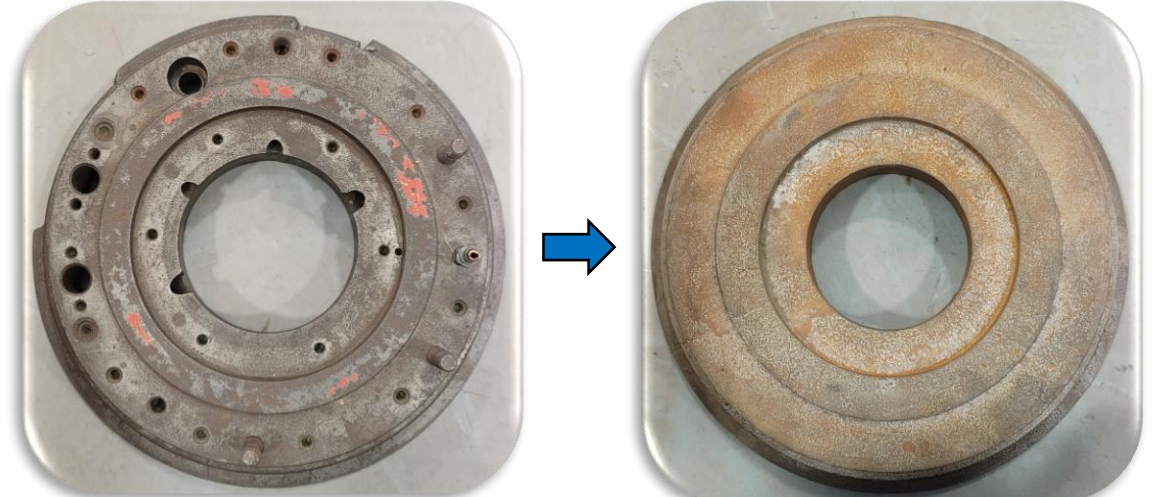
# Reversed Engineered: Cutting Machine Parts



Metal – EN 8 [Heat Treated and Machining]

Weight – 3.8 Kgs

Cust Req: 01 Nos

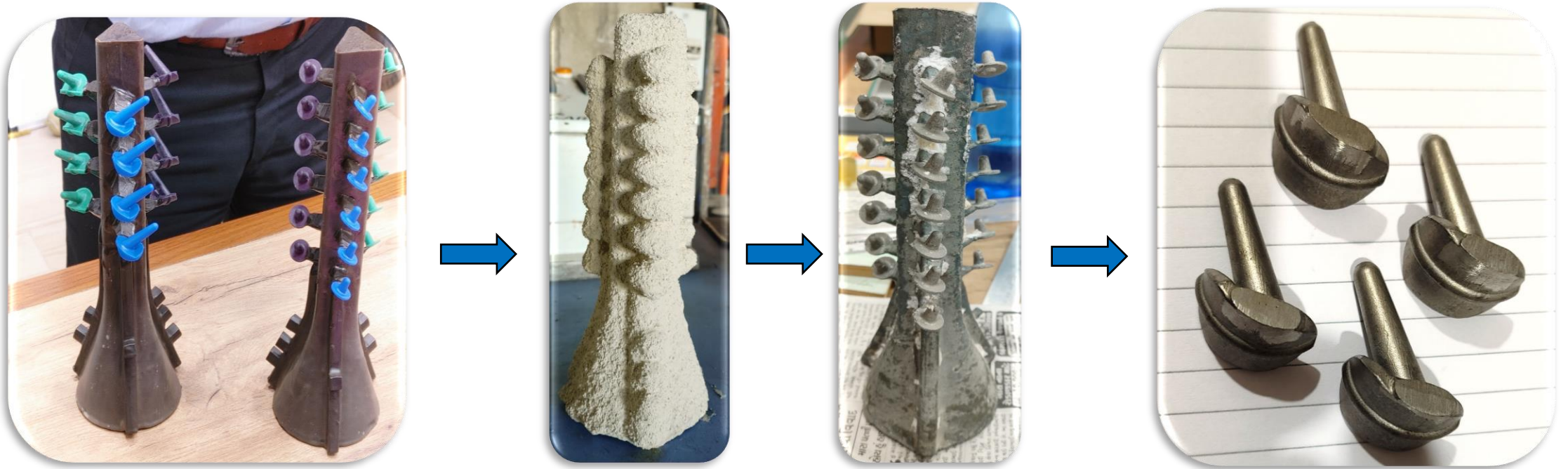


Metal – SG Iron [Heat Treated and Machining]

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



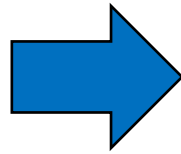
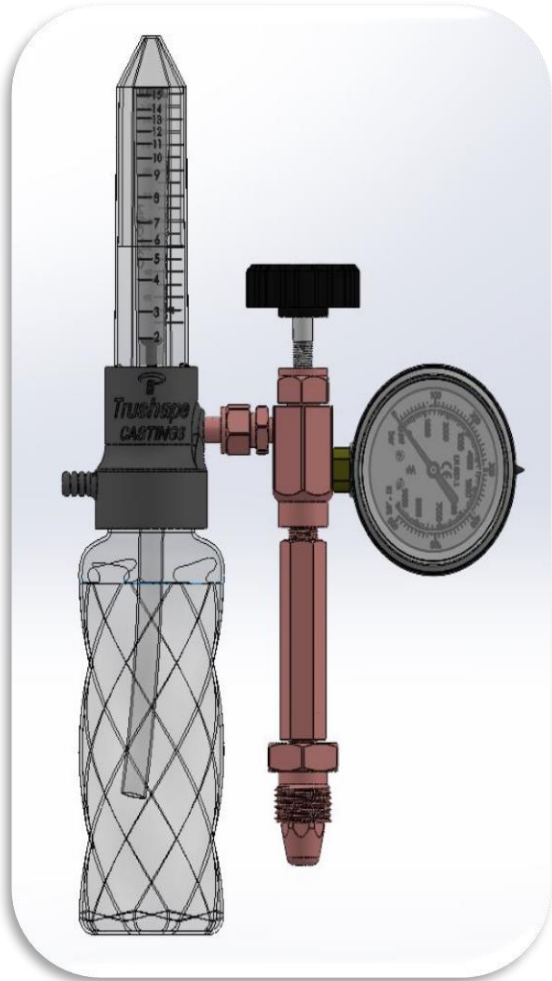
Metal : SS 304 [Heat Treated then Machined]

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.



# Green Initiatives

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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