

## **TRUSHAPE COMPANY PRESENTATION**













## **About Us**

- Investment Casting / Lost Wax / Feinguss
- Lost Foam Casting
- Shell Moulding
- Gravity Die Casting
- Rapid Prototyping & 3D Printing
- No Bake Sand Casting

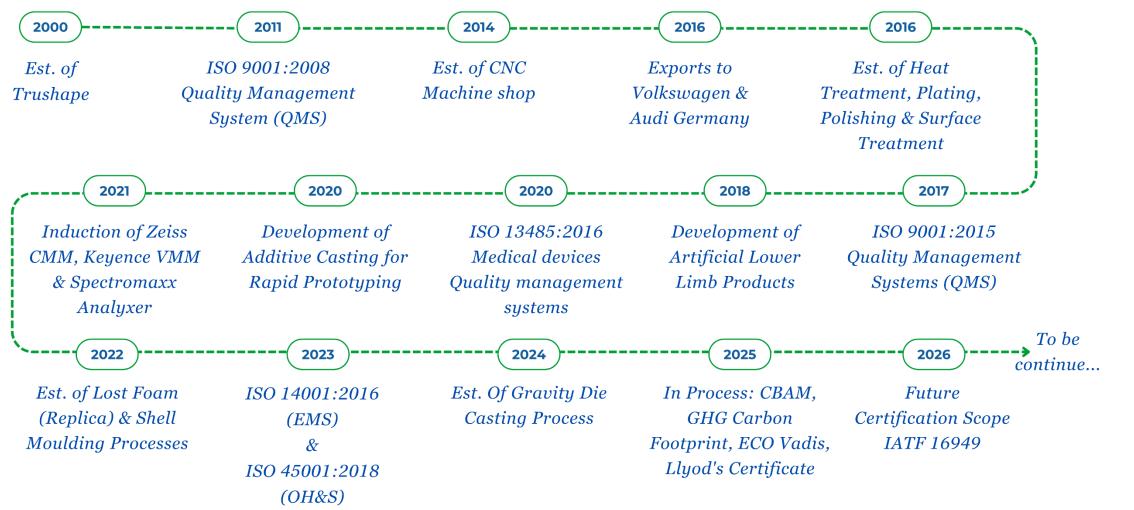


## Manufacturing precision components since past 24 years

- Ferrous and Nonferrous
- 180 employees
- Heat Treatment
- Electroplating & Polishing
- CNC Machine Shop
- Assembly
- Mechanical and Chemical Testing
- NDT testing

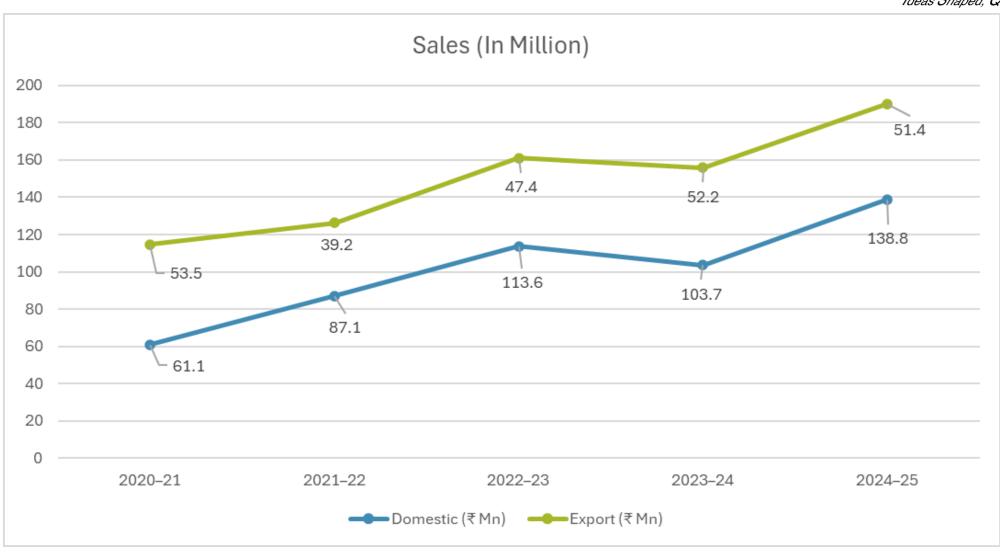
## The Journey That Shaped Us





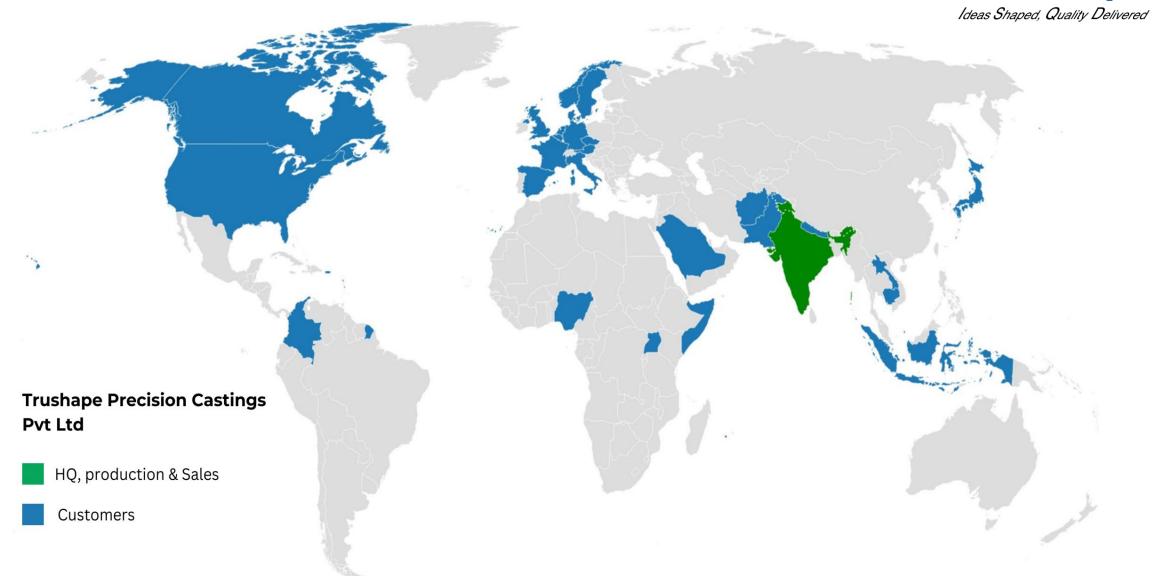
## Exports in Million (INR) - 2020 - 2025





## **Exports Countries**





## In House Facilities



#### **Processes:**

- Investment Casting / Lost Wax / Feinguss
- Shell Molding Casting
- Lost Foam Casting
- No Bake Casting
- Rapid Prototyping / 3D Printing
- Gravity Die Casting

#### **Quality Control:**

- Trimos Height Gauge
- Zeiss CMM
- Keyence VMM

#### Weight capabilities:

- Lost Wax : 3 Grams to 30 Kgs
- Shell Molding: 5 Kgs to 60 Kgs
- Lost Foam: 3.5 Kgs to 90 Kgs No Bake: 3 Kgs to 40 Kgs
- Rapid Prototyping: 5 Grams to 30 Kgs
- Gravity Die Casting: 100 Grams to 3 Kgs

#### **Surface Treatment:**

- Heat Treatment Furnaces
- Sand Blasting
- Shot Blasting
- Glass Bead Blasting
- Media Polishing
- Electropolishing
- Electroplating

#### **Rapid Prototyping:**

- 3 Nos FDM (Multi material) Printer
- 2 Nos SLA Printer

#### **Testing Lab:**

- Tensile Testing
- lzod Impact Testing
- Hardness Testing
- Spectrometer (Spectromaxx & Bruker)
- Dye Penetrant Test
- Ultrasonic Test
- Conductivity Test
- Pressure Test

#### **Machine Shop:**

- 2 Nos CNC Turning Machines
- 4 Nos 3 Axis VMC Machines
- 2 Nos 4 Axis VMC Machines (Makino)
- Conventional Lathe, Drill and Milling Machines

### Material Grades



#### **Stainless Steel**

- Austenitic: 304, 316, 316L, 321, 1.4301, 1.4404, CF8, CF8M
- Martensitic: 410, 420, 440C
- Duplex & Super duplex: F51, CA6NM
- Precipitation Hardened: 17-4PH,
   1.4542, CB7Cu-1

#### **Tool & High-Speed Steels:**

 Tool & Wear Resistant: D2, 1.2379, 1.2080, HSS, X155CrVMo12.1, Hardox 400

#### **Aluminium & Light Alloys:**

Casting Alloys: LM6,
 LM25, 535, A356

#### **Carbon & Low Alloy Steels:**

- Carbon Steels: EN8, EN24, EN36, C15, C45, ASTM A48
- Low Alloy Steels: 4140, 4130, 4340, 8620, 20MnCr5, 42CrMo4
- Case Hardening Steels: 16MnCr5, 34CrNiMo6, 38Cr5Ni3Mo1Cu

#### **Special & Magnetic Alloys:**

Alnico, ISO 5832-1, 1.4441, 1.4086,
 Guronit

#### **Nickel & Cobalt based Superalloys:**

- Nickel Based: Inconel 625, Inconel 713C, Hastelloy C-22, Hastelloy X, CW12MW
- Cobalt Based: ASTM F75 (CoCr), Stellite 6
- Ni-Resist: Type 1 Ni-Resist

#### **Copper Based:**

Brass, Bronze & Gunmetal: CZ121, CB766S, C83600, CuAl11Fe6Ni6, CC040A, CuZn37Al1

#### Certifications

ISO 9001:2015





Lack of fulfillment of conditions as set out in the Certification Agreement may render this Certificate invalid.

ACCRIDITED UNIT: DNV Product Assurance AS, Veritasveision 1, 1363 Havis, Nonasy - TEL - 47 67 57 99 00, www.dmc.com



ISO 45001:2018



ISO 14001:2015



## **TPCL Global Area by Sector**

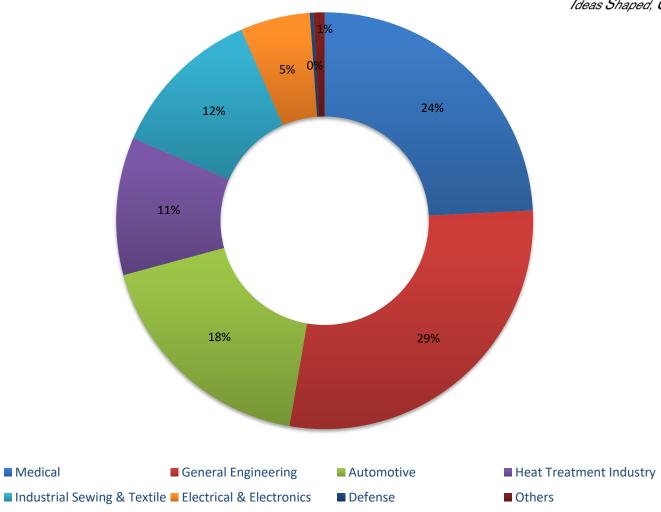
- Medical (24.2%)
- General Engineering (29%)
- Automotive (18.1%)
- Heat Treatment (11%)
- Industrial Sewing & Textile (12%)

■ Medical

- Electrical & Electronics (5.4%)
- **Defence (0.3%)**
- Other (1%)







## Safety-Critical Expertise



**Focus on Manufacturing Process** 

Investment casting is a specialty at Trushape. We've mastered this process to ensure consistent quality and meet demanding requirements of our customers.

**Material Control and Traceability** 

Certified processes to meet specific quality standards, and the materials used in production are sourced from genuine suppliers

**Supplier Management** 

At Trushape suppliers are qualified based on their capabilities, quality control processes, and past performances. Regular audit controls for suppliers are done, and the quality requirements are clearly communicated

**Quality Control and Inspektion** 

100% Inspection for Critical Components, Statistical Sampling, Updated Operators Training

**Continuous Improvement** 

Detailed documentation of the entire lifecycle of the component are maintained, including design decisions, material certificates, test results, and any non-conformance reports

**Comprehensive Verification** 

Testing of the components under simulated real-world conditions, including extreme loads and environmental stresses

## **Achievements**

Il Trushape<sup>®</sup>
Ideas Shaped, Quality Delivered

- Smallest Casting weighing 3.0 gms.
   with 12 critical dimensions and ±
   0.1 gram accuracy in weight
- Castings weighing 5.4 gms. with ±
   0.1 gram accuracy in weight
- Import substitute for complete machined castings for Orthotic and Prosthetic applications for rehabilitation





## **Our Component Segments**





**Automotive & Transportation** 



**Electrical** 



General Engineering



Hardware



Industria Textile





Aerospace & Defence



Saddlery



Heat Resistant Steel



Energy



**Precision Prototyping** 



Luxury Decorative Metal Art

## **Trushape Meditech**

# DNV-GL



#### Orthopedic & Prosthetic Components – Precision for Human Mobility

- Since our inception in 2010, Trushape Precision Castings has been at the forefront of innovation in orthopedic and prosthetic metal castings. What began as a vision to extend our expertise in precision engineering to the healthcare industry has evolved into a trusted partnership with leading medical device manufacturers across India and beyond.
- At Trushape, we not only manufacture precision-cast components but also carry out complete in-house assembly and testing to ensure consistent quality, performance, and reliability. Each assembly undergoes rigorous inspection and functional testing before delivery, ensuring it meets the strict standards required by the medical and biomechanical sectors.
- We proudly supply our products to NGOs, healthcare institutions, and prosthetic rehabilitation centers both nationally and internationally, supporting initiatives that restore mobility and improve the quality of life for countless individuals in need.



## **Product Range & Applications**

- Prosthetic Joints & Connectors Precision-cast knees, ankles, and connectors for smooth movement and long-term durability.
- Custom Socket Interfaces Designed for a perfect anatomical fit, enhancing comfort and usability.
- Orthotic Supports & Braces (KAFOs, AFOs) -Engineered for strength, alignment, and lightweight performance.
- Lightweight, High-Strength Components Manufactured using premium stainless steel and aluminum alloys for durability without added weight.
- Ergonomic & Aesthetic Designs Focused on patient comfort, wearability, and visual appeal.
- Orthopedic Implants & Surgical Tools Highprecision castings for hip, knee, and toe implants, orthopedic jigs, and other critical surgical components.













## Trushape Equiform



- At Trushape Precision Castings, our saddlery components reflect a perfect blend of traditional craftsmanship and modern engineering. Crafted from premium-grade metal castings, each piece combines strength with elegance—ensuring durability, reliability, and performance in every ride.
- Our journey in precision metal casting began with a vision to bring world-class quality to Indian manufacturing. Over the years, we've refined our techniques and expanded our expertise to cater to the demanding needs of the equestrian industry. Drawing upon decades of metallurgical knowledge and advanced casting technologies, we produce components that withstand the rigors of riding while maintaining impeccable finish and aesthetic appeal.
- From stirrup irons to buckles and fittings, every component is engineered with meticulous attention to detail, reflecting our commitment to excellence and our respect for the heritage of equestrian craftsmanship.



## Product Range & Applications

Trushape Equiform The Land Staped Quality Delivered

- Buckles and Clasps For secure and reliable fastening of straps and harnesses.
- Stirrups Providing rider support, balance, and safety during every ride.
- Bits Enabling effective control and communication between horse and rider.
- Spurs Delivering precise rider cues for refined performance.
- Saddle Trees Forming the core structure that ensures proper fit and comfort.
- Decorative Hardware Adding visual appeal and elegance to premium saddlery products.





## Our Growth in Equipment & Facilities:



#### 2019

Wax Department – 4.5 tons production

**Melting Department** – 50 kg & 100 kg furnaces

**Quality Control** – Conventional measuring equipment

Materials Lab – Bruker Tasqman Spectro

Machining Dept. – 2 CNC, 1 VMC

**Heat Treatment** – 150 kg & 20 kg furnaces

#### 2025

Wax Department – 10 tons production

**Melting Department** – 50, 100 & 300 kg induction furnaces

**Quality Control** – Zeiss CMM, Keyence VMM, Trimos height gauge + conventional

**Materials Lab** – Spectromaxx analyser + Bruker Tasqman

Machining Dept. – 2 CNC, 3 VMC

**Heat Treatment** – 400 kg, 150 kg, 20 kg, 10 kg furnaces

**New Additions:** R&D & Design Manager, Lost Foam / Shell Moulding / No Bake Sand Casting (Up to 100 kg, reduced cost)

### Value We Deliver to Our Customers



#### **Capability / Department**

Wax Department – 10 tons production volume

Melting Department – 50 kg, 100 kg, 300 kg induction melting furnaces

QC Department – Zeiss Duramax CMM, Keyence VMM, Trimos Height Gauge and Conventional Equipment

Materials Laboratory – Spectromaxx Metal Analyser and Bruker Tasqman Spectro

Machining Department – 2 CNC and 3 VMC

Heat Treatment – 400 kg, 150 kg, 20 kg, 10 kg furnaces

New R&D and Engineering Manager appointed

Lost Foam Casting – components up to 120 kg with cost efficiency

#### **Customer Advantage**

Allows us to produce large quantities with shorter lead times

Allows us to produce samples in large quantities

Better quality, more precision, and dimensional accuracy

Minimal probability of error and highest accuracy in metal composition detection

Improved ability to perform complex machining operations with shorter lead time

Enables us to perform large quantities of treatments, reducing costs

Better understanding of customer requirements and ability to take on more complex projects

Higher production availability with reduced end-customer costs

## **Our Core Values**



Value	Description	Explanation	Impact
Dedication to Knowledge	Tailored solutions through deep expertise	The company is committed to continuously learning and applying deep expertise to offer personalized solutions that meet each client's unique needs.	The state of the s
Trusted Experts	High precision and quality for ou customers	Focus on delivering high-quality outcomes with precision.  The company is reliable and trusted to provide top-tier service or products.	RILLIAG TRICT WITH CHANTS IDDAING TO IONG-TORM
Innovative & Agile	Continuous improvement in everything we do	The organization prioritizes innovation and constant improvement. It adapts quickly to changes in the market and implements new technologies or processes as needed.	to changes and forward-thinking ensuring
Supplier Relationships	Long-term, reliable partnerships	Values strong, transparent, and mutually beneficial relationships with suppliers, emphasizing trust and collaboration.	
Collaborative & Inclusive	Power of people and teams worldwide	Encourages collaboration and inclusion across teams, departments, and geographies, valuing diverse perspectives and expertise.	Fosters creativity, problem-solving, and a more engaged workforce, enhancing customer satisfaction and business success.
Integrity	We do what we say we will do	The company operates with honesty, transparency, and accountability, ensuring that commitments are always followed through.	- · · · · · · · · · · · · · · · · · · ·

## Social Responsibilties





Workplace safety:

Hazard assessment, continuous equipment maintenance, ongoing training



**Sustainable Practices:** 

Power generation road map through Solar and Hydrogen.

Health protection and occupational safety, respect for human rights and protection of employees against discrimination is to utmost importance to us

## Corporate Social Responsibility (Activities)











Parenting for Peace Workshop



CSR Activity: Donations to Various Charitable funds

## Corporate Social Responsibility Activities





Industry-Academia Collaboration | Digital Manufacturing Visit at Trushape



**Blood Donation Camps** 



## Contribution to Environment

- Green vegetation Plantation : 2500 square meters
- 35 Mango trees and other fruit trees along with organic vegetables are grown around the factory vicinity. Fruits from which are then distributed among our employees.



