



**MAGAL ENGG . TECH PVT LTD , INDIA**



Magal Tech India has a Dedicated and focused approach to Customer relationships, offering multiple Customized solutions from Design, development through to lean manufacturing.

Magal Tech facility is capable of supplying all major Automotive OEMs with Made in India content, engineering and manufacturing.





## about

### Products

- Connecting Rods
- Car Jacks
- Tool Kits
- Thermostats and elements
- Exhaust manifolds
- Cables

### Facilities

- Conrod automated machining transfer lines
- Steel presswork – 29 presses to 1,000 tonne
- Jack assembly lines and CNC machining
- Thermostat element manufacture and calibration

### Capabilities & Technology

- Jack development and DVP
- Thermostat development and DVP
- High precision machining and grinding of conrods
- High precision machining of steel and aluminium
- Development of prototypes for testing and analysis

### Customers Include



### Accreditations

Working towards



## management

CEO	<b>J.Sridhar</b>
Head - Operations	<b>V. Senthil Kumar</b>
Quality Manager	<b>T.Subbusamy</b>
Sales Manager	<b>G. Kaushik</b>

## location

Stats	Plant Size: 152,000 Sq. Ft Employees: 480
Location	<b>Magal Engg. Tech Pvt Ltd</b>  Oragadam - 602 105 Chennai India

## map



- **Founded in 2006.**
- **Part of US \$ 550 Million KUN Group in Chennai .**
- **KUN Group is in to Automotive and Aerospace Sectors .**
- **Commencement of Manufacturing Operations in 2008.**
- **Global Automotive Customers - JLR , Ford , KG Mobility Korea**
- **Domestic Automotive Customers - TATA , Mahindra & Mahindra, Cummins, Ashok Leyland, Force Motors, Simpsons, Kirloskar, Escorts Kubota, New Holland, SAME, John Deere.**
- **Located in the well connected Industrial Estate - Oragadam having close proximity to Chennai International Airport , Madras Sea Port and other 3 Seaports around Chennai.**

- **Magal Engg Tech is a successful Tier1 company. The Company designs, develops, validates and manufactures a wide range of Technical Engineered products utilising in-house capabilities.**
- **A TS 16949 accredited supplier to the leading Automotive OEMs for Thermal Management systems – Thermostat Elements, Engine Conrods, Tyre & Puncture Management System Parts and Tools, Mechanical Assemblies, Medium & Light Duty Cables , Precision Pressed Stamped Parts and a variety of Machined Parts**
- **Accredited to AS9100D Aerospace Standards, developing critical machined parts**
- **With a full-fledged technical centre and Standards room, supporting our customers for testing , validation and Quality assurance requirements**
- **Utilising lean manufacturing techniques, modern management tools , efficient supply chain management with SAP-ERP and with skilled and motivated manpower , Magal Engg. Tech is a capable supplier to both the domestic market and export markets in USA, Europe and Asia.**

- **Magal has the capability and expertise to design , develop and manufacture a range of complex engineered thermal and mechanical assemblies to support Customer needs.**
- **The Magal Tech brand has been associated with delivering complex design solutions , consistent quality , on-time delivery , a depth of engineering capability and competitive pricing.**
- **Magal wins significant new business with Tier-1 OEMs based on the reputation of its brand and full service supply, offering customers a total solution for their engineering requirements together with outstanding customer service.**
- **Magal Tech’s in-house Engineers are recognised specialists in their fields, and provide rapid and innovative solutions to customer problems.**
- **MagalTech’s manufacturing is based on “ Lean Principles” which are core to all of Magal Tech’s operations and recognised internally as the “Magal Way”.**

- **In-house Design with extensive testing and validation facilities**
  - **Predictive Hydraulic flow testing with design evaluation of designs through CAE and FEA simulations.**
  - **Use of Robotic and automated process in critical processes to ensure Quality and cost competitiveness in the Global marketplace.**
  - **Highly skilled manpower in in design , processes and complex assembly process including special process like welding.**
- 







AS9100D & ISO 9001:2015



ISO 14001:2015



IATF 16949:2016



ISO 45001: 2018



Quality Status Award



Supplier Excellence Award



**Annual 5S Certification - 2023  
Sustenance Level -1**



**ACMA Atma Nirbhar  
Excellence Awards**



**Annual 5S Certification - 2022  
Platinum Grade**



**ACMA Excellence Awards in  
Various Categories**



**ACMA Excellence in HSE , HSS & Export  
Sustainable Business Small & Medium Enterprises**

## Product Design Capabilities

### CAD Systems

Catia V5  
Solidworks



I-DEAS



Pro-E  
CADD5  
Medusa



Fusion-DX - Autoweb



Odette OFTPs



Tolstack



CimatronE

AutoCAD

### Digital Simulation/Analysis Tools

Adams  
MSC Nastran  
Patran - (FEA)  
Marc -(FEA)



### Test Equipment

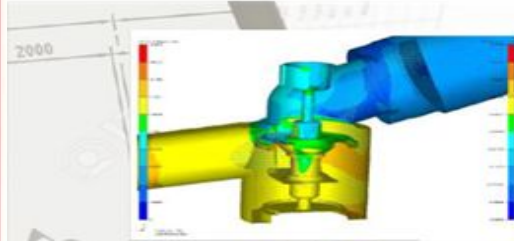
Cleanliness check  
Climate chambers  
Durability bench  
Endurance bench  
Endurance & climate test  
Hydraulic test bench  
Jiggle valve testing machine  
Leak testing machine  
Micrography  
Pressure & de-pressure testing

### OEM Communications

Teamcentre to Ford and  
EDI Infrastructure

### System Design Software

Fast Form LabVIEW





Height Gauge



Roundness Tester



Cylindrical/Roundness Tester



Profile Projector



Auto CMM



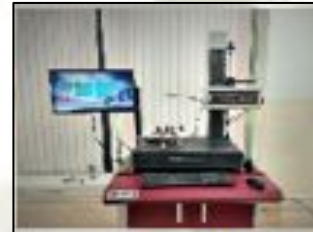
CMM



Ultimate Testing Machine



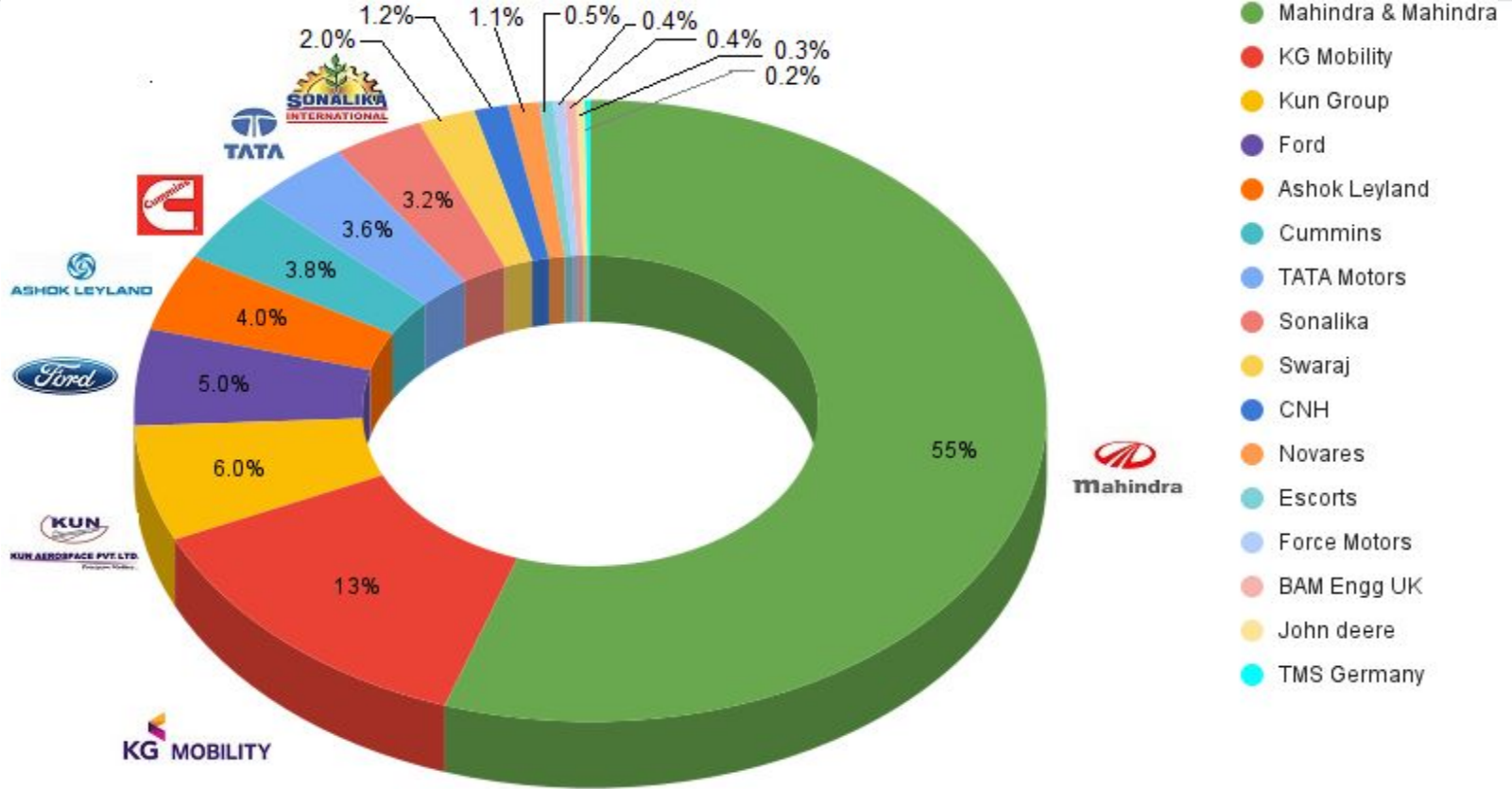
Tensile Testing Machine



Contour Tracer



Image Dimension Measuring System



**2024-25 Forecast Sales 22.09 \$ M**

**Built Up Area**            48,000 Square Feet

**Office Block**            6,000 Square Feet

**Future Expansion**    52,000 Square Feet

**Manpower**

Operators

**Current**  
MAGAL  
tech

288

Maintenance & QA (common for Phase-II)

43

Common staff / heads

39

**CONNECTING ROD**

**Capacity :**

2 million pcs/annum

**KEY CUSTOMERS** Ford India, Mahindra & Mahindra, KG Mobility South Korea

## **BUILT UP AREA**

**100,000 Square Feet**

**Used**

**60,000 Square Feet**

**Available for expansion**

**40,000 Square Feet**

**Manpower**

**Operators 47**

## **CAPACITY**

**Jacks**

**1 million per annum**

**Exhaust manifold 650k per annum**

**Thermostats**

**3 million per annum**

## **CUSTOMERS**

**Jacks**

**JLR - UK**

**Exhaust Manifolds - Ashok Leyland**

**Thermostats**

**TATA, Mahindra, Simpson, SAME, Mecaplast (Renault)**

**Ashok Leyland, Sogefi , Tata Cummins**





## Key Features

- We offer traditional mechanical thermostats and high-tech electrical thermostats
- We can supply individual components or incorporate into complete flow control assemblies
- Thermostat housings and flow control units are available in aluminium and plastic
- We can provide additional components such as hoses, sensors and pressure relief valves

## Markets

- Automotive
- Non-automotive



Magal offer a full system service for cooling flow controls, along with a comprehensive design and development service to support customers

## Key Features

- Our oil thermostat regulates oil temperature of engine Oil / transmission oil by controlling the flow through the exchanger
- Our products meet the highest level of requirement (ex: 200°C) of the main car manufacturers
- Gasoil products by-pass the flow through the tank to control the temperature
- Our thermostat element switches a flap to mix external air with engine air, this prevents freezing
- We have a new Oil cooling system Thermostat designed specifically for IC Engines to control the Oil temperature

## Markets

- Automotive, Industrial



Magal offer a full system service for cooling flow controls, along with a comprehensive design and development service to support customers

## Key Features

- We have invested in 2 transfer line conrod facilities with the new technology 'laser cracking'
- Magal Tech has a temperature and dust controlled 'Clean Room' for measuring, marking and packing directly after washing
- We have an automated flexible transfer line to machine conrod of varying size and weight
- The fracture splitting process is an advanced manufacturing technology for the automobile engine connecting rods
- Rough cleavage surfaces ensure a perfect match of cap and rod. With larger joint surfaces the process accuracy is very high

## Markets

- Automotive

	Existing Transfer Line	New Transfer Line
Min and Max bore size of Small end	16 - 38mm	15 - 40mm
Min and Max bore Size if Big end	25 - 35mm	40 - 65mm
Thickness of Conrods	10 - 22mm	18 - 30mm
Min and Max centre Distance	125 - 150mm	130 - 165mm
Max weight of Conrod Forging	900 grams	1200 grams
Capacity	0.8 million	3.0 million



Magal's fractured split conrod transfer line is capable of machining both regular steel forging and powder metal sintering with capacity to provide 2 million conrods a year

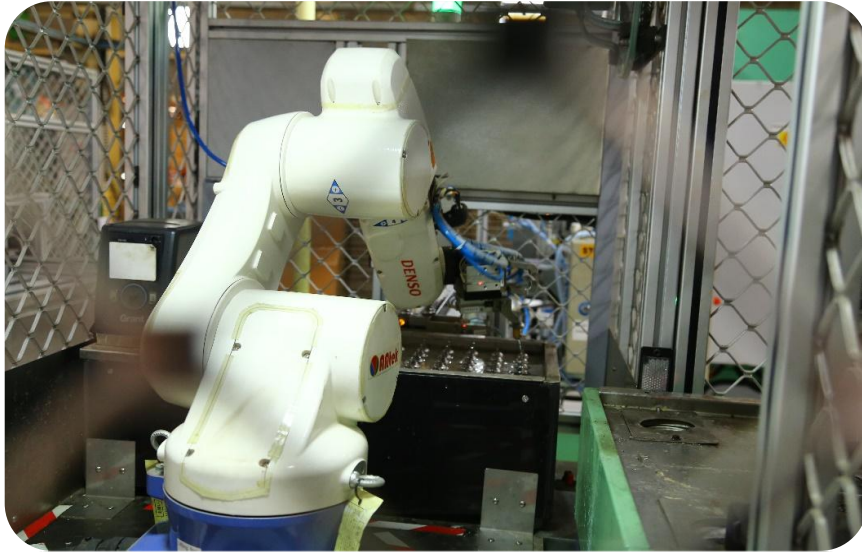
**Transfer Line 1**



**Transfer Line 2**



Automated flexible transfer lines for machining conrods of varying size and weight, European sourced sintered powder metal forgings and Indian sourced hot steel forging



**Magal Offers a wide range of Thermostats , with Housings in Aluminium and Polyamide with Glass filling for the Automotive , Commercial Vehicles, Agri Machinery and Equipments and Stationary Engines**





**A full fledged Thermostat life testing and Validation Test Facility is available covering OEM and National Standards for Testing of Thermostats for Auto and Non Auto applications.**

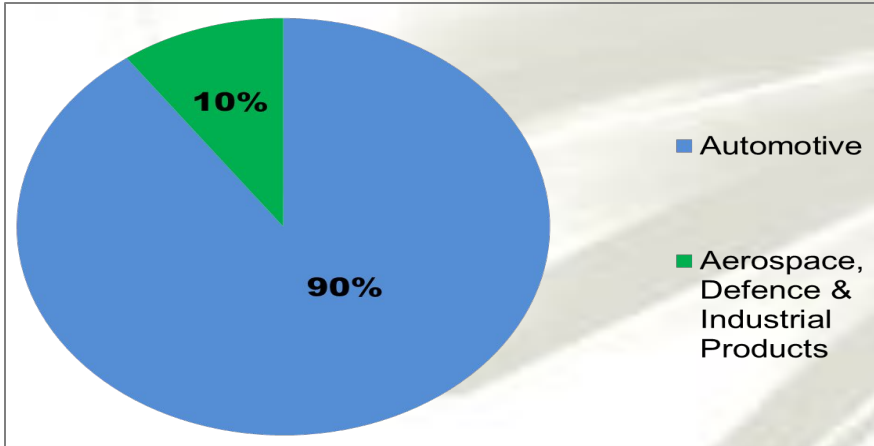




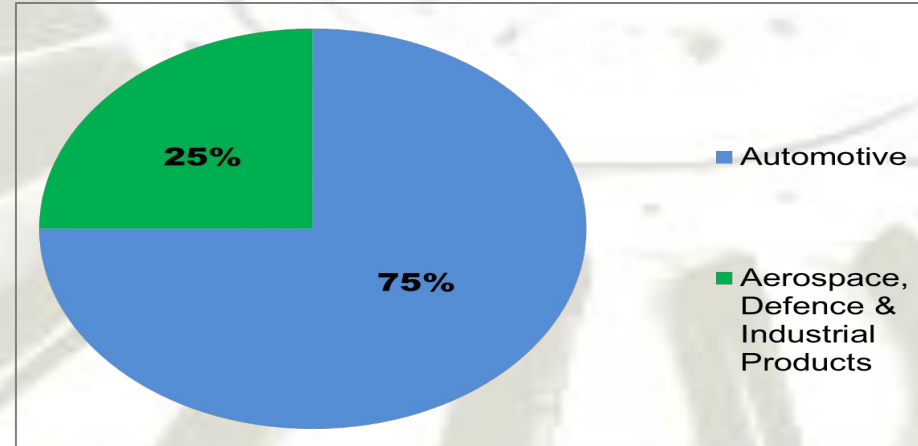
**MAGAL TECH AEROSPACE  
CAPABILITIES**

- **Our Vision** is to become prominent player in the Aerospace and Defence sector and to support both the global and domestic Aerospace, Defence and Industrial needs.
- **Our Mission** is to achieve continuous growth in Aerospace and Defence Sector through investment in People and Technology and to be a profitable company that promises quality, customer relations and Lean manufacturing systems as the central theme of our culture .
- **Our Objective** is to achieve 25% of Turnover in Annual Business in Aerospace Defence and Industrial Sectors within 5 Years period from now

FY 2022-23



Target for FY 2027-28



**As a leader in field of manufacturing we are well equipped to meet the needs of the Aerospace Sector whilst our technology allows us to offer the following:**

- **High Precision machining and grinding.**
- **Tooling Capabilities.**
- **High Precision Machining of Steel, Stainless Steel Brass, Copper and Aluminium.**
- **Press /Stamping with 80 to 400 Ton capacity.**
- **Sheet metal pressings.**
- **Assemblies.**
- **Calibration of Measuring Equipments.**
- **Development of prototype for testing and analysis.**
- **Product Testing and Validation.**

**Our experience and Success means we can assure the following for our customers:**

- **An Accredited company in Automotive, Aerospace and Defence sectors.**
- **Lean Manufacturing Processes.**
- **Structured approach to Supply Chain Management.**
- **Part of the reputed KUN Group with contemporary design capability and best in class manufacturing capability and achieving customer delight**



**DMG MORI – NLX 2000SY/500**



**AMS – MCV 400**



**AMS – MCV 450**



**PRIDE - JAGUAR**



**Horizontal Milling Center**

## 200 Ton Chin Fong Press



## 400 Ton Rhodes Press





## SMV 125 TON PRESS



## CHIN FONG 60 TON PRESS



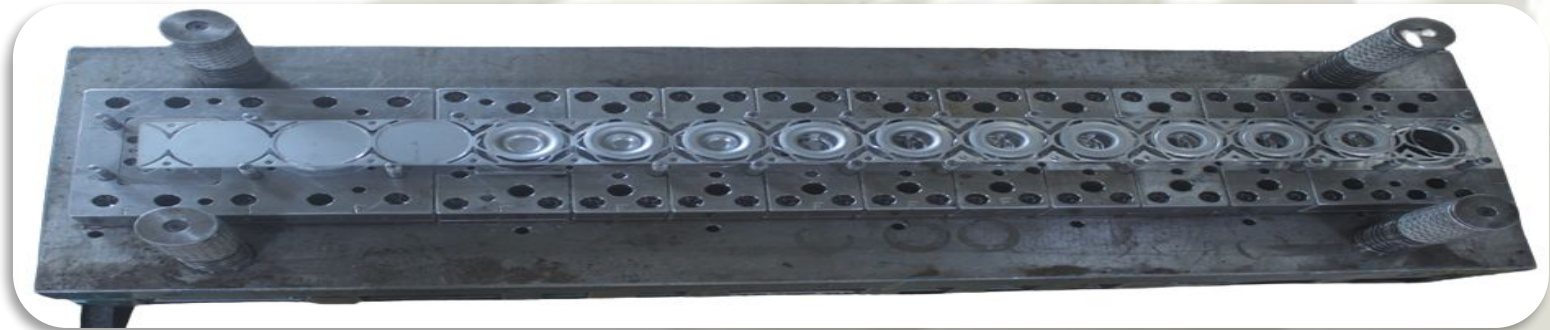
## BLISS 300 TON POWER PRESS



## ASSEMBLY & PRESS SHOP



## PRESS TOOLING



- **Magal Tech has a sophisticated manufacturing plant at Chennai, using cutting edge technologies with high precision machining system viz. Flexible manufacturing systems and state of the art Computer Numerical Control (CNC) Milling Machines, Turing Machines, Turn Mill Centres, Hydraulic, Mechanical Presses and Special Purpose machines (SPMs).**
- **Modern and precision measuring equipment carry out the stringent quality checks that meet the customer's requirements and International Standards.**
- **The critical machining processes at Magal Include:**
  - **Drilling**
  - **Tapping**
  - **Grinding**
  - **Boring**
  - **Honing**
  - **Milling**

## THE CRITICAL SHEET METAL WORK AT MAGAL TECH INCLUDE:

- **BLANKING**
- **BENDING**
- **DRAWING**
- **FORMING**
- **TRIMMING**
- **COINING**

- **Magal Tech India are developing their systems and processes to increase their offering to the Aerospace sector, our mission is to become a prominent player in the Aerospace sector and to support both the domestic and the global Aerospace industry in defence and civil aircraft needs.**
- **Decision are taking place with several potential customers and completion of new Supplier Registrations is ongoing.**
- **We have received RFQ's from various Aerospace customers namely BEML, Mahindra Defence and Ordnance Factory, Tiruchirappalli.**

**Receptacle Square Flange  
Connectors**



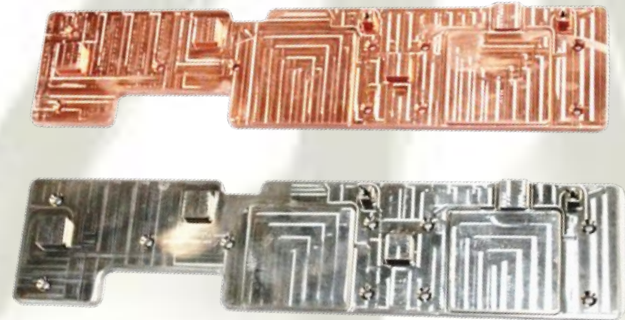
**Mahindra - ALSV Thermostat  
Housing**



**Manual Release Assembly (IAF)**



**Copper Plate-ODSC for 5G  
Communication Systems**







**Mahindra ALSV Engine Conrod**



SANMINA



**beml**

NEW FRONTIERS. NEW DREAMS

**Mahindra**  
DEFENCE

# CORPORATE OVERVIEW



THANK YOU

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