## Laboratory

## **Foundry**



#### **Measuring Equipment – Foundry**

The process of Quality plan is spread out in number of stages which begins with the selection of pattern equipment and ends with the finished products, flawless in every detail. The latest quality control equipments and methods monitor every stage of the process

#### **Chemical Analysis**

Optical Emission Spectrometer – 15 Elements (ARL)

#### **Sand Control Laboratory**

- Sand Rammer
- Green Compression Strength Tester
- Green Shear Strength Tester
- Wet Tensile tester
- Moisture Tester
- Permeability Tester
- AFS Sieve Analysis Unit
- Active & Dead Clay Determination Unit
- Hot and Cold Tensile Strength Tester for Shell Sand
- Loss on Ignition and Volatile Matter Testing Unit

#### **Metallography Laboratory**

- · Complete metallographic specimen preparation equipment.
- Microscope with Image Analysis and metallographic picture printing & transmission units

#### **Physical & Mechanical Laboratory**

- Brinell Hardness Testing Unit
- Digital Rockwell Hardness Testing Unit
- Digital Vickers Hardness Testing Unit
- Automatic & Computerised Ultimate Tensile Testing Unit ( UTM )

## **Camshafts**



#### **Measuring Equipment - Camshafts**

The Sophisticated Metrology lab of the machining division deserves special mention for its state-of-the-art Equipments

- Ezcam Cam Profile tester
- Adcole Cam profile tester
- Co-ordinate measuring machine
- Contour tracer
- Microhardness tester
- Digital Profile projector
- Digital Testing Equipments
- Surface Roughness Tester
- Multi gauging System

Further to monitor quality of the finished products, 100% visual inspection is also carried out to ensure that the end product is free of all casting, machining and handling defects. Before dispatch, random samplings of the finished components are done from every batch to carry out quality audit.



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# **Tappet**



### **Measuring Equipment – Valve Tappet**

At present, Metrology lab is common for both Camshaft & Valve Tappet Machining Division. In addition to this, the following instruments are used in process and final inspection.

- Trimos 2D Vectra Touch linear height Gauge 600 mm ACC 0.001mm.
- Digital system Shadow grapher
- Digital Micro Hardness Tester
- Air Gauge Baker 2045
- Dial snap Gauges
- Dial comparators
- Millipore testing equipments.
- Contour Measuring Machine(Perthometer)
- Resonic NDT Tester
- Coating Thickness Measurement