



# HARI SHANKAR SINGHANIA ELASTOMER & TYRE RESEARCH INSTITUTE

**HASETRI**

RAGHUPATI SINGHANIA CENTRE OF EXCELLENCE



**+300** Satisfied Customer

**+13** Countries Served

**+25** States & UTs of India Served

**+80000** Successful Assignment

**+200** Technical Publications

**+05** Patent

**+50**  
Training Conducted

## SERVICES

MATERIAL CHARACTERIZATION  
PRODUCT CHARACTERIZATION  
SIMULATION  
CALIBRATION  
CONSULTANCY  
TRAINING

## INDUSTRIES SERVED



## RECOGNITION & ACCREDITATIONS

- Recognized under SIRO by DSIR, Govt. of India
- First testing laboratory in private sector in India to receive Prof. SK Joshi Laboratory Excellence Award from Quality Council of India (QCI)
- Accredited Lab for Testing and Calibration as per ISO / IEC 17025 : 2017 standard
- NABL accreditation for Proficiency Testing Provider (ISO 17043:2010)
- First Training Provider of Rubber Skill Development Council (RCPSDC), India
- VCA & SASO Certified Laboratory for measuring Rolling Resistance

## WHO WE ARE

Our institute was established in October 1991 as an independent research institute, to achieve self sufficiency in Technology Development including upgradation of knowledge and skill development for Rubber & Allied Industry in India.

HASETRI envisions the future of society and business needs by taking a proactive approach for addressing issues from the clients stand point.

We believe the best ways to continue meeting customer expectations and needs is by having a clearly defined time bound Technical Development path and working towards continual improvement with quality intact.

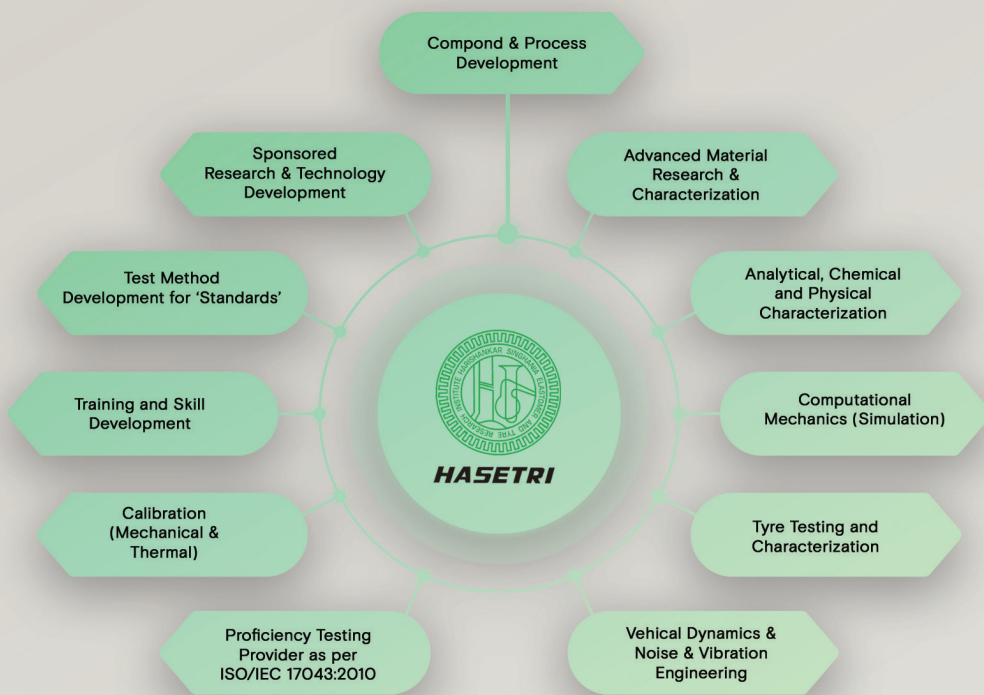
## VISION

To become a Premier Industrial Research Institute of global repute in the field of Elastomer and Tyre Technology

## MISSION

- To achieve Technology Self Reliance through innovative approach.
- To promote Collaborative/Sponsored research through industry-academy interaction.
- To play the Leadership role in developing skilled technical manpower.
- To be a world class Accredited Testing Laboratory.





With over 30 years of rich experience to foster development and evaluation of new technologies for the Rubber and Allied Industries and to develop technical manpower, HASETRI has demonstrated continuous advancement in team knowledge & expert services, facility and technology.

Our experts have commendable foothold in analysing & testing of polymer to meet the government and industry standards

- SAE, ISO, ASTM, DIN, BIS.

## Laboratory Services / Facilities

### Analytical and Physical

- Dynamic Mechanical Properties
- Hyperelastic Properties
- Creep & Stress Relaxation (Life Prediction)
- Aging of Cured Rubber/Rubber product
- Reverse Engineering of Rubber products
- REACH, RoHS analysis
- Proficiency Testing

### Simulation

- Structural
- Thermal
- Process
- Material Coefficients
- Tyre Noise
- Aquaplaning
- Cleat

### Advanced Material Characterisation

- Surface Topography / Morphology
- Elemental Mapping
- Dispersion Study
- Phase Analysis
- Crystallographic Study
- Failure Analysis
- Fatigue Crack Growth Measurement

### Tyre Testing

- Rolling Resistance (AIS142, ECE R117)
- Endurance & Tyre Thermograph
- Force & Moment Characteristics
- PRAT/CRAT/Conicity & Plysteer
- Stiffness [X, Y, Z, Torsional]
- Electrical Resistivity
- Dynamic & Static Footprint
- Dynamic Loaded Radius

- Plunger Energy
- Bead Pressure Mapping
- Bead Unseat
- Shearography
- Air Retention
- Sidewall Deflection Profile
- Tyre Dimension Analysis
- Sectional Analysis

### NVH & Vehicle Dynamics

#### Anechoic Chamber

- Tyre Noise Measurement
- Tyre Modal Analysis
- Automobile & White goods Noise analysis

#### Proving Ground

- In-Cabin & Pass-by Noise Measurement
- F&M, RR, Dry & Wet Grip (Skid Trailer)
- Objective Handling, Steering Response & Fuel Efficiency

### Consultancy Services

- Contract Research
- Standard Testing
- Material Selection for specific application
- Customer Specific Test development
- Process Problem – Root Cause Analysis
- Generation of Technical Specification
- Skill Development & Training

### Calibration

- Temperature
- Force Measurement (UTM)
- Pressure
- Volume
- Mass
- Length
- RPM

### Environmental

- Quality Check-drinking Water /Beverages
- Quality Control-Effluent /Waste water
- Trace Metal ion detection
- Trace Anion detection
- Turbidity
- Conductivity, pH & TDS
- Environmental Compliances