



JACOB
ENGINEERS

SPECIALISTS IN STRUCTURAL ENGINEERING



Structural and Material Testing Division

Ensuring safety, quality and sustainability in the engineering, construction and infrastructure sectors.



CIBI JACOB

CHIEF CONSULTANT

Jacob Engineers Private Limited (JE Pvt Ltd) has been a leading name in Construction Material Testing and Soil Testing since 2009. We are a trusted laboratory in civil engineering, specializing in testing building materials, providing quality consultancy for infrastructure projects, and assessing heavy concrete structures.

With decades of experience, Jacob Engineers Private Limited operates a state-of-the-art in-house laboratory equipped with the latest technologies. Our advanced equipment allows us to perform a wide range of tests accurately and efficiently, ensuring error-free results across all services. As a one-stop shop for turnkey structural engineering solutions, we offer reliable Soil SPT Tests for foundation recommendations and comprehensive quality testing for concrete, aggregates, asphalt, steel, and other essential construction materials. Our detailed reports and precise testing reinforce our commitment to delivering dependable, zero-error solutions.

About us



Aim:

At Jacob Engineers, we strive to achieve the highest client satisfaction with our expert material testing services. We offer practical, cost-effective solutions using the latest technology. Our precise and reliable testing, combined with efficient teamwork, ensures we meet clients' needs and help them achieve the best project outcomes. Our dedication to innovation and quality builds lasting, trust-based relationships with our clients.



Objective:

We strive to continuously enhance our performance and expertise in material testing through dedication, ongoing advancement, and collaborative efforts. By staying at the forefront of industry standards and fostering a culture of continuous learning and adaptation, we aim to exceed client expectations and drive the progress of our organization.

Quality Assurance: ISO 9001:2015 Certified Excellence



At JE Pvt Ltd, quality is our top priority. We proudly hold ISO 9001:2015 certification, demonstrating our dedication to maintaining high standards in all aspects of our work. This certification applies to every part of our business, from precise testing processes to efficient management systems. It ensures that our clients receive reliable, top-notch results and underscores our commitment to continuous improvement. By choosing Jacob Engineers, you partner with a company that meets and often exceeds global quality standards, giving you confidence in our expertise.

Our Mission & Vision



Our mission is to support our clients in achieving superior quality, timely results, and cost-effective solutions in their material testing needs. Whether testing construction materials, industrial components, or infrastructure, our clients rely on us for accurate and dependable results. We uphold this mission through our core values, known as the "A Triple I": Accountability, Integrity, Innovation, and Involvement, ensuring the highest standards of quality assurance in all our testing services.



OUR **EXPERTSE**

- 01 . Soil Testing**
 - 02 . Geotechnical Engineering**
 - 03 . Aggregates Testing**
 - 04 . Design Mixes**
 - 05 . Building Materials Testing**
 - 06 . Non-Destructive Tests (NDT)**
 - 07 . Chemical Analysis**
 - 08 . Steel Testing**
 - 09 . Water Testing**
 - 10 . Civil Material Testing**
 - 11. Rock Testig**
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Soil Testing

Soil testing is crucial for construction projects to determine the physical and engineering properties of soil at a site. This data is essential for designing and constructing stable foundations, retaining walls, and slopes. Our soil testing services include:

- **Standard & Modified Proctor Test**
- **CBR**
- **Direct Shear Test**
- **Consolidation**
- **Triaxial**
- **Permeability**
- **Swelling Pressure**
- **Grain Size Analysis (Wet, Dry, Hydrometer)**
- **Liquid Limit & Plastic Limits**
- **Free Swell**
- **Specific Gravity**
- **Field Density by Core Cutter**
- **Field Density by Sand Replacement**

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Geotechnical Engineering

Our Geotechnical engineering services provide insights into subsurface conditions vital for the safe design and construction of structures. We offer:

- Soil Sampling and Analysis
- Borehole Drilling
- Slope Stability Analysis
- Foundation Design Recommendations

Aggregate Testing

Testing aggregate is critical for understanding their performance and durability. Our aggregate testing includes:

- Sieve Analysis
- Specific Gravity
- Impact Value
- Flakiness & Elongation
- Crushing Value
- Abrasion Value

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Design Mix

We tailor concrete mixes to meet project-specific requirements, ensuring optimal strength, durability, and workability. Our design mixes include:

- PCC (Plain Cement Concrete)
- RCC (Reinforced Cement Concrete)
- SCC (Self-Compacting Concrete)
- PQC (Pavement Quality Concrete)
- DLC (Dry Lean Concrete)

Building Materials Testing

Ensuring the highest quality in building materials is crucial for the safety and longevity of any construction project. Our testing includes materials such as:

- Bricks
- Hollow & Solid Blocks
- Paver Blocks
- AAC Blocks
- Porotherm Bricks

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Non-Destructive Tests (NDT)

NDT involves various testing techniques that allow inspectors to assess and gather information on a product, system, or component without making long-term changes. It assesses a product's characteristics, such as its sturdiness, consistency, appearance, durability, conductivity, and corrosion resistance by using:

- Rebound Hammer
- Ultrasonic Pulse Velocity (UPV)
- Cover Meter
- Pile Integrity Test
- Carbonation Test
- Half Cell Potential
- Concrete Core Cutter

Chemical Analysis

Our chemical analysis services help reduce the environmental impact of construction and ensure the highest quality materials are used. We analyze:

- Aggregates
- Soil
- Cement



Steel Testing

Steel is a foundational element in construction, and understanding its physical properties is essential for structural integrity. We test:

- Tensile Strength
- Elongation
- Bend & Rebend
- 0.2% Proof Strength

Water Testing

Ensuring the quality of water is essential for meeting safety and regulatory standards in construction and environmental projects. Our water testing includes:

- Contamination Levels
- Chemical Composition
- Physical Properties





Civil Material Testing

We offer comprehensive testing for a variety of civil materials to ensure they meet construction standards and project specifications. Our testing includes:

- Material Strength
- Durability
- Overall Performance

Rock Testing

Rock testing optimizes excavation, tunneling, and foundation design. We evaluate rock strength through:

- Density
- Point Load Index
- Specific Gravity
- Porosity



We ensure all testing procedures meet the highest standards of accuracy and reliability. Using Laboratory Information and Management Software (LIMS), test data is recorded in real-time, and reports are generated automatically, reducing errors and ensuring traceability. All reports are securely stored for easy access and future reference. Our processes are regularly reviewed and refined to consistently exceed client expectations and industry standards.



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GET IN TOUCH

 +91 91769 72727 | +91 91761 72727

 lab@jacobengineers.in

 www.jacobengineers.in