

INTRODUCTION TO ENVITEST

THE GIFTS OF PERFECTION

Knowledge is important, but only if we're being kind and gentle with ourselves as we work to discover who we are. Wholeheartedness is as much about embracing our tenderness and vulnerability as it is about developing knowledge and claiming power.

This journey is equal parts heart work and head work. The struggles seemed to be perfectly characterized by the summation of the establishment we are creating, indeed hard work. Perhaps the most comfortable lesson is we are on journey of living and loving with our whole hearts to grow much stronger and achieve success than anything we can learn from 'how-to' books.

Envitest Lab started for making anything perfect. Envitest is in process of creating pattern. Pattern of Perfection. Once you see a pattern, you can't un-see it. Trust me, we've tried. But when the same thing keeps repeating itself. One reason it's impossible to un-see trends is that our minds are engineered to seek out patterns and to assign meaning to them. Our sincere focus is leverage on that pattern, encode pattern and establish the sequence of pattern to meet the perfection. We want to gift this perfection to all our patrons.



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Special points of interest

- Envitest Lab has now the best capacity in the space of thermal test ranging for 20°C/min transition rate to walk-in chamber.
- Envitest has implemented Project Management Tool software where customers gets to know about the status of the project and the personnel in-charge .
- Envitest Lab keeps on adding special test requirements and provide support to develop the test process and facility.



Requirements in Railway domain are stringent. Envitest Lab ensures the Reliability, safety & services

Railways - Freedom from Defects

Freedom from defects in railways refers to the condition where the railway infrastructure, equipment, and operations are free from any defects that could lead to accidents or disruptions in service. It is essential for railways to maintain a high level of safety and reliability to ensure the smooth and efficient transportation of goods and people.

There are various measures that railways can take to achieve freedom from defects. One important aspect is identifying any defects or potential issues early on and taking corrective actions before they become a safety or reliability concern.

Overall, achieving freedom from defects in

railways requires a comprehensive and proactive approach, and the use of advanced technology and data analysis. By ensuring the highest level of safety and reliability, railways can provide efficient and reliable transportation services that benefit society as a whole.

A specialist in engineering and testing, Envitest Lab is independent test house works closely with best test methods and process. Envitest has many years of experience in the rail sector testing. Our laboratories have geared towards ensuring the highest levels of safety and reliability for hundreds of technical standards.

“Envitest has many years of experience in the rail sector testing and in process of expanding the facility to provide comprehensive solutions”

Why Envitest

Envitest Lab was started to fulfil a need in the market and to provide a solution to a problem.

To provide a niche service: Envitest is started to provide a specific service and simplify the solutions. Envitest identified a gap in the market for type of testing and monitoring service and decided to start to fill that gap.

To innovate in an existing industry: Another aim of Envitest was to bring innovation to an existing industry. Envitest have developed new technologies and processes for environmental testing that are more efficient, accurate, or cost-effective than what is currently available.

Engineering Mechanics and Testing

Engineering mechanics is a branch of engineering that applies the principles of physics and mathematics to analyze and solve problems related to the behavior of physical systems, including the motion and deformation of solid and fluid materials. It is concerned with the study of the behavior of physical systems under the action of external forces and moments, and the prediction of the resulting motion and deformation of these systems.

Engineering mechanics is used in a wide range of engineering disciplines, including mechanical engineering, civil engineering, aerospace engineering, and materials engineering, among others. It provides a fundamental understanding of the behavior of physical systems, which is essential for the design, analysis, and optimization of engineering systems and structures.

Component testing is the process of evaluating and verifying the performance and functionality of components. When these component in any form needs to be tested, they are directly related to engineering mechanics

During testing, components may be subjected to various stress factors, such as temperature, humidity, and voltage fluctuations, to verify their performance under different conditions. The results of the tests can be used to determine the suitability of the components for use in specific applications. The testing process involves various techniques and tools, including multimeters, oscilloscopes, signal generators, and other specialized equipment. The primary purpose of component testing is to ensure that the components meet the required specifications and quality standards.

Component testing is an essential process in the development, manufacturing, and maintenance of devices and equipment. It helps to ensure that the components function correctly and reliably, and it helps to identify any defects or issues that may affect their performance.



EV's – increased energy efficiency and conservation and to create an ecosystem for testing of Electric Vehicle (EV) components

Electric Mobility Development and Testing of Electric Vehicles

Envitest provides solutions optimized for the future of automobiles.

Automobiles are entering a new stage of evolution with the spread of electric vehicles and the development of autonomous driving technology.

Electric vehicles are gaining popularity across the globe. Due to fast depletion of fossil fuels, the automotive industry is also shifting from traditional fuel-based technology to eco-friendly technologies. Govt of India has launched The Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME Scheme) in 2015, under National Electric Mobility Mission Plan (NEMMP) with an aim to promote eco-friendly vehicles in the country. In this backdrop, it becomes imperative for the designers and manufacturers to come up with an electric vehicle.

To make these types of technologies a reality, the product and the components used to build, one must have greater reliability, efficiency, heat resistance, smallness, vibration-proof, noise proof, high voltage capacity, and high capacitance. Moreover, they must synchronise to each other and work with great efficiency.

Testing of electric vehicles involves evaluating the performance and functionality of the vehicle's electrical system, including the battery, motor, power electronics, and charging system. The testing process is essential to ensure that the vehicle meets safety standards, environmental regulations, and performance requirements.

Envitest Lab provides solutions that anticipate market changes and satisfy these rigorous demands and provides valuable products.

What is Envitest

Our test lab is equipped to meet a variety of commercial, automotive, medical, aerospace and military test standards, as well as a broad range of customer-defined test specifications. Below is a partial list of common test specifications and applications that we frequently test.

TEST CAPABILITIES

ENVITEST LAB has one of the largest and most complete set of product qualification testing capabilities and services in the world, that is at the forefront of testing and qualifying new product innovations in the Aerospace, Construction, Consumer Product, Defense, Digital Engineering, Energy, Life Sciences, Transportation, and Telecommunications industry sectors.

Envitest Lab can be trusted for,

- * Advice
- * Testing
- * Certification
- * Market access

Our Services

- ◆ *Climatic Simulations*
- ◆ *Dynamics & Vibration*
- ◆ *Contamination and Ingress*
- ◆ *Materials / Metallurgical Testing*
- ◆ *Aircraft Electrical Testing*
- ◆ *Electrical Safety Testing*
- ◆ *Optical Fibre Cable Testing*
- ◆ *Telecom Interface Testing*
- ◆ *International Approvals*

ABOUT ENVITEST LAB

ENVITEST abbreviated for “ENVIRONMENTAL TESTING”, established in 2017 at Bangalore Electronic City, is a ISO/IEC 17025 certified company with an unlimited vision backed by professionals having great experience in problem solving, with an objective to offer high-quality testing and inspection, pre-compliance and certification, engineering services for the across the globe products at best quality results, consistent process, and affordable cost.

We serve across domains products for the compliance and certifications. Over time we kept on adding the new testing facilities to bring more opportunities for growth but would allow to provide a more complete portfolio of testing solutions to our customers. From our humble beginnings, we have grown from a simple test house who worked on the world’s most complex engineering projects to become a leading test lab of standard and custom test services.

Throughout our journey to become one of the premier worldwide service providers of testing solutions, we have held true to the philosophy that the customer comes first. This dedication to customer service has allowed us to work with leading manufacturers in over 22 industries including aviation, automotive, aerospace, defense, medical, energy, to name a few. Located in Bangalore, our campus is comprised of two buildings with over 10,000 square feet of space. Each building has been tailored to provide flexibility, comfort, and safety for everyone while providing room for continued growth and innovation.

ENVITEST LABORATORIES PVT LTD

ISO/IEC 17025 (NABL) Accredited Laboratory – Certificate # TC7490
DGAQA Approved Lab – Certificate # 1408/LAB/DGAQA/TECH-COORD/12
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