

IndustryOutlook TOP 10
LABORATORY EQUIPMENT
MANUFACTURERS - 2025

CAD MECH ENGINEERING

Tailoring Solutions for Long-Lasting, High-Performance Lab Equipment

By Deepshikha

The market for laboratory equipment in India is growing rapidly, fueled by a push for improvements in educational infrastructure, the creation of skill development centers and incubation centers, increasing collaborations between Indian and foreign universities, and rising university focus on industry integration. These factors are lending to the increase in demand for upgraded lab equipment for universities as well as for the thriving startup ecosystem in India, to offer greater opportunities for training and skill development. The government also carries out projects such as the World Bank, MODRAB, STRIVE, PPP, and TEQUIP, in order to fund lab equipment.

Where on the one hand the industry is experiencing rapid growth, on the other, customers continue to struggle with challenges pertaining to procurement and post-procurement maintenance of the lab setup. Within the education sector, universities grapple with finding the right investment, which is where CAD MECH Engineering, a Pune-based laboratory equipment manufacturer with over 24 years of experience in the domain, emerges as the go-to partner. Designing equipment that is aligned with the syllabus, industry needs, and potential future technology trends, the company offers an affordable range of solutions in the competitive domain.

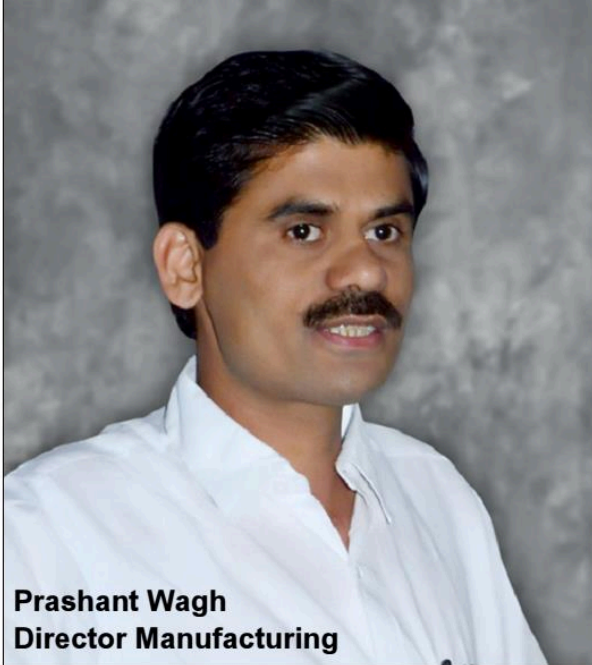
PRAKASH SULAKHE
MANAGING DIRECTOR



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Cover Story





Prashant Wagh
Director Manufacturing

High-Quality Lab Equipment

A key player in this market, CAD MECH is renowned for offering high-quality CNC Trainer Machines and Mechatronics lab equipment which offers the right value to the customers for their investments. As lab equipment setup requires funding, the firm understands the importance of developing and deploying equipment that lasts for a long time and is aligned with the particular specifications and guidelines followed by the university. Catering to the education sector, CAD MECH boasts expertise in manufacturing equipment that seamlessly blends into the large infrastructure that universities need to build in alignment with the AICTE and UGC norms.

To ensure the quality of its solutions, the firm has extensively implemented QMS across the entire manufacturing process, right from raw material procurement to assessments of the finished products, and every aspect of quality is examined. The inspections are utilized not only for identifying and modifying errors but also for creating comprehensive reports and documents of the measurables, which supports the firm's efforts for quality enhancement.

"Our mission at CAD MECH is to offer all users true value for their equipment investment by a combination of factors such as value engineering, active service support, and superior performance consistency. To balance the high-quality expectation and budget constraint, we focus on in-house manufacturing of the total product right from raw material machining to dispatch of total product. All the manufacturing activities are carried out under one roof, which enables us complete control over the products that we offer, and allows us to ensure that every piece of equipment is as per the unique specifications demanded", shares Prakash Sulakhe, Managing Director, CAD MECH.

CAD MECH also offers customized product solutions, manufacturing which is supported by the company's in-house R&D department, and the expertise of the firm across all engineering disciplines. Leveraging these capabilities, the firm also gains more control over the cost of end products, which further strengthens its position as a reliable partner.

Embracing Innovation

At CAD MECH, innovation is at the core of everything that the company does. A key achievement in this regard has been designing easy-to-operate machines and equipment, aimed at addressing the fear students and teachers often have about using them. The machines also come with video guides to further simplify the experience. Advancing its solutions even more, the company has integrated simulation software into its products which assists students in verifying operations, empowering them to avoid errors or damages.

Through its innovative designs and virtual experience, the firm empowers students and faculty members to utilize the equipment with confidence, while the simulation panels offer an immersive experience. Embracing technological advancements and changes, the company continually upgrades its equipment to enhance user experience, boost performance and functionality, and maximize return on investment.

"A major shift in technology came with the Windows OS. To enhance the user experience, Windows is releasing the upgraded versions, so we are also upgrading our software for compatibility with the evolving needs. To cater to the evolving technological needs, we are implementing Industry 4.0 and IoT in our equipment. We have also developed our equipment with AR and VR for an immersive experience, and have developed online and virtual offline software with the machines to make smart labs", adds Prakash.

CAD MECH developed a Computer-Integrated Manufacturing Setup (CIM SETUP), Flexible manufacturing Setup (FMS SETUP), and Modular manufacturing setup (MMS SETUP) to experience Smart Factory Automation and to learn high-end technology skills.



Comprehensive Support Services

Beyond manufacturing excellence, what sets CAD MECH Engineering apart in this competitive domain is the firm's comprehensive range of post-sales services, including ongoing maintenance solutions, annual maintenance contracts, as well as training services for the faculty.

"Post-sales maintenance of a lab is the major point of inconvenience for all institutes. We solve this issue by carrying AMC for the supplied equipment, which all institutes can sign up for and get regular maintenance services in order



to ensure that the equipment functions in the right manner for a long period and any potential issues are addressed at the earliest. Another factor in maintenance is training needs. We offer complete training to all the faculty members at the time of installation, ensuring the equipment is handled correctly. We also provide training sessions periodically, if required”, adds Prakash.

With decades of experience in the domain, the company has developed a keen understanding of common client challenges and built a robust service team that handles service requests across India. Furthermore, in addition to the onsite training, trials of the machines are performed before clients for better transparency.

Apart from this, CAD MECH has also grown into the only authorized Indian reseller of two of the most prominent US-based companies, PENTA Machines and WAZER. These companies hold the monopoly for their patented unique products in desktop 5-axis machines and Desktop CNC water jet cutting machines. These collaborations have contributed significantly to the company’s rise over the years.



Ajay Jadhav
Research Director

Future Roadmap

Having carved a prominent position as a leading manufacturer of lab equipment in India, CAD MECH Engineering’s journey over the past years demonstrates the value of adopting a customer-centric approach. As the sole OEM of the equipment it manufactures in the education sector, the company has carved a distinctive identity in the market. However, the firm not only caters to the education sector but also works with DRDO to develop special-purpose machines.



Continuing on this journey of growth, the company has strategic plans for the coming years to support its expansion initiatives. One of the key aims for the company is to expand into varied industries, for which it has developed robust production capabilities for Industrial CNC machines. This development is aimed at enabling the firm to easily penetrate industrial sectors. Furthermore, the company aims to penetrate the export market within the education domain, establishing its footprint across countries, and becoming a preferred partner of choice for a global audience.

Another point of focus for CAD Mech in the coming years is to develop an educational virtual simulator complete with hardware, as a smart solution capable of meeting the future trends and demands of the education and Industrial sector. Through these diverse strategies, the company aspires to contribute to the advancement of education worldwide. 