

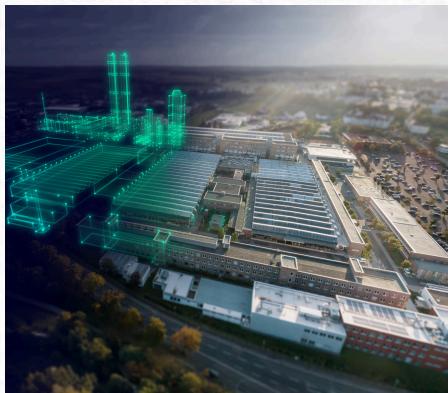
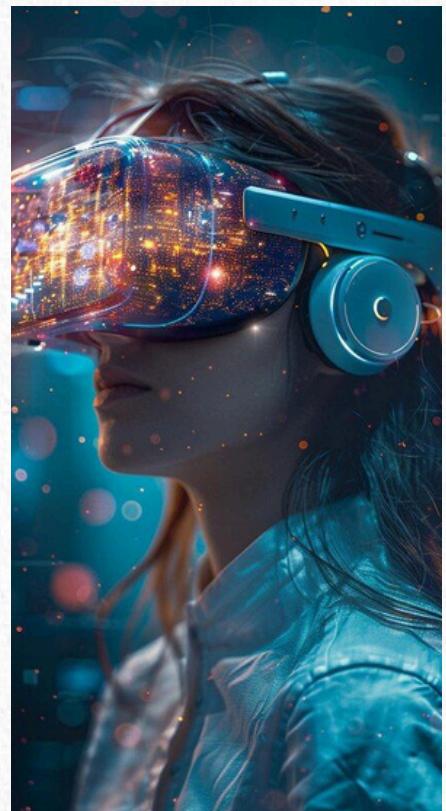


TANSAM **SIEMENS** Center of Excellence



Tamil Nadu Smart and Advanced Manufacturing Center

"Innovate, Automate, Elevate Industries with I 4.0"



7 State - of - the - Art INDUSTRY 4.0 LABS

**Product Innovation | Innovative Manufacturing |
Predictive Engineering Analytics | Asset Lifecycle
Management | Smart Factory | Product Lifecycle
Management | AR-VR-MR**

100+ Projects

97 MoU with International, R&D, Industry, MSME, Association, Academic Organizations

300+ POC's

1 Lac + Skilling



ABOUT

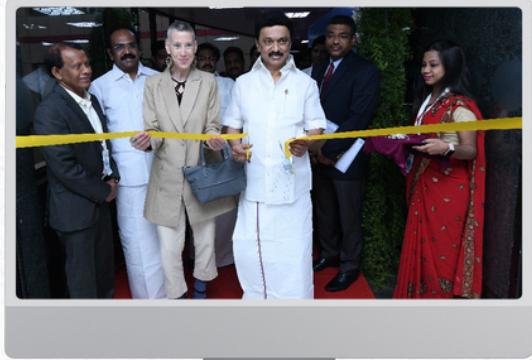


Tamilnadu Smart and Advanced Manufacturing Center of Excellence

TANSAM, is established as a Section 8 company formed and fully owned by Tamil Nadu Industrial Development Corporation (TIDCO) to facilitate Innovation at all levels. TIDCO in association with Siemens formed a Centre of excellence for Smart and advanced manufacturing based is bringing together state-of-the-art approaches of Industry 4.0 – to create factories of the future for products of the future. This will be a place where innovators and entrepreneurs can accelerate ideas from labs to market.

Tamil Nadu Smart and Advanced Manufacturing Center (TANSAM) is a pioneering institution dedicated to fostering innovation and excellence in the manufacturing sector of Tamil Nadu, India. Established to accelerate technological advancements, TANSAM collaborates closely with industry leaders, academic institutions, and governmental bodies to drive research and development initiatives.

By focusing on cutting-edge technologies such as robotics, automation, additive manufacturing, and Industry 4.0 practices.



TANSAM provides tailored training programs, workshops, and certifications to upskill MSME employees in areas such as automation, robotics, artificial intelligence, and data analytics. TANSAM plays a pivotal role in supporting Micro, Small, and Medium Enterprises (MSMEs) by equipping them with the knowledge, skills, and tools needed to embrace Industry 4.0 practices. Recognizing MSMEs as the backbone of the economy, TANSAM focuses on fostering innovation and competitiveness through advanced smart manufacturing technologies. TANSAM aims to enhance productivity, promote sustainable manufacturing practices, and elevate the region's global competitiveness in advanced manufacturing.

"Harnessing IoT for Seamless Industrial Integration."



LAB - Product Innovation Center

The Center is a dedicated hub for fostering creativity, engineering excellence, and cutting-edge product development. The center empowers industries to design, develop, and validate innovative products that meet the demands of the modern marketplace while ensuring efficiency, cost-effectiveness, and reliability.



LAB - Center for Predictive Engineering Analytics

The Center offers high-fidelity simulation tools to replicate real-world conditions, enabling precise performance analysis during the design phase. Create virtual replicas of physical systems to monitor, simulate, and predict product behavior, reducing risks and improving operational performance. A fully equipped testing facility ensures that simulations align with real-world outcomes, fostering confidence in predictive results.



LAB - Smart Factory Research Center

The Center is dedicated to revolutionizing manufacturing processes through the integration of Industry 4.0 technologies. By adopting advanced automation, IoT-enabled systems, and data-driven decision-making. Also, it empowers industries to achieve unparalleled levels of efficiency, flexibility, and sustainability.



LAB - Research Center for Asset Performance

This Center is dedicated facility focused on improving the reliability, efficiency, and longevity of industrial assets. By integrating cutting-edge technologies such as IoT, predictive analytics, and digital twin solution. Also, it helps industries optimize asset management and reduce operational risks while achieving maximum return on investment.

"Redefining Efficiency with Digital Twin Technology."

LAB - Innovative Manufacturing Center

The center is equipped with advanced Additive technologies, including metal and polymer-based 3D printers, to produce intricate, high-performance parts with minimal waste. Accelerate product development by quickly creating prototypes that are fully functional and allow for real-time testing and iteration.



LAB - Research Center for Product Life Cycle Management

Enable a holistic approach to managing the product lifecycle, integrating design, engineering, manufacturing, maintenance, and end-of-life stages into one unified process. Create digital replicas of physical products to simulate, monitor, and optimize performance in real-time throughout their lifecycle, ensuring informed decision-making and reducing risks.



LAB - AR & VR Research

Develop and deliver training programs using AR and VR simulations to provide hands-on experience in a controlled virtual environment, reducing risk and costs. Use VR and AR to create detailed, interactive 3D models of products, allowing for more efficient design validation and decision-making without the need for physical prototypes.

INDUSTRY Collaboration



L&T Technology Services

