

Engineering and Industrial Services



In a constantly changing complex environment, your organization needs a competitive advantage to be a market leader. At Tata Consultancy Services (TCS), we understand the factors that drive the industry. We help evolve the right innovative solutions that deliver engineering excellence and operational efficiency, ensuring you stay ahead of competition.

Overview

Today, only organizations that constantly innovate and embrace technological upgrades can contend in the increasingly competitive environment of the manufacturing sector. Developing new products in the shortest possible time, reducing R&D investments, and controlling product development costs are critical. Higher utilization of capital assets and higher production efficiencies are essential for success. So, the need for achieving engineering excellence and operational efficiency cannot be over stressed.

We understand that efficiency in innovation, operations, and capital management are critical for any manufacturing organization to succeed. With a deep understanding of industry challenges, we partner with engineering organizations like yours to help you achieve business goals. Using best-in-class technologies, processes and competencies, we work with you, taking on product development, plant design, supply chain management, production management and capital asset management, enabling you to maintain a competitive edge. Our process-driven approach and ability to scale, as per your requirement, will allow you to realize real business results faster.

Our Global Network Delivery Model™, a collaborative, superior framework of people, processes and infrastructure, makes it possible for us to consistently ensure success of your initiatives - anytime, anywhere.

Why TCS

As per Industry Analyst- ARC Advisory Group; "ARC is particularly impressed with the methodology TCS uses to manage customer engagements. Their approach reflects to a high degree, an Operational Excellence (OpX) approach to ensuring client satisfaction."

We work towards creating the right ecosystem, developing perfect solutions through our Centers of Excellence (CoE), focused R&D, and pool of experienced engineers and consultants. Our capabilities are further strengthened by our alliance partners that include the best technology houses, renowned academic institutions, and industry members. We add value to your operations through our:

Research and Development

We conceptualize and build innovative solutions around advanced control, system identification and fault diagnosis areas, and allied domains such as data mining, knowledge extraction, system identification and sensing, system modelling, analytics, simulation, decision support systems, and learning/intelligent systems.

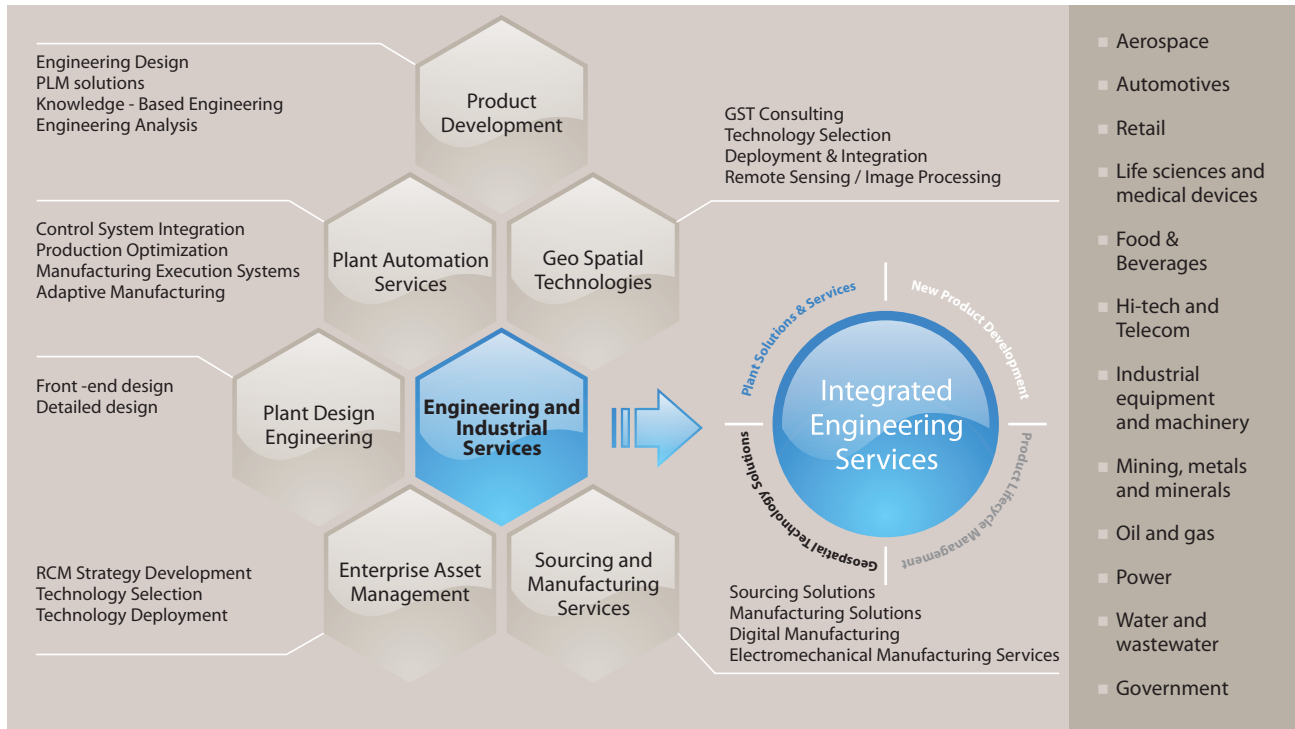
Infrastructure

Our excellent infrastructure across the globe, catering to computing and non-computing requirements, drives engineering excellence and operational efficiency. Our ISO9001 certified Electromechanical Manufacturing Factory manufactures quality products and takes on assembly and testing activities. We have teamed up with A.T. Kearney Procurement Solutions and UGS Corp to form Asian Sourcing Network, a groundbreaking initiative that enables manufacturers across the world to connect suppliers from low-cost countries to their global innovation networks.

Frameworks for excellence

Developed by us, frameworks such as 'Excellence in Design through Global Engineering' and 'Policy-Objective Matrix and Structured Enhancement of Daily Activities through Creativity', demonstrate our process-oriented thinking along with commitment to provide value and quality. This has helped us to receive certifications such as AS9100: Rev B (Aerospace), ISO 13485:2003 (Medical devices), CSIA Level-1 (Control System Integration).

EIS Services Portfolio



How TCS helps

We bring in scalability and state-of-the-art tools and processes to give your organization unparalleled advantages. Our solutions deliver tangible benefits in the form of:

- 25-30% reduction in engineering cycle time
- 30-45% reduction in engineering cost
- 10-25% improvement in production efficiency
- 15-20% reduction in equipment maintenance costs

Our offerings across the plant life cycle help you right from plant facility design, facility realization to operations and maintenance, while our product life cycle solutions help in conceptualization, designing, testing, analyzing, and service. Our single-window integrated engineering solutions are tailored to help you realize your product development, production management, and asset management strategies. We also provide manufacturing support through our Electromechanical Manufacturing Factory and Asian Sourcing Network.

Products

CemPac: Productivity suite for cement plants

DMDCAM: First-ever CAM software for additive manufacturing

EntICE: Versatile RAD framework for shop-floor applications, certified by SAP NetWeaver®

PowerPac: Asset management suite for power plants

Rapid Sigma: Composite application for effective and efficient Six Sigma implementation

SmartBox: Next-generation industrial controller

TC-FDA Accelerator: Enabling compliance to FDA regulations for the medical devices industry

TCS Stand Alone Post Processor: Post-processing solution for NC manufacturing applications

Web FACTORe: Which is a web-enabled intelligent asset management solution

How we help our customers

Global strategic manufacturing applications integration partner for a pharmaceutical major

One of the world's largest global pharmaceutical companies was looking for a partner that could provide manufacturing automation engineering services for its operations. With over 100 consultants working in North America and India, we provided range of services such as manufacturing IT applications lifecycle support, control system applications design and support, manufacturing data integration with enterprise business applications, manufacturing analytics, FDA compliance validation and six-sigma process consulting. This resulted in reduction in manufacturing engineering support cost by USD 3 million per year, while providing greater visibility within the manufacturing ecosystem.

Operational excellence in design and manufacturing for a global leader in aviation products and services

A global leader in the design and manufacture of aviation products and services for aircrafts was seeking a partner who could leverage its global engineering capabilities to enable concurrent engineering for faster time-to-market, apart from lowering costs. In collaboration with an aerospace domain consultant we engaged in concept design development, functioning as an extended design center. Leveraging our alliance partners' knowledge, we are also assisting them with manufacturing and assembly of metallic and composite structures, testing and life-time engineering support. We will be able to help this company lower cycle time by 30 per cent, cut manufacturing costs by 35 per cent, and reduce TCO through low-cost manufacturing and design houses from Asia.

Contact

To know more about our Engineering and Industrial Services, contact corporate.engineering@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com

IT Services Business Solutions Outsourcing

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