

Case Study | CEIT

PRODUCTION MONITORING SYSTEM

THE CLIENT RELIED ON TATA TECHNOLOGIES TO PROVIDE A PROJECT MANAGEMENT SYSTEM FOR ITS CRITICAL MACHINES, COUPLED WITH MANUFACTURING EXECUTION SYSTEMS (MES) DEVELOPMENT AND IMPLEMENTATION.

THE CHALLENGE

The customer required a project management system (PMS) for its preparatory equipment. Specific challenges included:

- Working with a tedious production planning process.
- Manual production reporting to SAP®.
- Manual logging of production data.
- Lack of product traceability.

THE COMPANY

A pioneer of radial tires and market leader in truck and bus radials in India. The Delhi-based organization is present in 100 countries across six continents.



THE SOLUTION

In just seven months, a team of four engineers delivered a solution that:

- Interfaced with 16 programmable logic controllers (PLCs) and 16 human machine interfaces (HMIs) in the plant, and with SAP ERP (enterprise resource planning) central component (ECC) 6.0 for active production orders and data for production booking.
- Provided for operator accountability and performance monitoring of the machines.
- Featured production planning, sequencing and data logging; scrap declaration; input material consumption and output production data logging; production booking back to SAP; and reports and dashboards.
- Utilized the following technologies: Customized .NET based MES platform; Rockwell® and Siemens PLCs; Beijer – iX developer HMIs; ethernet, PROFINET® and PROFIBUS® protocols; MySQL v5.6, Microsoft® SQL 2012 and Oracle® 11g databases; and .NET Framework 4.0 reporting portal.

THE RESULT

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Manual data entry into SAP with log book digitization



Visibility to shop floor



Optimum utilization of business system due to real-time authentic data



Accountability of scrap at production order level

ABOUT US

Tata Technologies is a global engineering and product development IT services company that is focused on fulfilling its mission of helping the world drive, fly, build and farm by enabling manufacturing companies across the automotive, aerospace and industrial heavy machinery verticals realize better products and drive efficiencies in their businesses. There are two components to our value proposition – managing and delivering outsourced engineering services and products for our manufacturing clients, and helping them identify and deploy technologies that are used to conceptualize, design, validate, build, test, benchmark and realize better products. For more information, visit www.tatatechnologies.com.