FACTORIES OF THE FUTURE

Tech Mahindra’s End to End Solution for Industry 4.0
FACTORIES OF THE FUTURE

Impacting Product, Humans & Environment

- Factories Of the Future (FoF) core is about Automation & Robotics, Quality Throughput, Utilization, Flexibility and Reduced Time-to-Market
- Furthermore, FoF is also about new digital technology and its smooth alignment with human, it’s about change management and how to achieve the desired target state
- & FoF is about reduced carbon footprint and waste, positive environment impact and health & wellness of the employees

Tech Mahindra is your single window partner from Consulting, Tech Assessment, Project implementation, Roll out & Run... & we can do this with business outcome based engagement model
6 DIGITAL TECHNOLOGIES WILL HELP BUILD THE FACTORIES OF FUTURE

- Digital Manufacturing
- VR/AR
- Blockchain
- Industrial Cybersecurity
- Automation 2.0
- Connected Machines
- Analytics
- 5G Wireless

Greenfield Plants with New Age Tech Infrastructure

Brownfield Plants with Legacy System

& these digital technologies will integrate with the existing legacy landscape of...

- Enterprise Asset Management
- Manufacturing Execution System
- Manufacturing Intelligence
- Enterprise Resource Planning
- Supply Chain Management
- Warehouse Management System
- Supplier Relation Management
- Mainframe
- Attendance Management
- BOM
- Planning & Scheduling Systems
- EHS
TECH MAHINDRA HAS ENVISIONED INDUSTRY 4.0 ALIGNED FACTORY ARCHITECTURE

Enabling Interoperability, Virtualization, Real time Technical Assistance, Modularity, Service Orientation & Decentralized Decisions with effective change management for specific factory needs

TECH MAHINDRA’S SOLUTION CATALOGUE FOR INDUSTRY 4.0

Industry 4.0 Consulting
- Industry 4.0 Assessment : business process & technology
- MVP definition : Minimal Viable Product
- Technology & product assessment

Digital Manufacturing & PLM
- Product Data Management – eBOM, mBOM, BOP
- Plant Management – Factory 3D Layouts, Process & Plant Simulations
- Plant Ergonomics, Dimensional Quality & Work Cell Optimization
- Digital twin for Processes
- Product Life Cycle Management

Industrial IoT
- Machine connectivity
- Edge Analytics
- Sensor and Gateway development
TECH MAHINDRA’S SOLUTION CATALOGUE FOR INDUSTRY 4.0

**AR & VR**
- Smart Work Instructions
- Hands free Maintenance Solution
- Training Support

**Manufacturing Analytics**
- Plant/ Equipment Condition Monitoring & Analytics
- Predictive Maintenance & Quality
- Engineering Analytics
- Machine Learning

**Manufacturing Execution Systems (MES)**
- Production Planning & Scheduling
- Product & Process Traceability
- Error Proofing & Quality
- Production Execution, Data Collection & Performance Analysis
- Asset Management & Labor Management

**Asset Management & LIMS**
- Enterprise Asset Management
- Analytics & PMQ of Assets
- LIMS Implementation
- Research Optimization
- Data acquisition, processing and transfer

**Robotics & Automation**
- PLC & Robots Programming and commissioning
- Robots off-line programming
- Automation HW integration
- SCADA Programming

**Industrial Infra, Networks & Security**
- Network Consultation & Architecture
- Cyber security
- Industrial Infrastructure Management
- Hybrid Cloud
- OPEX model of Infrastructure
TECHM’S PRESENCE IN THE INDUSTRY 4.0: 1800+ Team Size & Partners

1. Digital Manufacturing

2. MoM

3. Advance Analytics

4. PLM

5. Industrial IoT

6. Robotics & Automation

7. AR-VR

8. Network & Security
TECHM’S LAB – HELPING OUR CLIENTS ACCELERATE EXECUTION
FACTORY END TO END IMPLEMENTATION @ BROWNFIELD DISCRETE MANUFACTURING, 120+ PLANT GLOBALLY (JAPAN, CHINA, EUROPE, US...)

Visioning
- Workshop and High level discussion along with Mahindra Plant Visit – June 2015 (1 week)

Manufacturing Execution
- Track & Trace
- Quality Management, Error Proofing

Reference Architecture & Roadmap
- Consulting Assessment on Industry 4.0 - September - October 2015 (6 weeks)

Production Planning & Scheduling
- Real time updates in production planning
- Re-sequencing & agile, flexible production

Energy Monitoring
- Energy Monitoring
- Visualization for efficient management

Real time Visibility
- Machine, Process Visibility, Visualization & Dashboard
- FactoryIoT

Roll Out & Support
- Enhancement, application & Infrastructure support
- Multi-lingual support

Contact Us: connect@techmahindra.com