

Industry 4.0 Road Map



Industry 4.0

Advanced data analytics
Data base management systems
Cyber-physical systems, the internet of things and cloud computing
Real time self optimizing connected systems
Integrated business and manufacturing processes as well as all the components in the company's value chain (suppliers and customers)



MES / ERP

Production management
Equipment networking
Central data acquisition
Continuous data recording



Intelligent intralogistics

Automation and transports systems for interlinking production, parts conveying, integrating additional manufacturing/assembly steps and logistical processes

Auxiliary Equipment



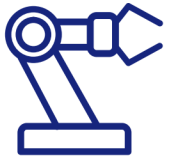
Auxiliary equipment integrated with the primary processing equipment
Material handling, central water, resin drying, blending, scrap reclaim, plant-wide controls

Smart Machines



Networked processing equipment, with advanced sensors for adaptive and automatic process control, integrated automation and peripherals - Collaborative technologies and networked processes

Robotic Systems



Gentle part removal
Reliable parts separation
Flexible part palletizing
Precise insertion
Reduced production steps
Space Smart - reduced footprint
Increased safety

Quality Control



Process control
Inline inspection
Visual sensors
Camera & imaging systems

**AUTOMATION
FOR MORE
EFFICIENT
PRODUCTION,
REDUCED UNIT
COSTS &
INCREASED
ADDED VALUE**