


# LightMES

POWERED BY  thingworx®

Manufacturing Execution  Simplified!





## About The Solution

As manufactures globally reshape their priorities and adopt newer strategies for restoring and future proofing operations, improving efficiency, using digital technologies, they are faced by challenges of cash preservation causing a significant impact on the future of MES programs in these organization. Today's manufacture ecosystem warrants the need for operational flexibility and responsive operations. A modern MES that is best aligned with your operational needs is quality-focused and can achieve a quick ROI, should be at the forefront of any decision.



Industries lose about **5-20%** of productivity in cross functional complex interactions



**20-30%** of assets fail during operations due to lack of knowledge about condition of the asset



**53%** of the enterprises expect COVID-19 to force a rethink of their operations and disrupt their demand cycles

## Light MES

Powered by PTC ThingWorx

**Light MES** solution framework engineered by HCL's Industry 4.0 Digital Manufacturing Practice includes essential manufacturing execution functions, which enables customers to achieve their production and operational goals with early return on investment. This flexible framework permitting users to develop, configure and customize the MES application with significantly reduced implementation times. It offers freedom to adopt agile approach to envision integrated manufacturing value chains by the end user. Some of the key features of the framework are:

## Features



### Connected Enterprise

Scalable across multiple plants as it is based on ThingWorx IIoT Platform



### Easy Configure & Customize

Extensibility with Production Modelling based on PTC ThingWorx Thing model



### Personalized user experience

Enable remote monitoring and social distancing through Digitalization for fulfilling post COVID needs



### Compliant Manufacturing

Adopt industry standard best practices of manufacturing



### Business Intelligence

Apply business logic to gauge the production performance and power actionable business decisions



### Rapid Project Rollouts

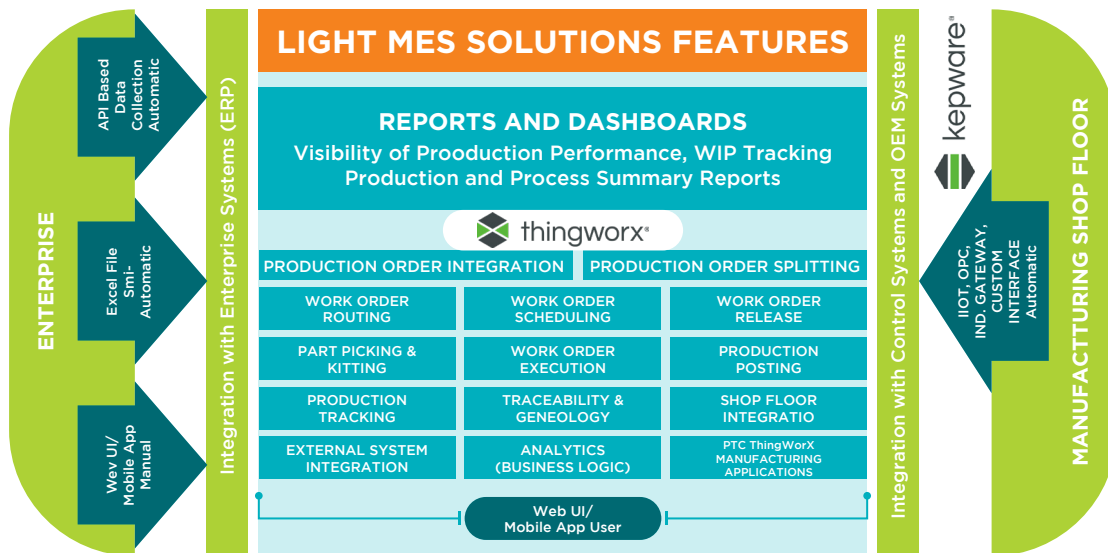
Seamless, quick implementation, for rapid deployment in production, to enable faster ROI realization on MES investment





## Scalable Architecture

The idea of the light MES framework is to build a library and a set of functions based on Industry leading manufacturing practices that can be extended and leveraged for our customer needs. By choosing thingworx as the base platform, we inherit a scalable and enterprise class IoT Platform that offers the stability and maturity that our customers expect. The library of functions can be selectively.



## Modular Functions

This solution offers all the critical and essential MES functions needed to create, customize, and modify manual daily operations by lift & shift to a complete digital means. It embodies the idea of manufacturing execution simplified by ensuring a digital response to post COVID business challenges.



## Benefits

### Improved Manufacturing Efficiency



Easy tracking of manufacturing and Performance KPIs



Easy to know manufacturing asset utilization



Easy identification of parts/assembly by serialization and image

### Optimized Cost of Ownership

#### Manufacturing Integration

- Native OPC DA/UA connectivity
- Native custom interface through SDKs and APIs

#### 3rd Party Licenses

- 100% based on PTC ThingWorx
- No hidden cost

#### Hardware

- Scalable hardware based on need
  - From single server to full-flagged fault-tolerant, high availability configuration
- Save on physical hardware with cloud hosting

#### Administration

- Powerful admin configuration GUI
- Help central decision making
- Less dependencies on multiple roles

#### Industry 4.0: IIoT Adoption

- Leverage the world's one of the foundational IIoT platform
- MQTT enabled for larger connectivity with different assets

#### Software

- Modular functionality
- Pay only for the feature for use
- Scalable pricing based on module size

#### Usability

- Lower training time for user
- Personalized user enforcement from handheld devices
- Quick action within no time, improved productivity

