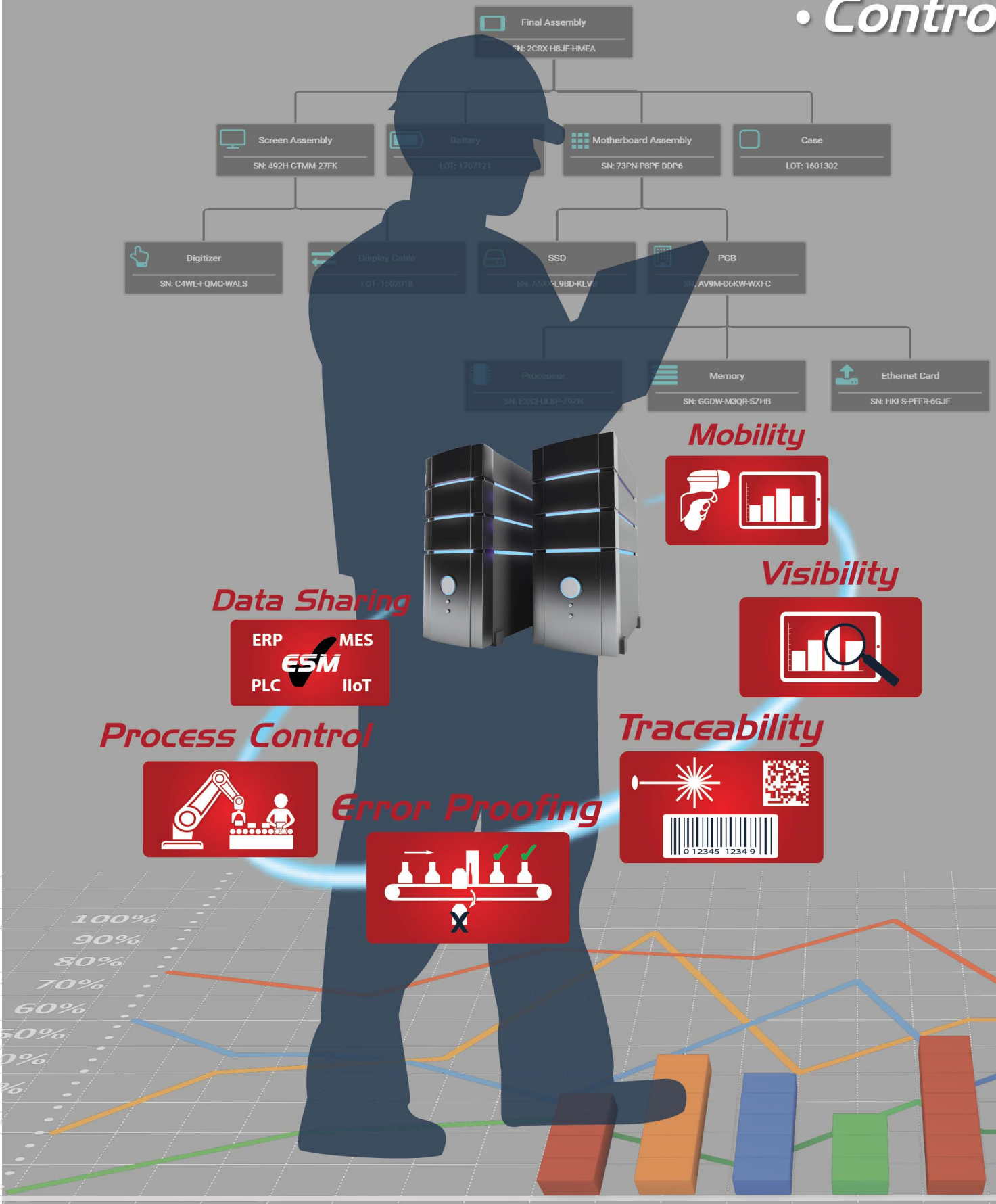
ENFORCER®

Smart Manufacturing

- Digitize
- Organize
- Control

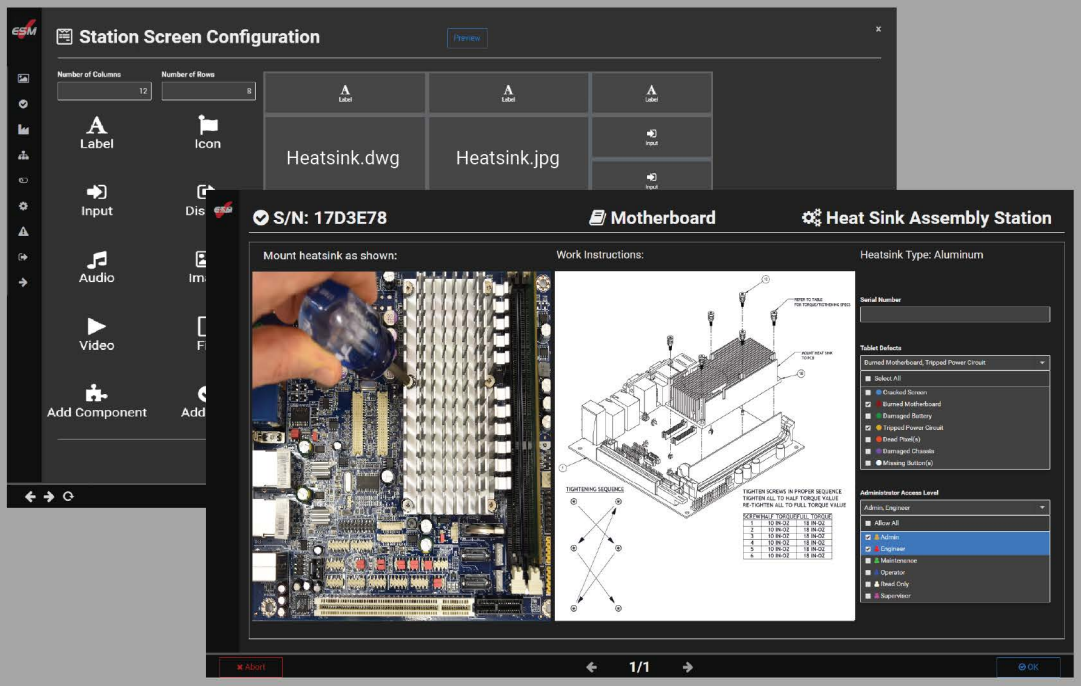


ESM

ENFORCER®
Smart Manufacturing

User Configurable Process Control & Traceability

- Process Configuration
  - Sites
  - Lines
  - Stations
  - Printers
  - Label Templates
  - Actions
  - Sequences
  - Routers
  - Recipes
  - Part Group Types
  - Component Group Types
- System
  - Controllers
  - Event Definitions
  - Labels
  - Media
  - Picklists
  - Security
  - Setting Definitions
  - Templates



- Digitally Transform your Production Processes
  - Manufacturing & Operations
  - Quality & Laboratory
  - Manual & Automated
- Ensure all Process Steps are Performed
- Improve Quality, Yield & Productivity
- Digitally Ensure & Document Compliance
- Complete Product & Process Traceability

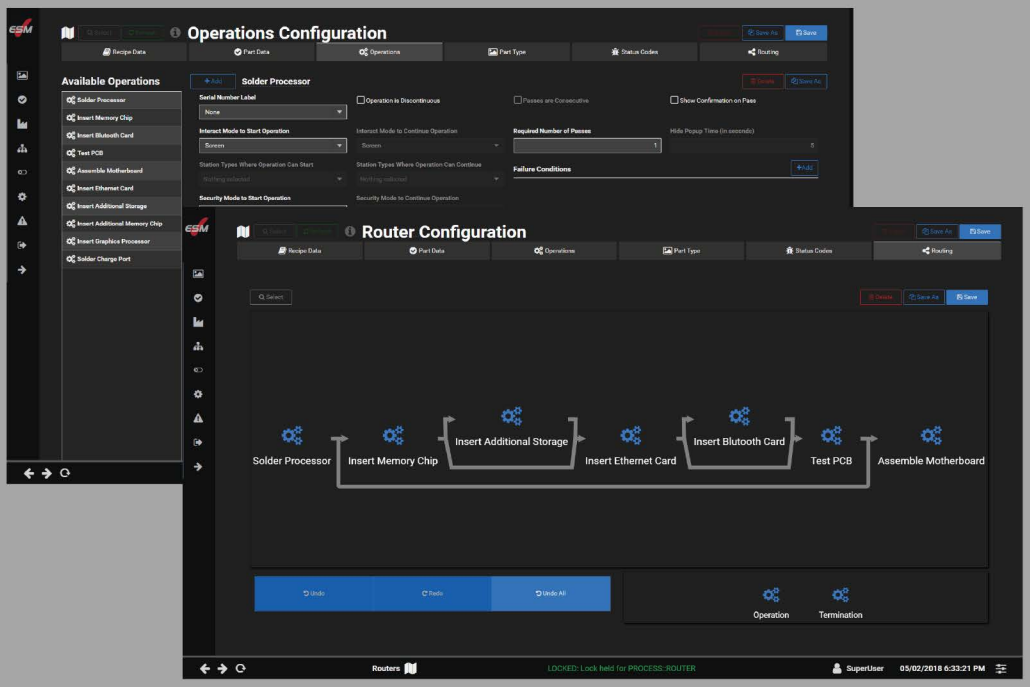
ESM

ENFORCER®
Smart Manufacturing

- Execute
  - Parts
  - Part Groups
  - Component Groups
- Process Execution
  - Part Genealogy
  - Part Groups
  - Process Coordinator
  - Events
- Visualization
  - Realtime Line Status
  - Realtime Shift Status
  - Part History
  - Part Group History
- Settings
- Events
- Logout
- Minimize

With ENFORCER® Smart Manufacturing YOU create digital twins of your Enterprise, Processes & Products

- Sites, Buildings, Departments
- Lines, Processing Areas
- Stations, Equipment
- Operations
- Process Routers
- Operational Screens
- Work Instructions
- Enforced Process Rules
- Equipment PLC Recipe Setpoints
- Equipment PLC Data Acquisition



With ENFORCER® Smart Manufacturing YOU define Visibility

- Real-time Dashboards for Continuous Improvement
- Traceability & Genealogy Data to the Batch, Lot & Part Level
- Replication of Data Sets for Cloud Analytics
- Visible on any Web-based Device with Authorized Access

ENFORCER® Smart Manufacturing

In today's competitive market, it is imperative for manufacturers to achieve operational excellence. Experts agree the quickest way to operational excellence is thru digital transformation. Now, manufacturers of all sizes and markets can quickly and affordably digitally transform their manufacturing processes with **ENFORCER® Smart Manufacturing** by Innovar. This user-configurable, scalable solution provides part-level manufacturing routing, process control, quality enforcement and traceability. It provides enterprise-wide, real-time visibility to your manufacturing successes and problems empowering all with the information needed for continuous improvement.

What is it ?

ENFORCER® Smart Manufacturing is a user configurable Digital Transformation software platform to gather, organize and use information in real time for Manufacturing Operations Management and to create Smart Manufacturing Solutions.

How does it work ?

At its core **ENFORCER® Smart Manufacturing** is a real-time information system with the unique ability to manage and control your manufacturing operations by sharing data in real time between production personnel, automated equipment and other systems.

What does it do ?

- Controls Operational Workflow with Process Routers
- Automatically Distributes Multimedia Work Instructions and Equipment Automation Recipes
- Automates Process Rules and Enforces that every Part is Manufactured Correctly
- Adaptive Control - Use Real-time Process Data to Statistically Improve Yields & Productivity
- Collects Batch, Lot & Part Level Traceability and Genealogy Data
- Monitors Line, Station & Equipment Events & Alarms
- Monitors Line, Station & Equipment Downtimes
- Monitors Overall Equipment Effectiveness OEE
- Provides Manufacturing Operations Visibility

What Information does it Provide ?

- Complete Traceability & Genealogy for each Part Manufactured including Manufacturing Parameters & Results for each Operation
- One Version of the Production Floor Truth
  - Production Count
  - Yields
  - Failures
  - Takt Times
  - Down Times
  - OEE

  Organized by Work Order, Model, Line, Station, or any other Context ***YOU*** create when configuring the **ENFORCER® Smart Manufacturing** system.

Where does it live ?

The **ENFORCER® Smart Manufacturing** resides on both plant Edge Servers and in the Cloud. The system connects to manufacturing workstations, production equipment and other systems via your enterprise network and is the "Command Center" for manufacturing control and information.

ENFORCER® Smart Manufacturing

- ***Scalable***
- ***Quick to Deploy***
- ***High ROI***
- ***Coolest Thing Ever***

Contact Innovar to see how **ENFORCER® Smart Manufacturing** can help you achieve operational excellence.

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