Resource Tracking

Manages and tracks factory resources and sub-resources

Overview

Nowadays, equipment is becoming increasingly complex and expensive. The equipment health, performance and utilization are key factors in the operations efficiency and in the company profitability, being the Overall Equipment Effectiveness (OEE) a closely monitored indicator. Furthermore, increasing levels of manufacturing sophistication and automation require that the Manufacturing Execution System (MES) keeps track of both the equipment master data information, equipment state and equipment history.

Resource Tracking provides a hierarchical object model to model virtually any type of equipment and it provides all the functionality required for managing and tracking resources.

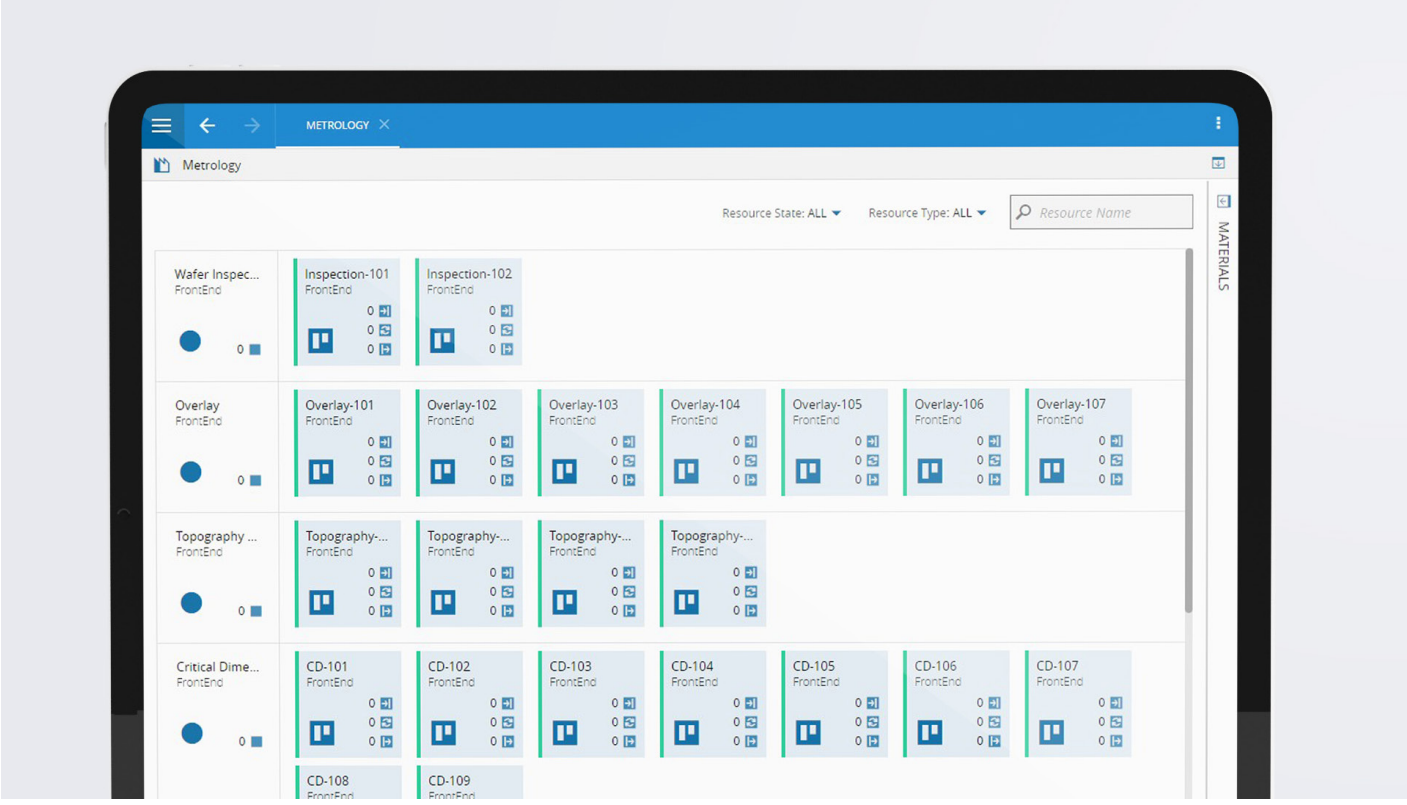

Figure 1 Area view

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Key Features

- Hierarchical Resource Model with different levels of Material Tracking.
- Rich set of transactions (Change Resource State, Change System State, Store Material, Retrieve Material, Dock Container, Undock Container, Perform Data Collection, Manage Durables, Manage Consumables, Manage Instruments).
- User defined state models with pre-configured SEMI-E10 state model with E58 standard reasons.
- Capability to propagate state changes in a resource hierarchy.
- Dedicated Resource Views.
- Capability to visualize the equipment in real-time in fabLive.
- Capability to define and enforce operator skills (certifications).
- Support of multiple Maintenance Plans per Resource.
- Support for Resources of different processing types with different functions: Process, Line, Storage, Load Port, Consumable Feed, and Instrument.
- Resource Setup transactions.
- Storage Resources with user defined position address formats and two-dimensions visualization.
- Integration with Material Tracking, Data Collection, SPC, Document Management, Maintenance Management, Recipe Management, Labor Management, Weigh & Dispense and Scheduling modules.

Benefits

- Improved Overall Equipment Effectiveness (OEE)
- Reduction of downtime and unplanned breakdowns
- Increased visibility and monitoring real-time capabilities
- Increased process automation

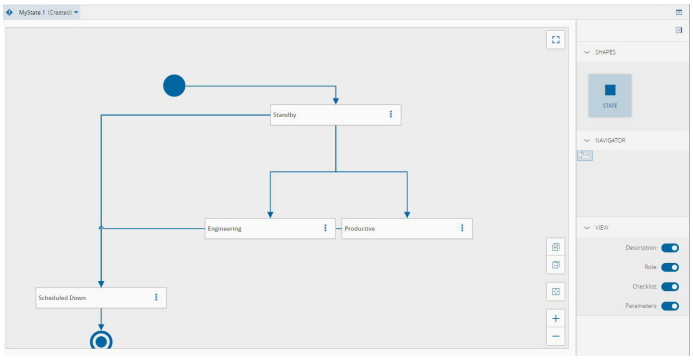

Figure 2 State Model definition

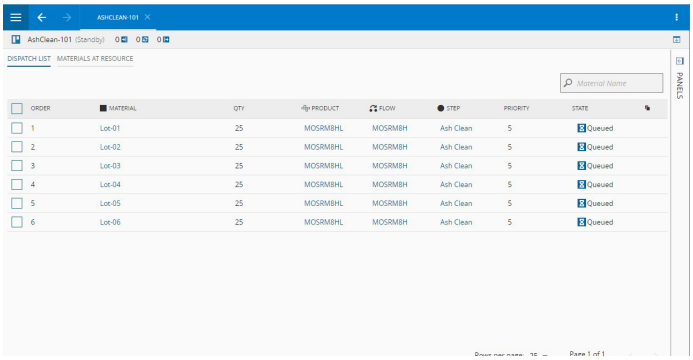

Figure 3 Dispatch Resource View

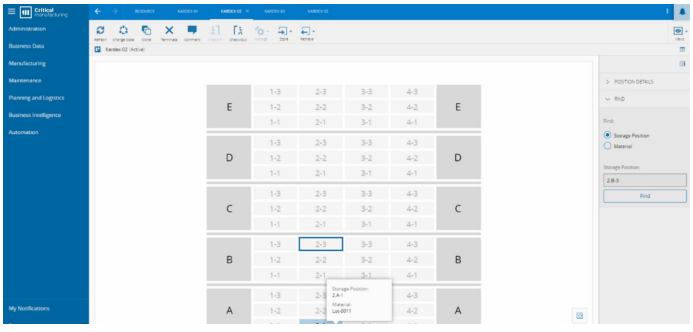

Figure 4 Storage Resource View

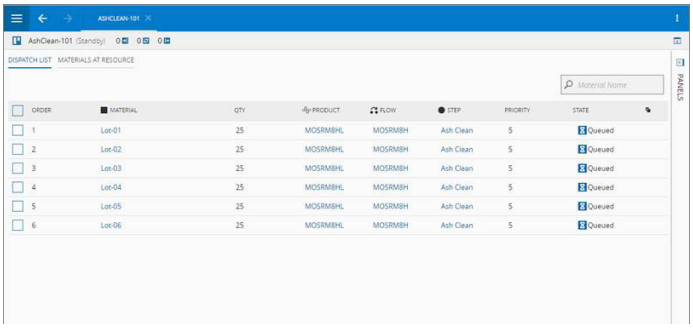

Figure 5 Process Resource View

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