

# FalconSFT

Shop Floor Tracker





 **inventrax**<sup>®</sup>  
Traceability Assured













## Introduction

### Introduction

-  **FalconSFT** is a shop floor tracking software that allows a manufacturing unit to have control on shop floor activities, capture process data, operator timings and monitor real-time production status. This tool validates material and process flow, captures quality parameters and hence make a production control more efficient.
-  FalconSFT can also be interpreted as a Manufacturing Execution System (**MES**) that helps resource planning and optimization based on real-time data

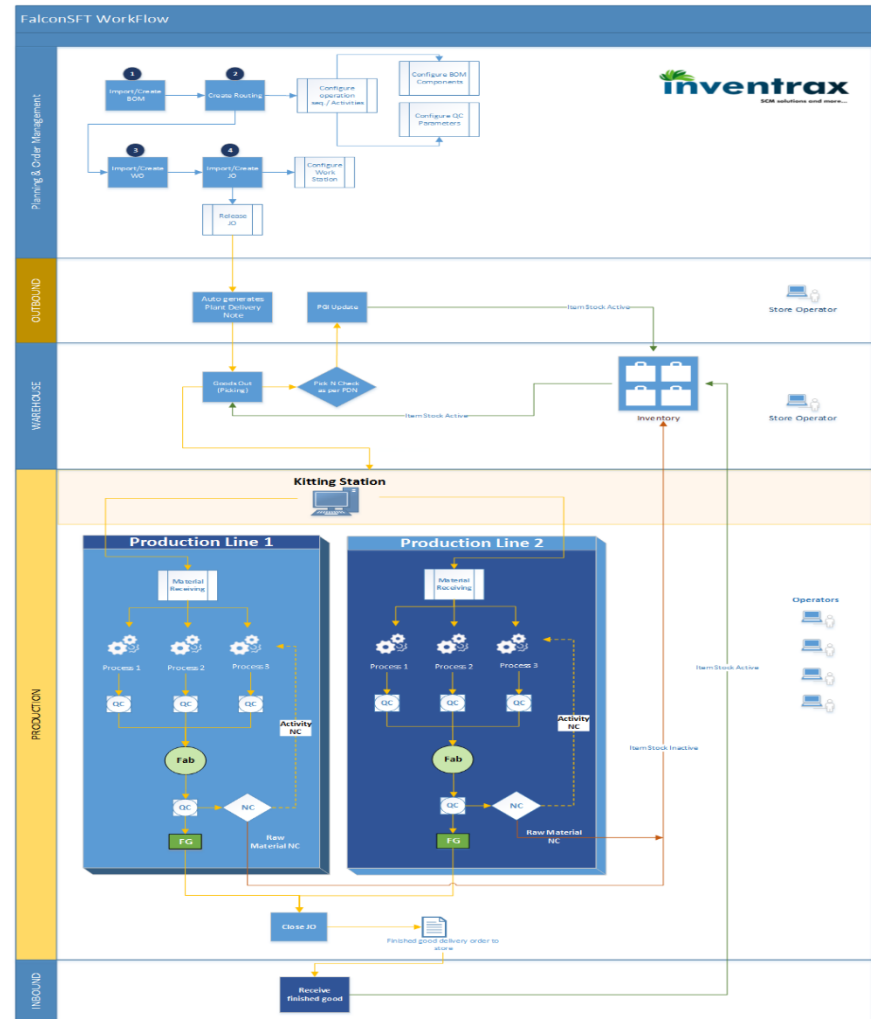
## Benefits

### Benefits :

-  Effective management of the flow of material and data across operations
-  Gain real-time visibility into the shop floor
-  Ensure items are built to product specification and quality
-  Eliminate wastages throughout production, checks for – machine, material, worker, tool availability
-  Paperless job card traveler, role based, workstation specific, operation/activity level controls
-  Achieve lean production
-  Improve operator, workstation efficiencies
-  Error free auto data capture through barcode , RFID and SCADA systems
-  Bird's eye view of overall production with Dashboards, KPI's reporting
-  Rapid and accurate data collection enables error free data collection and access to real-time business intelligence across all areas of production

# Workflow

## FalconSFT Workflow










## Features

### Features

#### **Falcon SFT Workflow Management**





FalconSFT facilitates management of Production Order, BOM, Routing, Engineering Change Order Management, component configuration at route activities, quality checkpoint mapping to route activities, workstations, tool mapping and user(Operator/Supervisor/ QC Inspector/) mapping.

#### **Order Management**




-  Initiate/Import Sales Orders
-  Initiate/Import a Job/Prod. Order
-  Engineering Change Order (ECO) management
-  Automatically checks the material availability in store, alerts SCM team to fulfill the deficiencies and validates the production plan
-  Validates production order release based on material, tool availability and machine/tool calibration status
-  View job order queues, prioritize the queues, and update job order status automatically after the required quantities of finished goods has been completed and shipped back to the stores
-  Supports production order returns to store

## Features

### Routing


-  Create routing and sequentially list the operations/activities, configure work stations, serial no. requirement and activity cycle time at each activity
-  Configure routing for workstation types, inspection checklist types, cycle time, dependency activities
-  Configure Engineering BOM, assign components with UoM and quantities to activities
-  Configure QC plans at activity level

### Bill of Material




-  Create Bill of Material (BOM), configure material type, UoM and quantity
-  Supports multi-level/ structured Engineering BOM
-  Support Phantom BOM creation

### Workstation Type/Workstation

#### Workstation Type













-  Create work station type based on the operation activity

#### Workstation

-  Create work station, configure resource type, average working periods and work type
-  Configure work station with capacity and costing information to provide accurate reporting at work station level
-  Configure operator and shift information to authorize operation recording

## Features










### Workstation Console

-  Role, workstation, operation, activity based authentication and authorization
-  Operator Workstation / Supervisor Workstation console
-  View job orders in work queue, operation instructions, material pick list for the assigned operation, job order status
-  Capture operators activity start time at the beginning of the operation
-  Receive and validate raw material using auto data capture (barcode/RF) devices
-  Track Work In-Process, material pending for consumption, material deficiency due to non-conformity/scraped output
-  Record quality results at operation/activity level
-  Record non-conformance with material scrapping/ rework at activity level
-  Attach pictures of scrap/non conformance state of the product
-  Move rejected assemblies to other operation sequence for rework
-  Assign lot and serial numbers at job order start
-  Print labels at operations





## Features




### Reporting & Dashboards

-  Dashboards with Real time production reporting
-  Key performance index (KPI) in graphical notations
-  Workstation performance reports
-  Operator performance reports
-  Route Process Report
-  Inspection reports at operation level
-  Non conformity reports
-  Certificate of Conformity (CoC) printing
-  Work In process(WIP) reports

### Data Acquisition

-  Data capturing at collection points with auto data capturing devices such as barcode, RFID and SCADA systems
-  Auto barcode/RF tag printing at process completion

### Integration

















-  Integration with Standard ERP's such as SAP, JD Edwards, MS Dynamics, Infor etc.
-  Real time event subscription based communication in message queues(MQ) with ERP's
-  Allows Integration with 3rd party software system in open XML standards





## Technical Specifications

### On-Premise - Hardware Requirements (Recommended):



-  **Server**    **Production (2 No's): 1 for Application Server and 1 for Database Server**
  -  Intel Xeon Quad Core Processor , 16GB DDR3 RAM ,500GB SATA HDD, 24MB CPU cache
  - Staging (1 No.): Application and Database Server**
  -  Intel Xeon Quad Core Processor , 4GB DDR3 RAM ,500GB SATA HDD, 24MB CPU cache
-  **Workstations**
  -  Hardware independent any modern PC's with browser support for configuration  
Windows OS Ver. 7.0 and above workstation for MES(Shop Floor Tracker) application
-  **Wireless infrastructure**
  -  High throughput Wireless mesh in the shop floor
-  **Thermal Printers**
  -  Industrial rugged thermal printers and network IP configuration
  -  Industrial RFID personalization printers
  -  Printing stationary (Labels, RFID Tags, Ink ribbons)
-  **Barcode/RFID**
  -  USB /Wireless barcode readers
  -  Fixed RFID Reader (Motorola FX9500) and Antennas
  -  Barcode consumable based on business requirements
  -  RF Tags depends on business requirements





## Technical Specifications

### Software Requirements (Recommended):

#### Server






-  Windows 2008 64bit Enterprise Edition
-  MS SQL Server 2012 Database Enterprise Edition with SSRS support

#### Workstations



-  Windows OS with Internet Explorer 9.0 onwards/ Google Chrome 28.0 / Firefox 12 .0 and above
-  Windows PC workstations / Rugged Industrial tablets

## Support

### User Training

-  System overview for all the stakeholders
-  Application installation and configuration(IT team)
-  Role based user training (Operator, Supervisor, QC Inspector, Other Quality Representatives)
-  Training for shop floor executives and key decision makers on reporting
-  User friendly interactive operations manual

### Support

-  Customer Help Desk
-  Call support (VoIP / Phone Line), Email support, On-site support



