

Production Planning: Run your factory efficiently

Pull Materials + Allocate Capacities + Schedule Resources = Meet Demand, On-Time



Improve the efficiency of your manufacturing operations

Inputs & Considerations

- **Production lines/machines** ... types, capabilities, capacity per shift/day, lead times, setup times, etc.
- **Order details** ... production orders by SKU & due date, order priority
- **Material availability** ... BOM representation, on-hand and in-transit materials
- **Costs/penalties** ... cost of mfg, penalty for missing due dates, sequence dependent setups, etc.
- **Business rules** ... available shifts, sequencing rules, alternate resources, etc.

Solution Output

- **Production Plans** ... day/shift level capacity & material constrained plan; order fulfilment plan
- **Resource Plans** ... use of alternate/simultaneous resources, overtime capacity, pre-builds, etc.
- **Production Schedules** ... detailed scheduling of production orders on resources
- **Digital Kanbans** ... represent movement & storage of material and trigger production operations
- **Multiple Objectives** ... meeting due dates, minimizing costs, maximizing utilization, etc.

Benefits

- ✓ Improved order fulfillment dates
- ✓ Fewer expedited shipments
- ✓ Increased utilization of resources
- ✓ Decrease in overtime
- ✓ Lower inventory levels of FG, WIP & RM

Production Systems Supported

- **Production stages** ... multi-stage, multi-line manufacturing; managing capacities across lines (make & pack)
- **Production campaigns** ... single stage production with large setups and multiple campaigns with long batch runs
- **Job shops** ... multiple products with unique 'production routes' that need to be sequenced across shared machines
- **Assembly lines** ... sequencing different jobs on a single assembly line with changes in tools, setups, etc.
- **Assembly operations** ... managing products with multiple stages of assembly & material constraints, shared resources

Spashta Production Planner

- **Efficacy** ... consider *all tiers* of your supply chain with relevant constraints
- **Data Ingestion** ... easily *import / export data* ... multiple options including Excel
- **Agility** ... perform rapid "*what-if scenarios*", quickly customize constraints, etc.

Highlights

- **Simultaneous planning** of materials & capacities
- **Algorithms** ... display & understand solution output and
- **Interactive** management of data inputs, business rules, constraints and output
- **Scenario planning** ... get up & running quickly ... use "on-demand" based on business needs
- **Execution systems** ... easily customizable for multiple manufacturing environments with unique requirements

Quick Implementations

Executable Plans

Improved ROI