

Which Manufacturing Planning System is Right for You?

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xTuple Planning Systems

When to use which...



▶ Key Concepts

- ▶ Production Plan (Forecast)
- ▶ Forecast Netted
- ▶ Cumulative MPS
- ▶ Time Fence
- ▶ Order Parameters
- ▶ Planning Item
- ▶ Runs before MRP – Drives MRP

MPS: Production Plan

▶ Demand Driver:

- ▶ Production Plan (Forecast): Must be maintained by the planning team
- ▶ Is the cornerstone of an MPS Plan
- ▶ Normally “looks out” several months to a year



MPS: Production Plan

- ▶ **Forecast Netted versus Cumulative MPS:**
 - ▶ Forecast Netted looks at on hand and future availability before creating planned orders
 - ▶ Forecast Netted is the traditional method
 - ▶ Cumulative MPS ignores on hand and future availability before creating planned orders
 - ▶ Cumulative MPS is used to “fill the warehouse” in the off season

MPS: Item Site Settings

▶ Time Fence

- ▶ Number of days inside of which production plan (forecast) is ignored and actual demand is used
- ▶ Number of days outside of which greater of production plan (forecast) or actual demand is used



MPS: Item Site Settings

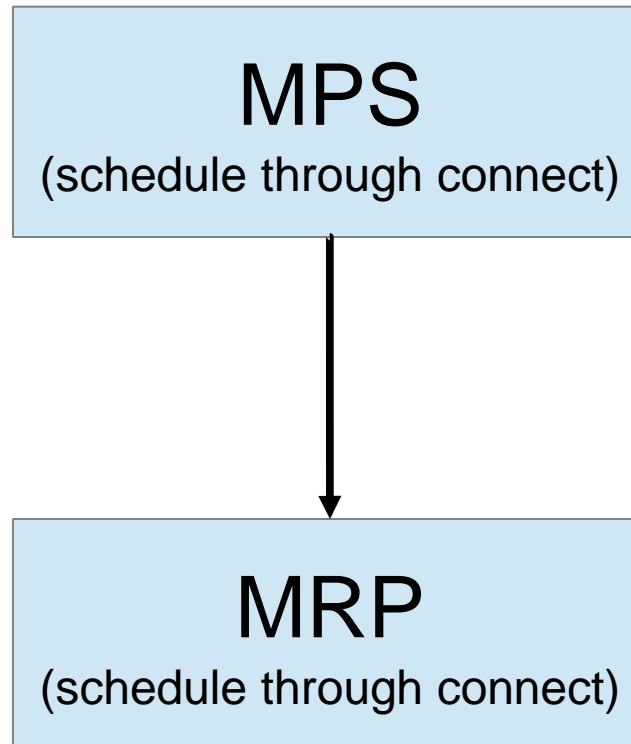
▶ Order Parameters

- ▶ MPS and MRP honor item site order parameters:
 - ▶ Reorder Point
 - ▶ Outer Up To
 - ▶ Minimum
 - ▶ Maximum
 - ▶ Order Multiple
 - ▶ Safety Stock

MPS: Planning Items

- ▶ Product Family Item Type
 - ▶ Logical item
 - ▶ Cannot be stocked
 - ▶ BOM defines family of products for MPS forecasting
 - ▶ Qty Per used to define percentage of demand for each family member
 - ▶ Simplifies forecasting
 - ▶ One forecast for family instead of one forecast per family member

MPS: Execution Sequence



▶ Key Concepts

- ▶ Demand and Order Parameter Driven
- ▶ No Forecast
- ▶ “Black Box” Planning System
- ▶ Simple Hands Off

MPS/MRP Items

▶ Independent Demand Items

- ▶ Items whose demand is independent of an item that is higher up on a Bill Of Material (BOM)
- ▶ “Top Level” Items
- ▶ Traditionally these are MPS items

▶ Dependent Demand Items

- ▶ Items whose demand is dependent on high level items in the Bill Of Material Structure
- ▶ Traditionally these are MRP items



MPS Scenarios

- ▶ Long Lead Time Items at Lower BOM Levels
 - ▶ Top level lead times are short
 - ▶ Lower level lead times are long
 - ▶ MPS forecast for short lead time top level items pushes down to long lead time MRP items to support an aggregated purchasing plan
- ▶ Customer Build Schedule
 - ▶ Customer provides a contractual build schedule
 - ▶ MPS forecast reflects build schedule to drive lower level sub-assembly schedule and purchasing plan

MPS Scenarios

- ▶ Sales History Used to Drive MPS
 - ▶ Not part of core it is possible to script the creation of the schedule



MPS Considerations

- ▶ **MRP is easy and simple**
 - ▶ Black box makes it easy to implement and operate
 - ▶ Can only plan to order parameters and actual supply and demand
- ▶ **MPS requires constant attention**
 - ▶ Production plans (forecasts) must be created, released, maintained
 - ▶ Marketing, operations and purchasing must collaborate around MPS
 - ▶ Requires leadership and maintenance and a cultural shift

Contact

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