



NETSUITE PRODUCTION SCHEDULING

Delivering the Right Product on Time at the Optimal Cost

Scheduling is one of the most complex functions within a manufacturing process. For years, the challenge has always been to find a solution that has the complexity to achieve the desired results while not sacrificing usability. NetSuite's Production Scheduling solution achieves this balance with a number of features that make it possible to create a realistic schedule with minimal effort.

Key Benefits

- Real-time scheduling engine—both forward and backwards
- Flexible scheduling code to enable light to dark sequencing
- Choice of infinite or finite scheduling with user definable constraints
- Multiple graphical representations of the schedule
- Drag-and-Drop scheduled operations for manual override

Drag and Drop Scheduling

The task scheduler in NetSuite shows the popular Gantt chart view of production with the ability to manually drag operations for last minute changes.

Real-Time Scheduling Engine

The NetSuite scheduling engine is unique in that it runs in real-time and can be set to automatically schedule work orders as they are created or reach a defined status. As the work order is saved, each operation will be scheduled according to the defined parameters.

Manufacturing Workbench

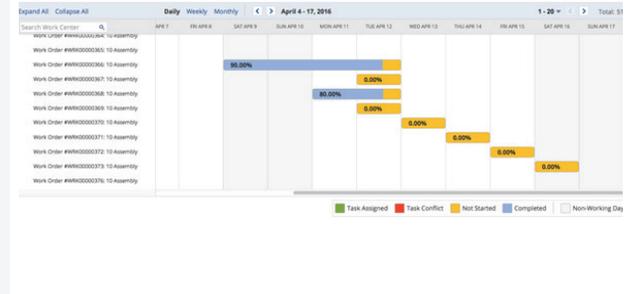
NetSuite's comprehensive workbench functionality provides a single place where most of the configuration is performed. From this one screen you can define:

- Setup and run standards
- Lag & hold time
- Batch configuration
- Asset & labor requirements with priorities
- Detailed work instructions
- Inspection plans with acceptable tolerances

Batch Scheduling

For manufacturers who make their products in batches to match the capacities of their machines (specifically food and beverage manufacturers but broadly applicable) this can easily be attained by defining the appropriate batch parameters.

Once this is done, the system will create and schedule each batch separately to ensure compliance with the capacities of the equipment that's running them.



Drag and Drop Scheduling

The screenshot shows the 'Planning Information' section of the Real-Time Scheduling Engine. It contains a table with the following data:

Planning Information				
SCHEDULING METHOD	PRODUCTION START DATE	PRODUCTION END DATE	PLANNING PRIORITY CODE	PRIORITY
Forward	3/31/2016	5/9/2016	02 - Standard Priority	50
STATUS	PLANNED START DATE	DELIVERY DATE		
In Process	4/1/2016	3/31/2016		
<input type="checkbox"/> FIRMED				

Real-Time Scheduling Engine

The screenshot displays the 'AM Mfg Work Bench Operation' interface for work order ASY00001-US - 10. It includes a navigation bar with 'Back' and 'Actions' buttons. The main content area is divided into several sections: 'Manufacturing Operation' with fields for 'MATERIALS REQUIRED NAME', 'ADDRESS/LOC', 'ADDRESS', 'OPERATION SEQ', 'OPERATION NAME', 'MACHINE CENTER', 'MFG WORK BENCH', 'ADDRESS/LOC', and 'PROCESS TIME'; 'Planning' with fields for 'Name', 'MFG FACTS (ADDRESS)', 'MFG WORK CENTER', and 'MFG WORK BENCH'; 'Lead Time and Off Sets' with fields for 'LTD TIME', 'LTD VALUE', and 'HOLD TIME BENCH'; 'Batching' with fields for 'BATCH SEQUENCE', 'BATCH NUMBER', 'INCREMENTAL QTY', and 'CONCURRENT ASSETS SPLIT ORDERS'; and 'Assets' with a field for 'Mfg Work Bench Assets (2)'. The interface is designed for configuring and managing manufacturing operations.

Manufacturing Workbench

Shop Calendar Definition

When finite scheduling is being conducted, the shop calendar defines when a work center is normally available and can be configured with exceptions for lunch, etc. Individual assets (pieces of equipment) can then be set up with variances to this as required.

Shop Calendar Definition

Work Center Dispatch List

The dispatch list in NetSuite is updated to be color coded based on status and date to provide instant feedback to the Production Manager should there be any issues.

Work Center Dispatch List

Calendar View

One of the most popular and powerful views of the schedule is the calendar view.

This easy-to-read and understand screen shows a traditional calendar with the work orders that are scheduled to be performed in each work center along with additional critical information for use by the scheduler such as:

- WO status
- Planned & available hours
- Utilization percentage with alerts
- Planned & completed quantity

Calendar View

Real-Time Updates from Production

One of the most important aspects of scheduling is getting the right information back from production to allow for educated decisions about the schedule. This simple list view shows all of the current work orders and automatically highlights potential problem areas.

Real-Time Updates from Production

PLANNING PRIORITY	ORDER START	OP START	DATE DUE	PLANNED QTY	RECORDED QTY	OPEN QTY	% COMPLETE
03 - Build For Stock	3/31/2016	3/28/2016	3/30/2016	1,800.0	770.0	1,030.0	42.0
02 - Standard Priority	3/31/2016	3/29/2016	4/1/2016	900.0	460.0	440.0	51.0
02 - Standard Priority	3/31/2016	3/31/2016	3/29/2016	900.0	1,455.0	-555.0	161.0
02 - Standard Priority	3/31/2016	4/1/2016	3/31/2016	900.0	423.0	477.0	47.0
01 - Priority Override	4/4/2016	4/4/2016	4/5/2016	900.0	0.0	900.0	0.0
02 - Standard Priority	4/5/2016	4/5/2016	3/10/2016	200.0	0.0	200.0	0.0
03 - Build For Stock	4/6/2016	4/6/2016	4/7/2016	500.0	0.0	500.0	0.0
02 - Standard Priority	4/8/2016	4/8/2016	4/11/2016	600.0	0.0	600.0	0.0
02 - Standard Priority	4/8/2016	4/8/2016	3/14/2016	450.0	0.0	450.0	0.0

