

## Weigh and Dispense (WD)



Avoid scrapped lots due to dispensing errors.

- Eliminates and streamlines work practices
- Reduces complexity of weighing materials
- Embeds knowledge of the dispensing process for reduced errors and future training costs
- Maintains all required data for complete work-in-progress forward and backward material traceability and genealogy
- Ensures correct materials are dispensed in the correct amounts, providing point-of-use verification of material QC status
- Defines dispensing requirements for all raw and intermediate materials
- Provides intuitive, user-friendly controlled dispensing to assure dispensing accuracy and reduce material variability
- Allows for flexible scheduling of dispensing orders by operator or dispensing station
- Provides real-time calculations for potency adjustment
- Generates bar code labeling for the source and destination containers
- Provides customizable dispensing reports
- Enables context sensitive access to associated standard operating procedures and Material Safety Data Sheets
- Interfaces to ERP and other warehouse management systems
- Microsoft .Net application built for secure material dispensing, as well as simplified change management and validation
- Can be used standalone or bundled with other Syncade™ Smart Operations Management modules to maximize productivity

### Introduction

Weigh and Dispense provides manufacturers with an unprecedented level of control and visibility of work-in-progress materials for operations in cGXP or non-cGXP environments. WD extends plant floor automation to include critical material weigh and dispense functions. By guiding dispensing operators through defined workflows, WD ensures that all procedures are adhered to and that a complete record of the operation is maintained for product release and regulatory review purposes.

WD assures accurate dispensing of materials, including point-of-use verification of the material identity, amount, and QC status.

WD Solution has an intuitive user-friendly interface that makes it easy to assign, track, weigh, dispense, and report all materials-related information. WD eliminates the need for separate and disconnected dispense operations and associated paper logbooks. WD improves the efficiency of critical weigh and dispense activities and provides point-of-need verification through wireless handheld devices. For those industries under cGXP regulations, WD is fully compliant with all cGXP regulations, including 21 CFR Part 11. WD provides the tools needed to ensure that timely required actions are taken to optimize manufacturing operations.

## Benefits

**Defines Dispensing Requirements for Materials.** WD provides for the definition of global and material-specific processing rules to ensure that all standard operating procedures are followed. These material definitions can determine the allowance for potency adjustment, weighing area scale requirements, weighing tolerances, operator training needs, MSDS and SOP reference links, material hazard warning messages, personal protective equipment requirements, suggested container size and quantity, and weigh-scale calibration requirements.

**Provides Intuitive, Controlled Dispensing.** WD reduces material variability by intelligently guiding dispensing operators through the process in an intuitive way and determining the appropriate steps to be taken based on the dispensing requirements for the material. Dispensing operators now have a powerful system to greatly reduce the chance for error caused by manual and paper-intensive systems. Support for electronic weigh-scale interfaces and extensive use of bar code labeling technology help to ensure that the right material, in the correct quantity, with the right label, is delivered to manufacturing on time for right-first-time manufacturing. When interfaced with an ERP system, WD can automatically update inventory, eliminating manual reconciliation and ensures inventory is real-time up to date.

**Enables Flexible Scheduling of Dispensing Orders.** Dispensing and operations management personnel are provided with complete visibility of past and future dispensing orders, which enables

optimization of this time- and cost-intensive step in manufacturing. A quick glance can indicate whether operations are ahead or behind schedule and the potential impact.

**Provides Forward and Backward Material Traceability.** Once the order has been successfully dispensed, WD manages the movement and control of all the dispensing containers—at a container, pallet, and order level. Both central and area-dispensed material consumption in the process are verified with WD in real time to prevent the inadvertent charging of incorrect, expired, or rejected materials. Finally, WD manages and controls any materials produced by the process until their return to the warehouse system (inventory management). This complete end-to-end material genealogy provides manufacturers with a paperless work-in-process material control and reporting solution. Use stand-alone or integrate with a corporate ERP system.

**Eliminates Paper Logbooks.** WD eliminates the need for paper-based logbooks, the hassle of finding a pen that works, and the frustration of sign offs. WD enables quick review and approval of materials with electronic signature verification.

**Enables Electronic Manufacturing Records.** WD records material weigh and dispense information needed to generate a comprehensive electronic manufacturing record.

**Simplify Validation and Commissioning.** Because WD is a true zero-client, web-based solution, you can quickly install, validate and deploy the solution to all your users from a centralized server and begin to realize the benefits immediately. The weighing, dispensing and tracking of different materials is quick and easy, and you can ensure that all your asset management and regulatory needs are met.

## Product Description

WD provides complete functionality for weigh and dispense operations, resulting in improved product quality and reduced variability. WD allows dispensing requirements for all raw and intermediate materials to be defined. WD provides flexible scheduling of dispensing orders by operator and/or dispensing station. It maintains required data for complete work-in-process forward and backward material traceability.

Controlled dispensing, in which an operator is guided through required steps, can reduce material variability. WD assures all material operations are performed per the recipe requirements and provides a complete electronic record for Quality Assurance purposes. WD provides comprehensive support for bar code scanning, wireless handheld devices, electronic weigh-scales, and integration with ERP systems.

WD can be used standalone or bundled with other Syncade modules for maximum productivity.

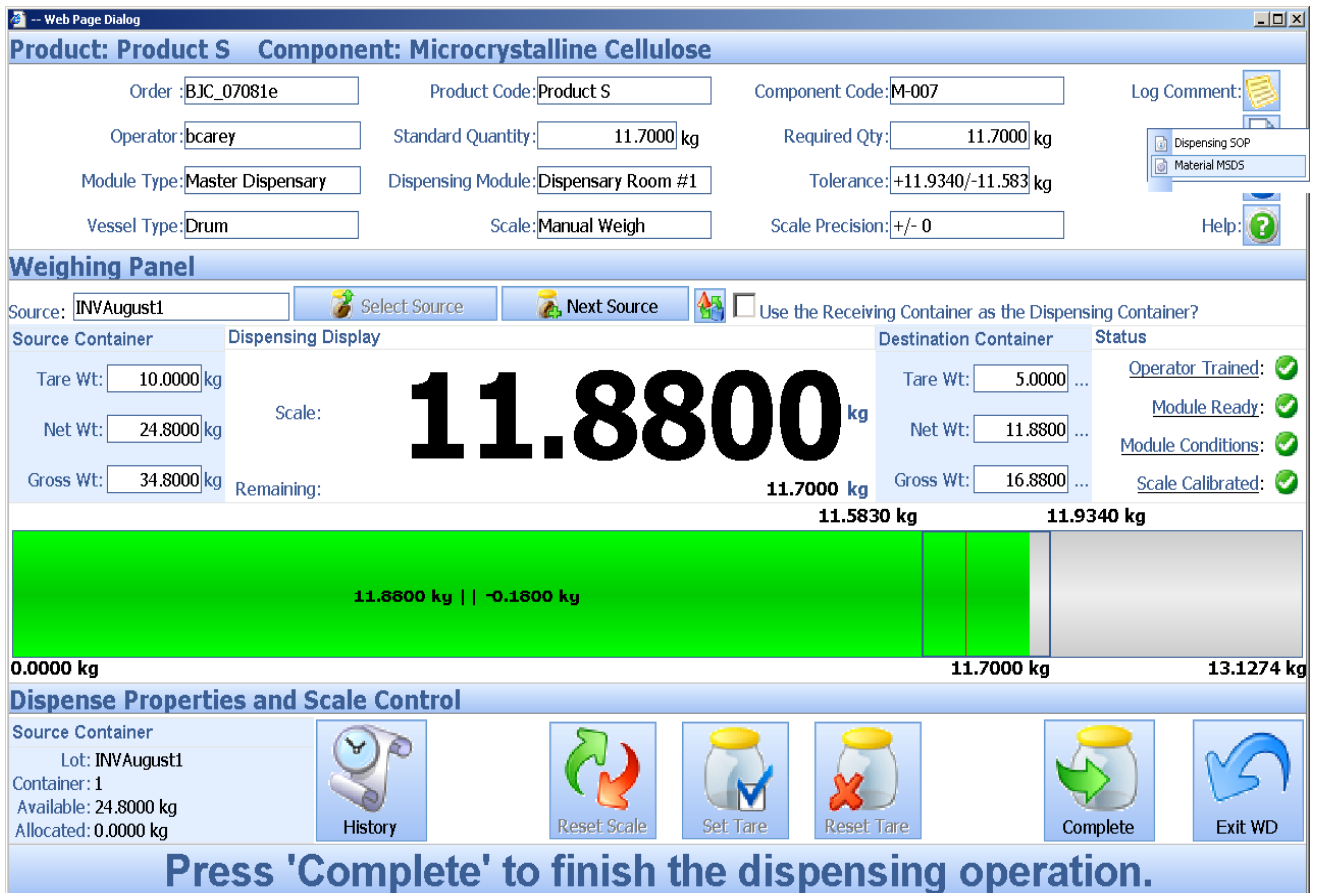
### Other Syncade Smart Operations Management Modules

- Equipment Tracking (ET)
- Electronic Batch Record (EBR)
- Materials Management (MM)
- Batch Production Records (BPR)

- Training & Development (TD)
- Recipe Authoring (RA)
- Document Control & Archiving (DCA)
- Security and Audit (SA)
- Manufacturing Information Portal (MIP)

### General System Requirements

A server-class PC with Internet Explorer is needed to support the Syncade solution. Microsoft SQL Server is the underlying database. For client access, a PC with Internet Explorer is needed. Please consult the factory for further details regarding hardware requirements and software versions.



Product: Product S Component: Microcrystalline Cellulose

Order: BJC\_07081e Product Code: Product S Component Code: M-007 Log Comment:

Operator: bcarey Standard Quantity: 11.7000 kg Required Qty: 11.7000 kg

Module Type: Master Dispensary Dispensing Module: Dispensary Room #1 Tolerance: +11.9340/-11.583 kg

Vessel Type: Drum Scale: Manual Weigh Scale Precision: +/- 0 Help:

**Weighing Panel**

Source: INVAugust1 Select Source Next Source Use the Receiving Container as the Dispensing Container?

Source Container	Dispensing Display	Destination Container	Status
Tare Wt: 10.0000 kg	<b>11.8800</b> kg	Tare Wt: 5.0000 ...	Operator Trained: <input checked="" type="checkbox"/>
Net Wt: 24.8000 kg		Net Wt: 11.8800 ...	Module Ready: <input checked="" type="checkbox"/>
Gross Wt: 34.8000 kg		Gross Wt: 16.8800 ...	Module Conditions: <input checked="" type="checkbox"/>
Remaining: 11.7000 kg			Scale Calibrated: <input checked="" type="checkbox"/>

11.5830 kg 11.9340 kg

11.8800 kg | -0.1600 kg

0.0000 kg 11.7000 kg 13.1274 kg

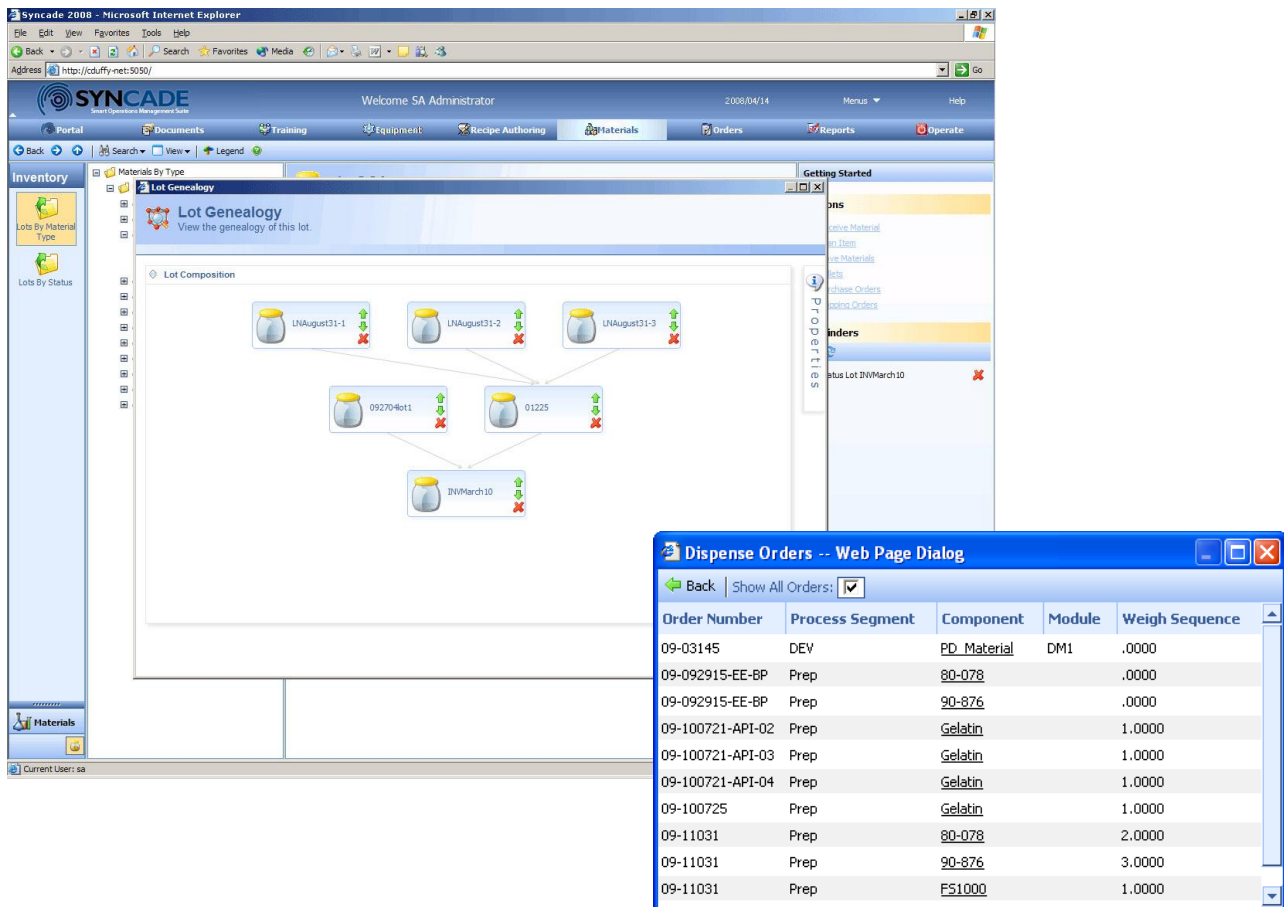
**Dispense Properties and Scale Control**

Source Container: Lot: INVAugust1 Container: 1 Available: 24.8000 kg Allocated: 0.0000 kg

History Reset Scale Set Tare Reset Tare Complete Exit WD

**Press 'Complete' to finish the dispensing operation.**

The Weigh and Dispense easy-to-use operator interface makes it simple to manage dispensing operations...



Order Number	Process Segment	Component	Module	Weigh Sequence
09-03145	DEV	PD_Material	DM1	.0000
09-092915-EE-BP	Prep	80-078		.0000
09-092915-EE-BP	Prep	90-876		.0000
09-100721-API-02	Prep	Gelatin		1.0000
09-100721-API-03	Prep	Gelatin		1.0000
09-100721-API-04	Prep	Gelatin		1.0000
09-100725	Prep	Gelatin		1.0000
09-11031	Prep	80-078		2.0000
09-11031	Prep	90-876		3.0000
09-11031	Prep	FS1000		1.0000

Important information is easy to find.

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