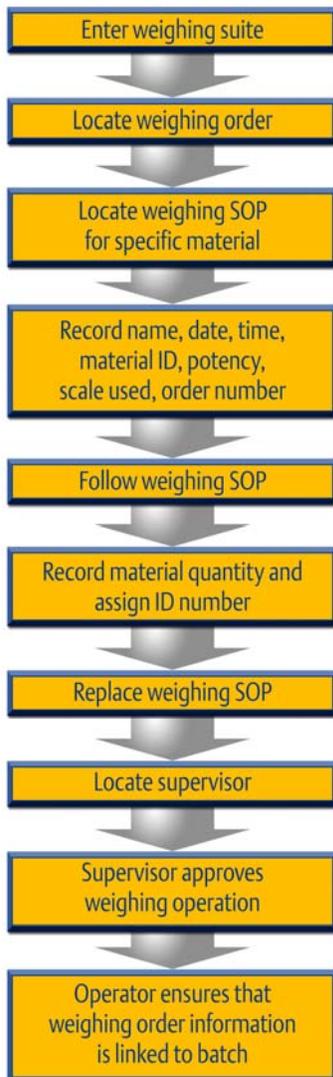


Reduce weighing errors

The Syncade Controlled Weighing Application guides the operator through weigh and dispense operations and enables easy access to reference documents. It provides quick, easy access to information needed for dispensing operations, including SOPs, scale requirements, and material safety data. Additionally, Controlled Weighing Application guides the operator through defined workflow sequences and provides automatic calculations, potency adjustments, scale requirements, and material tracking. The Controlled Weighing Application greatly reduces dispensing errors, which increases productivity and reduces costs.

EXAMPLE PAPER-BASED WEIGHING



Dispensing operations can be inefficient and prone to errors due to lack of integrated information. An operator may be faced with manual scenario detailed to the left.

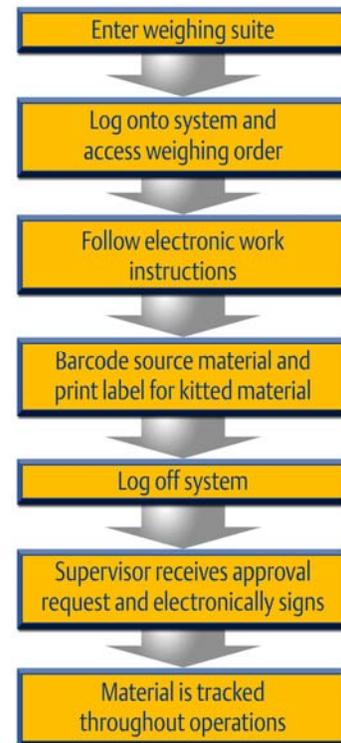
Controlled Weighing Applications reduces material variability by intelligently guiding dispensing operators through the process in an intuitive way and determining the appropriate steps to be taken based on the dispensing requirements for the material.

Controlled Weighing 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.

Once the order has been successfully dispensed, it 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 in real time to prevent the inadvertent charging of incorrect,

expired, or rejected materials. Controlled Weighing manages and controls any materials produced by the process until their return to the warehouse system. This complete end-to-end material genealogy provides a paperless work-in-process material control and reporting solution.

EXAMPLE ELECTRONIC WEIGHING



Pre-engineered software package reduces engineering

Syncade Controlled Weighing Application provides pre-defined dispensing configuration to guide your operator and provide easy access to reference information. This configuration can be modified to fit the unique requirements of your facility. The Controlled Weighing Application includes pre-configured software that defines typical weighing instructions, material types, safety designations, storage classifications, and vessel types. Additionally, common weigh scales and barcode printers have been defined. This application enables you to reduce engineering and testing efforts by building upon Emerson's process expertise.

Weighing instructions enables quick setup

Operator Instructions. A typical weighing process has been pre-configured as a starting point.

Weighing Instructions
Log in
Select Module (room)
Select scale
Select vessel and printer
Record data
Scan material bar code
Weigh material
Print label
Log off

Pre-defined configuration reduces engineering efforts

Module Types. Three modules have been pre-configured: Dispensary Room #1, Dispensary Room #2, and Dispensary Room #3.

Material Levels and Types. Three material levels have been pre-configured to group material by hazardous risk. NFPA Safety designations have been configured. Three types of material have also been defined: powder, liquid, and solid.

Material Level	Safety Designations	Material Types
1	Non-toxic	Powder
2	Caution	Liquid
3	Hazardous	Solid

Vessel Types. Three vessel types have been pre-configured: glass, bag, and container.

Pre-defined interface drivers allows easy integration

Syncade Suite uses industry standard, web-based communications protocols that enable easy integration to any standards-based device.

Weigh Scale Drivers. Common weigh scales have been pre-configured and tested; including Mettler/Toledo scales.

Barcode Printers. The most common barcode printer in the industry, Zebra, has been implemented and tested.

Data integration for easy data access

Security User Groups.

Four “typical” user groups have been pre-defined: System Administrator, User Administrator, Supervisor, and Change Request Reviewer. Each user group has been assigned permissions appropriate for their role

Security / User Groups	Description
System Administrator	Access to all application administration settings and configuration
User Administrator	Access to User Account creation and management
Supervisor	Access to approve operations
Operator	Access to dispensing instructions

Documentation delivered to support validation efforts

Project Management Plan. This document outlines the process and methodology used to develop the configuration.

Schedule. A pre-defined schedule of the tasks required to implement the solution is provided.

Functional Specifications. The functional specifications used to generate the Controlled Weighing configuration are provided.

Detailed Design Specifications. The design specifications used to generate the Controlled Weighing configuration is provided.

Executed Test Procedures. The test plans used to verify the Controlled Weighing configuration functionality is provided.

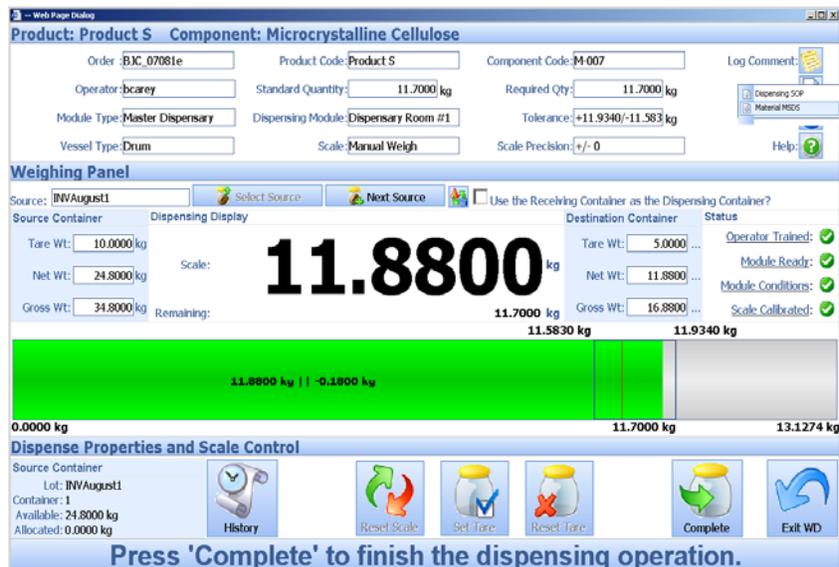
Services provided

Software Installation. The installation of Weigh & Dispense and Security & Audit software modules, as well as SQL Server 2008 is provided.

Document Import. The loading of Controlled Weighing Application configuration is provided

User Account Import. The loading of user accounts from the MS Active Directory is provided.

Consulting. 40 hours of consulting services is provided to help ensure that the end user gains operational benefit from this solution.



The screenshot displays the 'Weighing Panel' for 'Product S' (Microcrystalline Cellulose). It shows a large digital scale reading of 11.8800 kg. The interface includes fields for Order (BJC_07061e), Product Code (Product S), Component Code (M-007), 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), and Scale Precision (+/- 0). A 'Weighing Panel' section shows Source (INVAugust1) and Destination Container (11.7000 kg) with a status of 'Operator Trained: ✓', 'Module Ready: ✓', 'Module Conditions: ✓', and 'Scale Calibrated: ✓'. A large green bar at the bottom indicates the current weight (11.8800 kg) and tolerance (-0.1800 kg). The 'Dispense Properties and Scale Control' section includes buttons for History, Reset Scale, Set Tare, Reset Tare, Complete, and Exit WD. A message at the bottom reads: 'Press 'Complete' to finish the dispensing operation.'

Syncade Controlled Weighing solution improves productivity and reduces errors.

Syncade Controlled Weighing Application bundles software and services to comprehensively address dispensing operations. This solution includes several components:

Weight & Dispense (WD) Software Module

Weigh&Dispense (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. WD assures all material operations are performed per the recipe requirements and provides a complete electronic record. WD provides support for barcode scanning, wireless handheld devices, and electronic weigh-scales.

Security & Audit (SA) Software Module

Security and Audit provides controls for individual or multiple Compliance Suite applications to be used in a 21CFR Part 11-compliant manner. It provides complete security services, such as user authentication, electronic signature and transaction activity control that must be logged to an audit trail.

Controlled Weighing Application

The pre-configured application templates provide a quick start to help optimize your dispensing operations. This pre-engineered software can be modified to fit the unique requirements of your particular project. These configuration

templates reduce engineering and testing efforts by enabling you to build upon Emerson's process expertise. The Controlled Weighing application includes preconfigured software, security user groups, test protocols, pre-defined web parts, as well as software installation and loading.

Consulting Services

40 hours of consulting services is provided with each Controlled Weighing solution. This service will help end users evaluate their requirements and identify quantified business results to be achieved.

First Year Maintenance

One year of SureService is provided.

To locate a sales office near you, visit our website at: www.EmersonProcess.com/Syncade

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+1 512.832.3774

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