

## Materials Management (MM)



Optimize proper use of all your materials.

- Work practice elimination and streamlining
- Complexity of tracking and reconciling materials reduced
- Knowledge retention of material and warehouse control by placing control into an electronic system
- Purchase requisition and order management
- Receiving, bar code labeling, and sampling
- Quality controls—status, review date, potency
- Container, pallet, and lot movement tracking
- Cycle counting and physical inventory
- Issuance of material to manufacturing work orders or to department expense accounts
- Shipping requisition and order management
- Complete forward and backward material genealogy and tracking
- Time out of refrigeration and controlled substance tracking
- Extensive reporting of real-time metrics for key performance indicators
- Electronic signatures for all user actions
- Complete audit trail of all events
- Microsoft .Net application built for secure materials and warehouse management, 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

Materials Management provides manufacturers with a complete warehouse inventory management solution. MM provides for centralized management of all materials and their recipes, including bill of materials, equipment lists and processing instructions.

Supporting the full life cycle of materials workflow, MM is a powerful solution for managing the purchasing, receiving, warehousing, and shipping of materials. With its easy-to-use interface, MM allows materials management personnel to focus on the job at hand, rather than learning complex software. And the built-in support for wireless handheld devices brings materials management to the point of need.

For those industries under cGXP regulations, MM is fully compliant with all cGXP regulations, including 21 CFR Part 11. MM provides all the functionality needed to ensure that your most important material assets are tracked and proactively managed.

## Benefits

**Real-Time Status of Material.** With MM, your operations management will always know the exact status of material inventory, and warehouse and production workers will have the most efficient tools to perform their jobs.

**Easy Reorder Information.** Advanced analytical views allow the rapid determination of what to order and when, status of orders in transit, materials waiting for inspection, and shipping metrics.

**Integration to ERP Systems.** Asynchronous communication to third-party host computers, including standard interface setups for connectivity to SAP, provides easy access to materials inventory information.

**Simplify Validation.** Since MM 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. Whether tracking hundreds or thousands of materials, you'll be amazed at how quickly and easily you can ensure that all your material management and regulatory needs are met.

## Product Description

Material Management provides a complete solution for your material tracking needs. Materials can be tracked at the container and lot level, as well as by the pallet. Lot consumption can be assigned on a cost-center basis. Material adjustments can be made based on potency. MM tracks and enforces material movement within the warehouse. MM provides automatic notification of

expiration of material. MM supports tracking of non-production materials. Bar-coded material identification and hand-held devices are supported. MM provides inventory reporting and complete documentation of materials. Additionally, comments and notes can be added and associated with inventory lots.

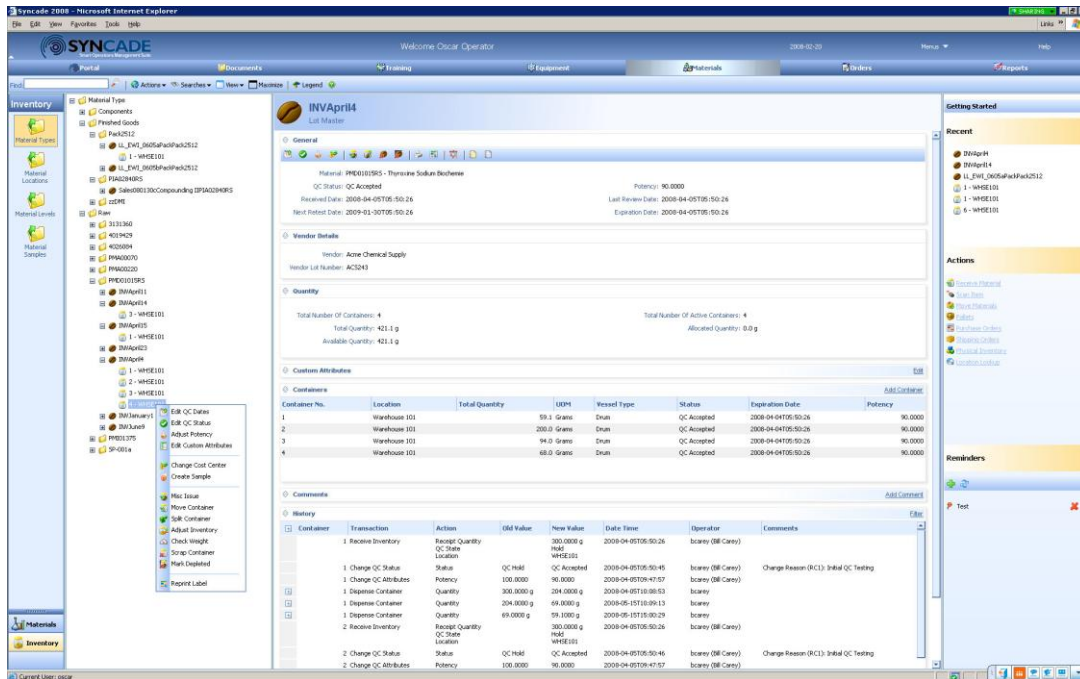
MM can be used standalone or bundled with other Syncade software modules for maximum productivity.

## Other Syncade Smart Operations Management Modules

- Equipment Tracking (ET)
- Document Control & Archiving (DCA)
- Batch Production Records (BPR)
- Weigh & Dispense (WD)
- Recipe Authoring (RA)
- Security & Audit (SA)
- Electronic Batch Record (EBR)
- Training & Development (TD)
- 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.



The screenshot displays the SYNCADE Materials Management interface. The main window shows the 'Lot Master' for material 'PRM010195 - Thiopine Sodium Bothers'. Key information includes:
 

- Material: PRM010195 - Thiopine Sodium Bothers
- QC Status: QC Accepted
- Received Date: 2008-04-05T05:50:26
- Next Pallet Date: 2009-01-10T05:50:26
- Lot Review Date: 2008-04-05T05:50:26
- Expiration Date: 2008-04-05T05:50:26
- Potency: 90.0000

 The 'Quantity' section shows:
 

- Total Number Of Containers: 4
- Total Quantity: 421.1 g
- Available Quantity: 421.1 g
- Total Number Of Active Containers: 4
- Allocated Quantity: 0.0 g

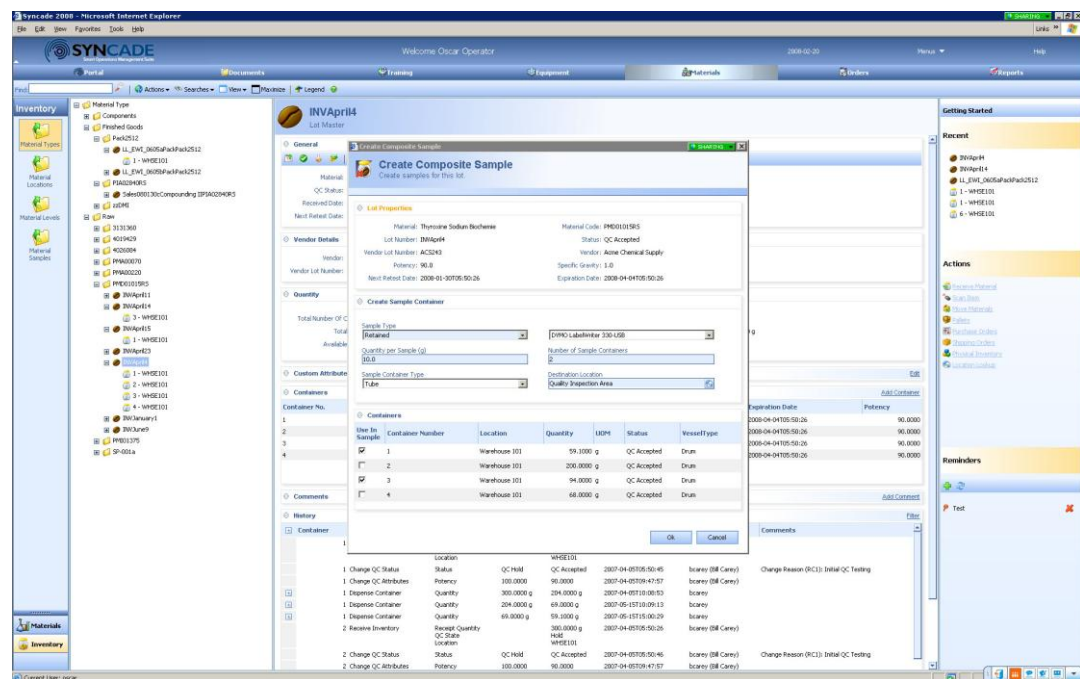
 A table lists containers with columns: Container No., Location, Total Quantity, UOM, Vessel Type, Status, Expiration Date, and Potency.
 

Container No.	Location	Total Quantity	UOM	Vessel Type	Status	Expiration Date	Potency
1	Warehouse 101	59.1 Grams	Grams	Drum	QC Accepted	2008-04-04T05:50:26	90.0000
2	Warehouse 101	200.0 Grams	Grams	Drum	QC Accepted	2008-04-04T05:50:26	90.0000
3	Warehouse 101	94.0 Grams	Grams	Drum	QC Accepted	2008-04-04T05:50:26	90.0000
4	Warehouse 101	68.0 Grams	Grams	Drum	QC Accepted	2008-04-04T05:50:26	90.0000

 A 'History' table shows transactions:
 

Container	Transaction	Action	Old Value	New Value	Effective Date	Operator	Comments
1	Receive Inventory	Received Quantity	300.0000 g	300.0000 g	2008-04-05T05:50:26	Isaacs (Bil Carey)	
1	Change QC Status	QC Hold	QC Accepted	QC Hold	2008-04-05T05:50:45	Isaacs (Bil Carey)	Change Reason (RC1): Initial QC Testing
1	Change QC Attributes	Potency	100.0000	90.0000	2008-04-05T04:47:57	Isaacs (Bil Carey)	
1	Dispose Container	Quantity	300.0000 g	294.0000 g	2008-04-05T10:08:53	Isaacs	
1	Dispose Container	Quantity	204.0000 g	69.0000 g	2008-05-15T10:09:13	Isaacs	
1	Dispose Container	Quantity	69.0000 g	59.1000 g	2008-05-15T10:09:29	Isaacs	
2	Receive Inventory	Received Quantity	300.0000 g	300.0000 g	2008-04-05T05:50:26	Isaacs (Bil Carey)	
2	Change QC Status	Location	QC Hold	QC Accepted	2008-04-05T05:50:46	Isaacs (Bil Carey)	Change Reason (RC1): Initial QC Testing
2	Change QC Attributes	Potency	100.0000	90.0000	2008-04-05T04:47:57	Isaacs (Bil Carey)	

Materials Management makes it simple to manage inventory within the warehouse.



The screenshot shows the 'Create Composite Sample' dialog box in the SYNCADE Materials Management interface. The dialog is titled 'Create Composite Sample' and includes the following fields and options:
 

- Material: Thiopine Sodium Bothers
- Lot Number: INVApr14
- Material Code: PRM010195
- QC Status: QC Accepted
- Vendor: Acme Chemical Supply
- Vendor Lot Number: AC2143
- Potency: 90.0
- Specific Gravity: 1.0
- Next Pallet Date: 2008-01-10T05:50:26
- Expiration Date: 2008-04-04T05:50:26

 The 'Create Sample Container' section has:
 

- Sample Type: Preformed
- Quantity per Sample (g): 50.0
- Sample Container Type: Tube
- Destination Location: Quality Inspection Area

 A table lists containers for sampling:
 

Container	Container Number	Location	Quantity	UOM	Status	Vessel Type
1	1	Warehouse 101	59.1000 g	g	QC Accepted	Drum
2	2	Warehouse 101	200.0000 g	g	QC Accepted	Drum
3	3	Warehouse 101	94.0000 g	g	QC Accepted	Drum
4	4	Warehouse 101	68.0000 g	g	QC Accepted	Drum

Using Materials Management, it is easy to create a composite sample of a material.

SHARING

### Miscellaneous Issue

Perform a miscellaneous issue of the containers of this lot

**Lot Properties**

Material: Thyroxine Sodium Biochemie	Material Code: PMD01015RS
Lot Number: INVApril4	Status: QC Accepted
Vendor Lot Number: ACS243	Vendor: Acme Chemical Supply
Potency: 90.0	Specific Gravity: 1.0
Next Retest Date: 2008-01-30T05:50:26	Expiration Date: 2008-04-04T05:50:26

**Miscellaneous Issue**

New Cost Center:       Print Labels?:

[X]	Container	Available Qty.	Issue Qty.	UOM	Status
<input checked="" type="checkbox"/>	1 - WHSE101	59.1	<input type="text" value="59.1"/>	Grams	QC Accepted
<input type="checkbox"/>	2 - WHSE101	200.0	<input type="text" value="200.0"/>	Grams	QC Accepted
<input type="checkbox"/>	3 - WHSE101	94.0	<input type="text" value="94.0"/>	Grams	QC Accepted
<input type="checkbox"/>	4 - WHSE101	68.0	<input type="text" value="68.0"/>	Grams	QC Accepted

The Materials Management interface is intuitive and user-friendly.

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