

# Oracle R12 Manufacturing Execution System (MES)

Learn what Oracles New Manufacturing Execution System Can Do For You...

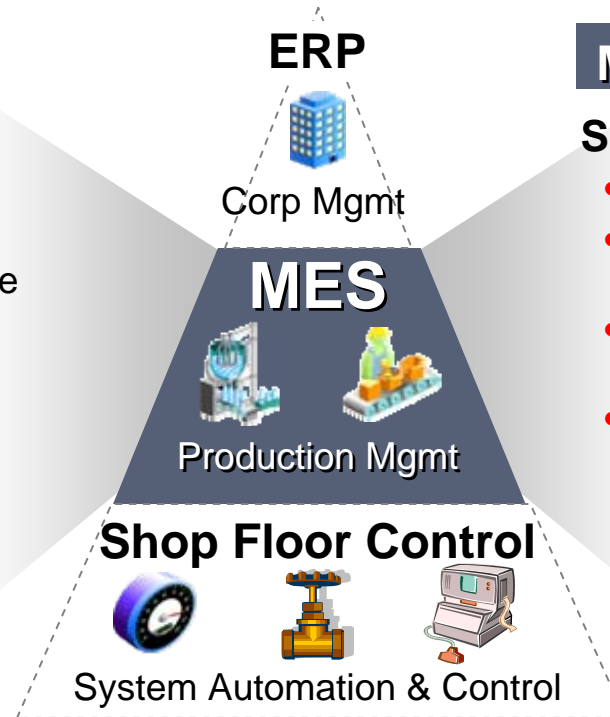


## MES for Discrete *Control Demand-Driven Mfg with Integrated Shop Floor Execution*

### MES for Discrete Mfg

#### Operator

- Work from dispatch list
- Record transactions, quality info, work completion, and time
- View work instructions and component info
- Report production exceptions



### MES for Discrete Mfg

#### Supervisor

- Work from dispatch list
- Record transactions, quality info, work completion, and time
- View work instructions and component info
- Report production exceptions

- ✓ Deliver Real-Time Shop Floor Visibility to Multiple Layers of Management
- ✓ Reduced TCO / Complexity via Integrated Mfg Mgmt & Production Execution

# R12 Manufacturing Execution System

- **MES Administrator Set Up**
  - Flexibility and Configurability
- **MES Operator Workstation**
  - Improve Operator Productivity and Efficiency through the MES Workstation
- **MES Supervisor Workbench**
  - Achieve Better Visibility and Tighter Control through the MES Supervisor Workbench, which includes the Dashboard and Workstation

# MES Administrator

## Flexibility and Configurability







- Control UI layout, content, system behavior and security through 27 parameters
- Configure at several levels (Site, Role, Org, Dept)

ORACLE Manufacturing Execution System Parameters Home Logout Preferences Help

---

Manufacturing Execution System Parameters

Level:

Parameter	Site	Result	Update
Allow Moves From Prior Operations	No	No	
Attachment Sources	Entered	Entered	
Attachment Window Height	600	600	
Automatic Job Transition	No	No	
Charge Resource at Report Time	Yes	Yes	
Combine Job On and Clock In Buttons	Yes	Yes	
Default Dispatch List Type	Current	Current	
Default Intra Op Step	Queue	Queue	

# MES Operator Workstation

## **Improve Operator Productivity and Efficiency through the MES Operator Workstation**

- Configurable Dispatch List Driven Execution
- Configurable Work Content and Sequential Display of Work Instructions
- Clock In/Clock Out for Actual Time Capture
- Streamlined Shop Floor Transaction Reporting
- Shop Floor Exception reporting

# MES Operator Workstation

## Configurable Dispatch List Driven Execution

### MES Workstation

Last Updated 29-Feb-2008 12:07:33 Shift 1 (06:30:00 - 15:00:00)

Printable Page

Actions

Print Discrete Job Routing

Go

\* Indicates required field

### View Options

Department ACC-MILL

Resource 223

Instance All

Go

Dispatch List Current

From Date

(example: 29-Feb-2008 19:45:00)

\* To Date 29-Feb-2008 15:00:00

### More Options

### Dispatch List

Select Job Op: Badge

Move Assembly (4)

Actions

View Work Content

Go

Reorder list

Express Move

Select Job Op	Ready	Clock In/Out		Start Date	Assembly	Total Qty			Customer	Shift	Resource		Express Move Qty	
		Action	Name			Op	Prior UOM	Exception			Usage	Availability	Complete	Scrap
<a href="#">896354:30</a>	✓			12-Dec-2007 06:36:00	VAPTM	8	0 EA			1	3	-0.13	<input type="text"/>	<input type="text"/>
<a href="#">897276:80</a>	✓			19-Dec-2007 16:33:00	VAMJ5V5938B	4	0 EA			1	0.78	-0.91	<input type="text"/>	<input type="text"/>
<a href="#">891864:80</a>	✓			20-Dec-2007 21:03:00	VAMB5M2250B	42	0 EA			1	4.89	-5.79	<input type="text"/>	<input type="text"/>

# MES Operator Workstation

## Configurable Work Content and Sequential Display of Work Instructions

Work Content: 904055:10

Badge  Clock In (0) Clock Out (9) Move Assembly (4) Complete Assembly (6) Actions Reject Assembly

**Current Working Employees**

Employee	Start Date
No results found.	

**Components**

Component	Description	Date Required	Basis	Quantity				Allocated	Available On-Hand UOM	Supply			Comments	Instructions
				Per Assembly	Required	Issued	Open			Type	Subinv	Locator		
VANT002817	TRUMPF SIZE 1 ALIGNMENT RING SOFT BLANK	06-Feb-2008 00:00:00	Item	1	36	36	0		125 EA	Push	FIN GOODS	02-C-29-D		+
SHC12079	SOCKET HEAD CAP SCREW M6x1 X 30 DIN 912-12.9	06-Feb-2008 00:00:00	Item	1	36	36	0		789 EA	Push	TC COMP	03-A-07-C		+
VKETD010	TRUMPF ALIGNMENT RING PIN FINISHED COMPONENT	06-Feb-2008 00:00:00	Item	1	36	36	0		69 EA	Push	ACCESSORY	06-A-21-G		+

Source Discrete Operation  
Name 2

Attach Seq 10  
Description VANTD

VANTD

#####

PROCESS REV C

CHANGED T109 FROM 5MM DRILL TO #9 ON OP 10  
S. THOMSON 2-21-03

PROCESS REV D  
ASSEMBLY DRAWING VANTD REV B 4/16/97  
COMPONENT DRAWING VANTD-C REV A 4/16/97

ADDED OPERATION #55 TO INSTALL THE DOWEL PIN BEFORE  
I.D. GRIND. PER RFPC #1668  
DAN HOEMBERG 8-24-04

PROCESS REV E

ASSEMBLY DRAWING VANTD REV B 4/16/97  
COMPONENT DRAWING VANTD-C REV A 4/16/97

CHANGED OP10 PROGRAM TO REMOVE "EXT HOLDER" FROM T102  
S. THOMSON 05-19-05

# MES Operator Workstation

## Streamlined Shop Floor Transaction Reporting

MES Workstation

Last Updated 29-Feb-2008 12:20:23 Shift 1 (06:30:00 - 15:00:00)

Printable Page

Actions

Print Discrete Job Routing

Go

\* Indicates required field

View Options

Department ACC-MILL

Resource 223

Instance All

Go

Dispatch List Current

From Date

(example: 29-Feb-2008 19:45:00)

\* To Date 29-Feb-2008 15:00:00

More Options

Dispatch List

Select Job Op: Badge 197

Move Assembly (4)

Actions

View Work Content

Go

Reorder list

Express Move

Select Job Op	Ready	Clock In/Out		Start Date	Assembly	Total Qty			Customer	Shift	Resource		Express Move Qty	
		Action	Name			Op	Prior UOM	Exception			Usage	Availability	Complete	Scrap
<a href="#">896354:30</a>	✓			12-Dec-2007 06:36:00	VAPTM	8	0 EA			1	3	-0.34	4	4



# MES Operator Workstation

## Shop Floor Exception reporting

MES Workstation >

Logged In As KNOX, Mr. BERNIE JAMES (USA, ACC-MILL, 223)

Report Exception

Cancel Apply

Job 896354  
Job Description Job Mass Loaded on 29-NOV-07  
Op Seq 30

Assembly VAPTM  
Assembly Description TRUMPF MINIMATIC SIZE 2 ALIGNMENT RING ASSEMBLY  
Reported By KNOX, Mr. BERNIE JAMES

\* Indicates required field

\* Exception Type Resource  
\* Resource 223  
Equipment  
Serial Number  
Reason

Note Machine Downtime

Cancel Apply

# MES Supervisor Workbench

## **Achieve Better Visibility and Tighter Control through the MES Supervisor Workbench**

- Supervisor Dashboard Provides Visibility to Shop Floor Status
- Exceptions Summary and Resolution Capabilities
- Anticipated Capacity or Resource Shortages
- Current Shop Floor State View

# MES Supervisor Workbench

## Supervisor Dashboard Provides Visibility to Shop Floor Status

**ORACLE** MES Supervisor Workbench Home Logout Preferences Help Startup

Dashboard Supervisor Workstation Logged In As KNOX, Mr. BERNIE JAMES (USA, ACC-MILL, 223)

Dashboard Actions Launch Resource Workbench

**Exceptions Summary: USA (ACC-MILL)**

Type	Number of Exceptions
All	1
Resource	1
223	1

**Reported Exceptions: USA (ACC-MILL)**

Days in the past	Number of Exceptions Reported
0	1.0

# MES Supervisor Workbench

## Dashboard Exceptions Summary and Resolution Capabilities

**ORACLE** MES Supervisor Workbench Home Logout Preferences Help Startup

Dashboard **Supervisor Workstation**

Dashboard > Logged In As KNOX, Mr. BERNIE JAMES (USA, ACC-MILL, 223)

**Exceptions**

**Resource**

Select Department	Resource	Resource Description	Instance	Number Of Exceptions	Add Exceptions to Impacted Jobs	Launch Resource Workbench
ACC-MILL	223	MONARCH VMC45B		1		

**Exceptions: 223**

Select Exceptions: Actions

[Select All](#) | [Select None](#) | [Show All Details](#) | [Hide All Details](#)

Select Details	Num	Job Op	Job Description	Status	Alt Resource Exist	Reason	Reported By	Reported Date
<input type="checkbox"/> <input type="button" value="Hide"/>	1001	896354:30	Job Mass Loaded on 29-NOV-07	Released	No		KNOX, Mr. BERNIE JAMES	29-Feb-2008 12:25:27
Assembly VAPTM Assembly Description TRUMPF MINIMATIC SIZE 2 ALIGNMENT RING ASSEMBLY Department ACC-MILL Department Description ACCESSORY MILL DEPARTMENT		Job Start Quantity 8 UOM EA Scheduled Start Date 09-Dec-2007 16:24:00 Scheduled Completion Date 21-Dec-2007 12:50:00						

**Note History**

\*\*\*KNOX, Mr. BERNIE JAMES (02/29/2008 12:23:20) \*\*\*  
Machine Downtime

# MES Supervisor Workbench

- Anticipated Capacity or Resource Shortages
- Current Shop Floor State View

Capacity Shortages **Current State**

View By Shift: 5 (07-JUL-2006 00:00:00 - 07-JUL-2006 23:59:00)

Resource	Department	Jobs Not Started	Available	Remaining		Dispatch List
				Required	Shortage UOM	
-RES5	CEP1	36	0	282.68	282.68 HR	
-RES4	CEP3	9	0	2	2 MIN	
-RES3	CEP2	36	0	188	188 HR	

Shopfloor Progress: HWS (HM-WS-DEP1)

Capacity Shortages **Current State**

View: All

Previous 1-10 Next 10

Resource	Department	Job Op	Assembly	Operator	Actual Start Date	Projected Completion Date	Qty Scrapped	Qty Rejected	Dispatch List
RES1	DEP1	AS-WS-0621-3:30	HM-WS-ASSYL	Workstation, Operator1	24-Jun-2006 15:11:39	26-Jun-2006 08:00:00	3	0	
RES1	DEP1	HM-WS-3082:10	HM-WS-ASSYL	Workstation, Operator2	13-Jun-2006 17:05:07	03-Jul-2006 15:12:00	5	0	
RES1	DEP1	TS-WS-LOTJOB:20	HM-WS-LOTSERASSYL	Workstation, Operator1	30-Jun-2006 09:48:32		0	0	
RES1	DEP1	AS-WS-TS06901:10	HM-WS-ASSYL	Workstation, Operator2	27-Jun-2006 21:30:46	28-Jun-2006 12:42:00	2	2	

# MES Supervisor Workbench

- MES Supervisor Workstation
- Expediting Jobs
- Reordering Dispatch Lists
- Reviewing Performance Metrics through DBI

# MES Supervisor Workbench

## MES Supervisor Workstation

**ORACLE<sup>®</sup> MES Supervisor Workbench** Close Window Preferences Help Startup

Dashboard **Supervisor Workstation** Logged In As KNOX, Mr. BERNIE JAMES (USA)

Supervisor Workstation  
Last Updated 29-Feb-2008 13:56:11 Shift 1 (06:30:00 - 15:00:00) Printable Page Actions Launch Resource Workbench Go

\* Indicates required field

**View Options**

Department: ACC-MILL    
 Resource: 223    
 Instance: All

Dispatch List: Current   
 From Date:    
(example: 29-Feb-2008 13:45:00)  
 \* To Date: 29-Feb-2008 15:00:00

**Dispatch List**

Select Job Op: Badge    Actions View Work Content

Select Job Op	Ready	Clock In/Dut		Start Date	Assembly	Total Qty			Shift	Resource		Express Move Qty		
		Action	Name			Op	Prior UOM	Exception		Customer	Usage	Availability	Complete	Scrap
<input checked="" type="radio"/> <a href="#">896354:30</a>	✗	<input type="button" value="🔍"/>		12-Dec-2007 06:36:00	VAPTM	8	0 EA	Resource		1	3	⚠️-1.94	<input type="text"/>	<input type="text"/>
<input type="radio"/> <a href="#">897276:80</a>	✓	<input type="button" value="🔍"/>		19-Dec-2007 16:33:00	VAMJ5V5938B	4	0 EA			1	0.78	⚠️-2.72	<input type="text"/>	<input type="text"/>
<input type="radio"/> <a href="#">891864:80</a>	✓	<input type="button" value="🔍"/>		20-Dec-2007 21:03:00	VAMB5M2250B	42	0 EA			1	4.89	⚠️-7.6	<input type="text"/>	<input type="text"/>
<input type="radio"/> <a href="#">898464:10</a>	✓	<input type="button" value="🔍"/>		27-Dec-2007 16:29:00	VAPTD	22	EA			1	3.51	⚠️-11.11	<input type="text"/>	<input type="text"/>
<input type="radio"/> <a href="#">902089:30</a>	✓	<input type="button" value="🔍"/>		22-Jan-2008 13:50:00	VLSR0070	17	0 EA			1	3.37	⚠️-14.48	<input type="text"/>	<input type="text"/>
<input type="radio"/> <a href="#">903697:10</a>	✓	<input type="button" value="🔍"/>		04-Feb-2008 20:07:00	VAPTE	42	EA			1	11.88	⚠️-26.36	<input type="text"/>	<input type="text"/>

# MES Supervisor Workbench

## Expediting Jobs and Reordering Dispatch Lists

**ORACLE<sup>®</sup>MES Supervisor Workbench**

Dashboard Supervisor Workstation

Supervisor Workstation >

**Reorder Dispatch List**

Job Operation	Expedite	Operation Start Date
896354:30	<input type="checkbox"/>	12-Dec-2007 06:36:00
897276:80	<input type="checkbox"/>	19-Dec-2007 16:33:00
891864:80	<input type="checkbox"/>	20-Dec-2007 21:03:00
898464:10	<input type="checkbox"/>	27-Dec-2007 16:29:00
902089:30	<input type="checkbox"/>	22-Jan-2008 13:50:00
903697:10	<input type="checkbox"/>	04-Feb-2008 20:07:00
903347:30	<input type="checkbox"/>	05-Feb-2008 20:42:00
904055:10	<input type="checkbox"/>	06-Feb-2008 19:56:00
903699:10	<input type="checkbox"/>	07-Feb-2008 12:16:00

**ORACLE<sup>®</sup>MES Supervisor Workbench**

Dashboard Supervisor Workstation

**Supervisor Workstation**

Last Updated 29-Feb-2008 13:56:11 Shift 1 (06:30:00 - 15:00:00)  
\* Indicates required field

**View Options**

Department: ACC-MILL

Resource: 223

Instance: All

Go

**More Options**

**Dispatch List**

Select Job Op: Badge  Move Assembly (4) Expedite Actions

Select	Job Op	Ready	Clock In/Out		Start Date
			Action	Name	
<input checked="" type="radio"/>	896354:30	<input checked="" type="checkbox"/>			12-Dec-2007 06:36:00



# MES Supervisor Workbench

## Reviewing Performance Metrics through DBI

### ORACLE<sup>®</sup> Manufacturing Management



**Warning**

The following parameter value is not valid for this dashboard or report: FII\_GLOBAL1. The default parameter value will be used instead: USD.

As Of Date  Period  Compare To  Organization  Currency

#### Manufacturing Management KPIs

Name	WTD	Compare Organizations	
		Change	Place cursor over data points to see values
<a href="#">Production To Plan</a>	-	-	N/A
<a href="#">Production Value</a>	-	-	N/A
<a href="#">On-Time Production</a>	-	-	N/A
<a href="#">Manufacturing Cost Variance</a>	-	-	N/A
<a href="#">Material Usage Variance</a>	-	-	N/A
<a href="#">Resource Utilization</a>	-	-	N/A
<a href="#">Resource Variance</a>	-	-	N/A
<a href="#">Scrap</a>	-	-	N/A

# R12 Manufacturing Execution System

## **Conclusion**

- Integrated ERP/ MES System “One-Stop-Shop”
- Deeper Shop Floor Execution Capabilities
- Improved Productivity and Efficiency
- Enhanced Visibility into Shop Floor Process
- Proactive Exception Management
- Collaboration Between Management and Shop Floor

# Q & A