



~ OEE Audit is now **OEE Studio** ~

**A new look with a new set of tools!**

We are expanding **OEE Audit** to provide integration with **OEE Alert** and some of our new products we plan to introduce in the near future.

To achieve this goal, we are renaming to **OEE Studio**.

**OEE Studio** gives you the tools to quickly access all your production data for multiple line, plants or even your entire enterprise.

**OEE Studio** . . . the complete toolbox.

Existing OEE Audit customers will get a free upgrade to OEE Studio.



# OEE Studio Release Note

## **Version 3.0**

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# What's New in 3.0

- New look and feel to make it easier to navigate – Same awesome reporting capabilities.
- **Pivot Grids** now include the Enterprise and other device hierarchy settings for more robust reporting.
- **Shift & Job Data Reporting** –
  - Optionally highlight the OEE Values per row of data
  - Added cross hatching in the charts for non-OEE values
- **Creating Format Rules** – similar to Excel, you can add format rules to cells.
- **User Defined Fields** – added currency type
- **All Shift Production**– 1-page At-A-Glance – added ability to view by Line then by Shift and by Line only
- **Integration with OEE Alert** – Your event comments are now available in a report in OEE Studio.
- **Favorites** – Create favorite reports and launch from the Favorites dashboard.
- **New Report** – Shift OEE Report – one page per line, per shift
- **New Website** – check it out!! [www.oeestudio.com](http://www.oeestudio.com)



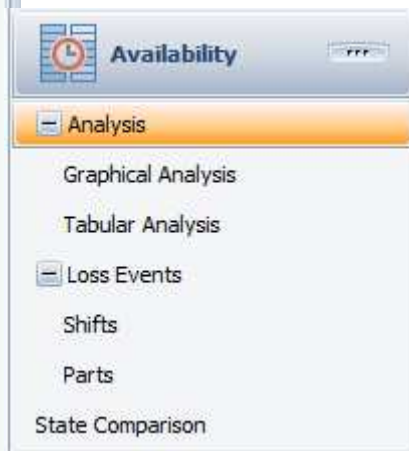
# OEE Studio – New Look & Feel



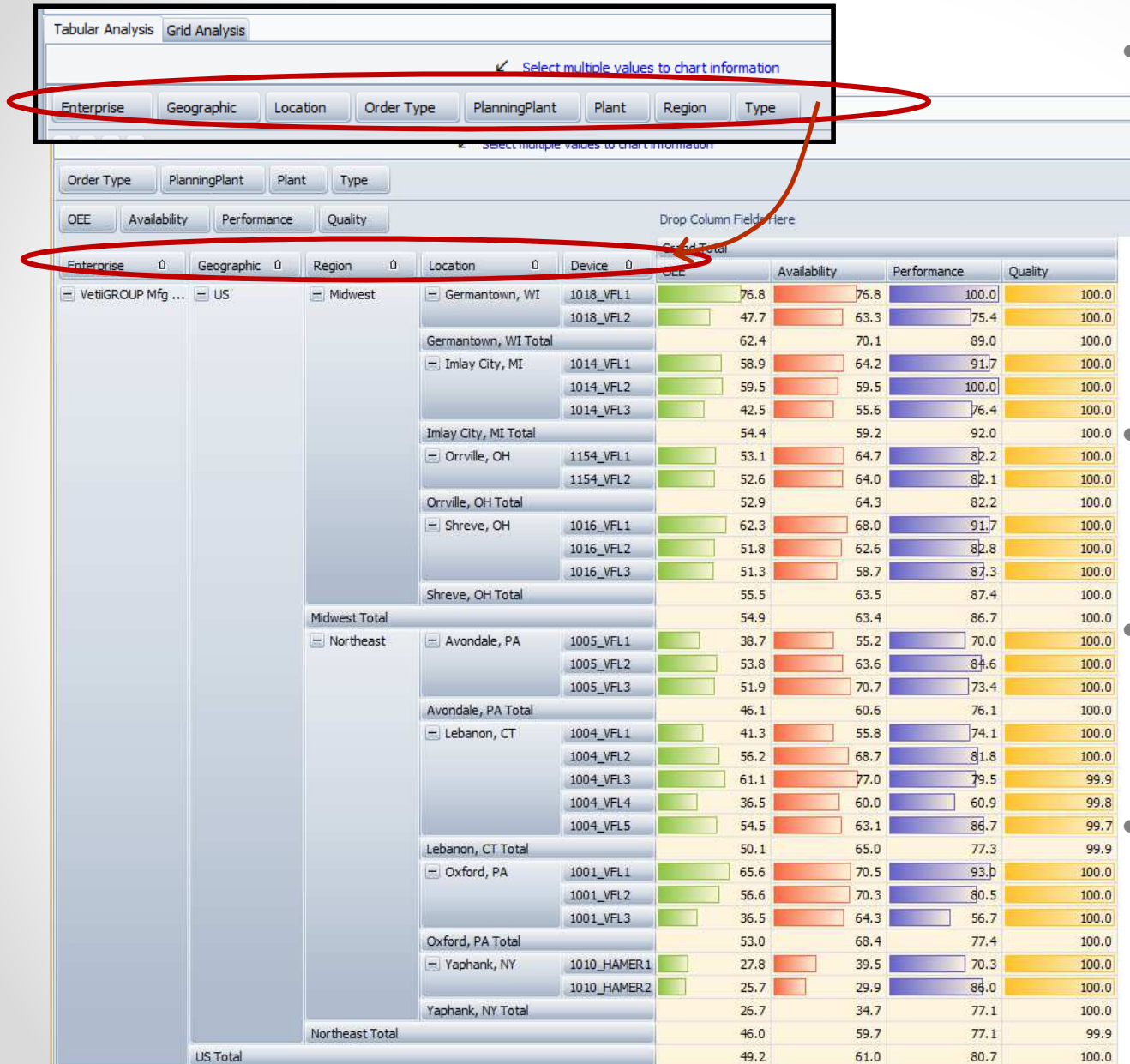
We have changed the look and feel of OEE Studio to make it easier to navigate through the tools.

The 3-dot ellipses next to the menu option will expand or collapse when you click on it.

The menu selections are grouped for ease in finding the reports.



# Pivot Grid - Tabular - Hierarchy



- Depending upon how we have your device hierarchy configured in the Data Collector, you can create a report with the various hierarchies.
- Typical device properties are Enterprise, Location, Type, Area, etc.
- Drag the element from the top of the screen to the Row Area.
- You can then expand or collapse by the different hierarchies

# Pivot Grid – Grid Analysis - Hierarchy

Tabular Analysis Grid Analysis

Drag a column header here to group by that column

Hierarchy Detail									Shifts			Measurables				
Device	Part	Enterprise	Geographic	Location	Order Type	PlanningPlant	Plant	Region	Type	Shift	Start Time	End Time	Performance	Quality	OEE	Availability

Tabular Analysis Grid Analysis

Enterprise Geographic Region Location

Hierarchy Detail

Enterprise Geographic Region Location Device

Enterprise: VetiiGROUP Mfg Company OEE : 49.2, Performance : 80.7, Quality : 100.0, Availability : 61.0

- Geographic: US OEE : 49.2, Performance : 80.7, Quality : 100.0, Availability : 61.0
  - Region: Midwest OEE : 54.9, Performance : 86.7, Quality : 100.0, Availability : 63.4
    - Location: Germantown, WI OEE : 62.4, Performance : 89.0, Quality : 100.0, Availability : 70.1
    - Location: Imlay City, MI OEE : 54.4, Performance : 92.0, Quality : 100.0, Availability : 59.2
    - Location: Orrville, OH OEE : 52.9, Performance : 82.2, Quality : 100.0, Availability : 64.3
    - Location: Shreve, OH OEE : 55.5, Performance : 87.4, Quality : 100.0, Availability : 63.5
  - Region: Northeast OEE : 46.0, Performance : 77.1, Quality : 99.9, Availability : 59.7
    - Location: Avondale, PA OEE : 46.1, Performance : 76.1, Quality : 100.0, Availability : 60.6
    - Location: Lebanon, CT OEE : 50.1, Performance : 77.3, Quality : 99.9, Availability : 65.0
    - Location: Oxford, PA OEE : 53.0, Performance : 77.4, Quality : 100.0, Availability : 68.4
    - Location: Yaphank, NY OEE : 26.7, Performance : 77.1, Quality : 100.0, Availability : 34.7

- Drag and drop the data elements based on how you want to see the data



# Shift & Job Data Reporting – Color your OEE

At the bottom of the **Shift** or **Job** Data Pivot Grids is an option to **Highlight OEE Values**. Selecting this will color highlight the OEE values within each row of data. Provides a very powerful visualization of the major KPI's.

Tabular Analysis | Grid Analysis

Select multiple values to chart information

Enterprise | Geographic | Order Type | PlanningPlant | Plant | Region | Type

OEE | Availability | Performance | Quality

Drop Column Fields Here

Grand Total			OEE	Availability	Performance	Quality
Location	Device	Shift				
[-] Oxford, PA	[-] 1001_VFL1	First Shift	67.1	72.1	93.0	100.0
		Gap Shift	46.2	50.2	92.0	100.0
		Second Shift	68.2	73.3	93.1	100.0
	1001_VFL1 Total		65.6	70.5	93.0	100.0
	[-] 1001_VFL2	First Shift	64.1	76.8	83.4	100.0
		Gap Shift	48.2	57.8	83.4	100.0
		Second Shift	51.1	66.5	76.8	100.0
	1001_VFL2 Total		56.6	70.3	80.5	100.0
	[-] 1001_VFL3	First Shift	39.9	68.4	58.4	100.0
		Gap Shift	29.4	48.4	60.8	100.0
		Second Shift	34.5	63.4	54.4	100.0
	1001_VFL3 Total		36.5	64.3	56.7	100.0
Oxford, PA Total			53.0	68.4	77.4	100.0

Highlight OEE Values

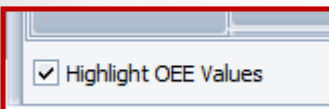
# Shift & Job Data Reporting – Color your OEE

In the **Grid Analysis** tab, you can sort the values to get a good visual of greatest to least.

Right-mouse click on the column heading you want to sort and select either Ascending or Descending.

The screenshot shows the 'Grid Analysis' tab in a software interface. A data table is displayed with columns for Hierarchy Detail, Shifts, OEE, and Measurables. A context menu is open over the OEE column header, showing options like 'Sort Ascending', 'Sort Descending', 'Clear Sorting', etc. The OEE values in the table are color-coded from green to red based on their magnitude.

Hierarchy Detail		Shifts			OEE	Measurables		
Device	Shift	Start Time	End Time			Quality		Availability
1001_VFL1	Gap Shift	5/16/2015 2:00 AM	5/16/2015 6:00 AM			100.0	100.0	
1001_VFL1	First Shift	5/23/2015 6:00 AM	5/23/2015 2:30 PM			100.0	100.0	
1001_VFL1	Second Shift	5/21/2015 3:30 PM	5/22/2015 2:00 AM			100.0	100.0	
1001_VFL2	First Shift	5/20/2015 5:00 AM	5/20/2015 3:30 PM			100.0	100.0	
1001_VFL1	First Shift	5/22/2015 5:00 AM	5/22/2015 3:30 PM			100.0	100.0	
1001_VFL2	First Shift	5/21/2015 5:00 AM	5/21/2015 3:30 PM			100.0	100.0	
1001_VFL2	Second Shift	5/14/2015 3:30 PM	5/15/2015 2:00 AM			100.0	100.0	
1001_VFL1	Second Shift	5/15/2015 3:30 PM	5/16/2015 2:00 AM			100.0	100.0	
1001_VFL2	Gap Shift	5/15/2015 2:00 AM	5/15/2015 5:00 AM			100.0	100.0	
1001_VFL2	First Shift	5/26/2015 5:00 AM	5/26/2015 3:30 PM			100.0	100.0	
1001_VFL2	Gap Shift	5/19/2015 2:00 AM	5/19/2015 5:00 AM			89.6	100.0	
1001_VFL1	First Shift	5/21/2015 5:00 AM	5/21/2015 3:30 PM			100.0	100.0	
1001_VFL2	Second Shift	5/25/2015 3:30 PM	5/26/2015 2:00 AM		82.1	100.0	100.0	
1001_VFL1	Second Shift	5/22/2015 3:30 PM	5/23/2015 2:00 AM		82.0	100.0	100.0	
1001_VFL2	First Shift	5/19/2015 5:00 AM	5/19/2015 3:30 PM		80.7	100.0	100.0	
1001_VFL1	Second Shift	5/25/2015 3:30 PM	5/26/2015 2:00 AM		79.3	89.9	100.0	
1001_VFL1	Gap Shift	5/20/2015 2:00 AM	5/20/2015 5:00 AM		79.0	89.4	100.0	
1001_VFL1	Second Shift	5/14/2015 3:30 PM	5/15/2015 2:00 AM		78.7	100.0	100.0	
1001_VFL1	First Shift	5/19/2015 5:00 AM	5/19/2015 3:30 PM		77.8	100.0	100.0	
1001_VFL2	First Shift	5/23/2015 6:00 AM	5/23/2015 2:30 PM		77.3	83.9	100.0	
1001_VFL1	Second Shift	5/23/2015 2:30 PM	5/23/2015 11:00 PM		77.2	100.0	100.0	





# Creating Format Rules

How to get from this →

D1 Actual	57,504	0	0	49,264	53,584	60,880	45,488	266,720
D1 OEE	83.20%	0.00%	0.00%	71.28%	77.53%	88.08%	65.81%	55.13%
D2 Actual	62,192	512	0	68,994	67,696	65,568	66,560	331,522
D2 OEE	74.47%	0.61%	0.00%	82.61%	81.06%	78.51%	79.70%	56.71%
D3 Actual	53,696	0	96	63,984	61,936	71,872	70,096	321,680
D3 OEE	64.29%	0.00%	0.11%	76.61%	74.16%	86.06%	83.93%	55.02%
D4 Actual	46,800	0	0	66,768	38,288	46,592	39,424	237,872
D4 OEE	56.04%	0.00%	0.00%	79.95%	45.84%	55.79%	47.20%	40.69%
D5 Actual	65,040	176	0	73,552	71,056	72,944	73,120	355,888
D5 OEE	77.88%	0.21%	0.00%	88.07%	85.08%	87.34%	87.55%	60.88%
Deckert Total	285,232	688	96	322,562	292,560	317,856	294,688	1,513,682
Deckert OEE	71.02%	0.16%	0.02%	79.73%	72.69%	78.96%	73.06%	53.67%

To This!!

		7/24/2015			7/25/2015			7/26/2015			7/27/2015			7/28/2015			7/29/2015			7/30/2015			Grand Total
Type	Device	Good Count	OEE	Down Time	Good Count	OEE	Down Time	Good Count	OEE	Down Time	Good Count	OEE	Down Time	Good Count	OEE	Down Time	Good Count	OEE	Down Time	Good Count	OEE	Down Time	Good Count
Deckert	Deckert1	57,504	83.2	02h 44m 09s	0	0.0	23h 59m 54s	0	0.0	23h 52m 03s	49,264	71.3	04h 33m 47s	53,584	77.5	03h 27m 02s	60,880	87.5	02h 04m 30s	28,944	62.8	03h 48m 42s	250,176
	Deckert2	62,192	74.4	04h 08m 20s	512	0.6	23h 49m 41s	0	0.0	23h 48m 17s	68,848	82.3	01h 35m 58s	67,696	81.0	02h 49m 08s	65,568	78.5	03h 25m 14s	45,440	81.5	02h 12m 53s	310,256
	Deckert3	53,696	64.2	05h 22m 42s	0	0.0	23h 59m 57s	96	0.1	23h 53m 24s	63,984	76.5	02h 49m 50s	61,936	74.1	03h 50m 43s	71,872	86.0	00h 49m 57s	45,296	81.3	01h 13m 40s	296,880
	Deckert4	46,800	56.0	08h 17m 35s	0	0.0	23h 59m 57s	0	0.0	23h 50m 14s	66,768	79.9	02h 12m 40s	38,288	45.8	10h 05m 09s	46,592	55.7	07h 05m 16s	32,128	57.6	04h 33m 42s	230,576
	Deckert5	65,040	77.8	03h 37m 23s	176	0.2	23h 59m 27s	0	0.0	23h 51m 24s	73,424	87.8	01h 14m 04s	71,056	85.0	01h 59m 02s	72,944	87.2	01h 36m 35s	49,072	88.0	00h 55m 25s	331,712
	Deckert Total	285,232	71.1	24h 10m 09s	688	0.2	119h 48m 56s	96	0.0	119h 15m 22s	322,288	79.7	12h 26m 19s	292,560	72.7	22h 11m 04s	317,856	79.1	15h 01m 32s	200,880	74.6	12h 44m 22s	1,419,600
SP	Scent-portable1	38,115	44.1	10h 36m 10s	0	0.0	23h 59m 57s	0	0.0	23h 59m 57s	53,430	61.8	05h 23m 15s	41,685	48.2	09h 12m 11s	13,565	15.7	18h 59m 52s	17,720	30.8	10h 03m 35s	164,515
	Scent-portable2	69,465	79.2	04h 59m 22s	275	0.3	23h 59m 24s	0	0.0	23h 59m 54s	58,175	66.8	07h 55m 14s	60,300	68.9	07h 28m 05s	76,205	86.6	03h 12m 42s	38,920	66.6	05h 20m 51s	303,340
	SP Total	107,580	61.7	15h 35m 32s	275	0.2	47h 55m 21s	0	0.0	47h 59m 51s	111,605	64.3	13h 18m 29s	101,985	58.6	16h 40m 16s	89,770	51.2	22h 12m 34s	56,640	48.7	15h 24m 26s	467,855
	Grand Total	392,812	68.5	39h 45m 41s	963	0.2	167h 44m 17s	96	0.0	167h 15m 13s	433,893	75.3	25h 44m 48s	394,545	68.7	38h 51m 20s	407,626	71.1	37h 14m 06s	257,520	67.2	28h 08m 48s	1,887,455

# Format Rules

		7/26/2015		7/27/2015			
E	Down Time	Good Count	OEE	Down Time	Good Count	OEE	Down Time
.0	23h 59m 54s	0	0.0	23h 52m 03s	49,264	71.3	04h 33m 4
.6	23h 49m 41s	0	0.0	23h 48m 17s	68,848	82.3	01h 35m 5
.0	23h 59m 57s	96	0.1	23h 53m 24s	63,984	76.5	02h 49m 5
.0	23h 59m				768	79.9	02h 12m 4
.2	23h 59m				424	87.8	01h 14m 0
.2	<b>119h 48m 56s</b>	<b>96</b>	<b>0.0</b>		<b>288</b>	<b>79.7</b>	<b>12h 26m 1</b>
.0	23h 59m 57s	0	0.0		430	61.8	05h 23m 1
.3	23h 55m 24s	0	0.0		175	66.8	07h 55m 1
.2	<b>47h 55m 21s</b>	<b>0</b>	<b>0.0</b>		<b>505</b>	<b>64.3</b>	<b>13h 18m 2</b>
.2	167h 44m 17s	96	0.0		393	75.3	25h 44m 4

Right-mouse click on the cell you want to apply rules format.

Drop Column Fields 1	
OEE Total	
→	37.1
↓	7.7
↑	71.9
↑	53.3
↑	38.3
↓	20.4
↓	23.6
→	34.9
↓	22.4
↓	26.5
↑	30.3

Example of Icon Sets →

# Applying Rules Formats

The screenshot shows a data reporting interface with a table of performance metrics. A dialog box titled "Between" is open, allowing the user to format cells based on a range of values. The dialog box includes the following elements:

- Format cells that are BETWEEN:
- Input fields for the range: 60 And 69 with
- A dropdown menu for the format type, currently set to "Bold Text".
- A checked checkbox for "Apply only to specific level".
- A list of available format options: Bold Text, Green Bold Text, Green Fill, Green Fill with Green Text, Green Text, Italic Text, Red Bold Text, Red Fill, Red Fill with Red Text, Red Text, Strikethrough Text, and Yellow Fill with Yellow Text.

The background table displays data for various devices (Deckert1-5, SP, Grand Total) across dates from 7/27/2015 to 8/4/2015. The columns are labeled "Good Count" and "OEE".

After selecting Highlight Cell Rules, you can then select the rules you want to apply to those cells.

Once you have your report laid out like you want, you can Save the Layout and/or add it to your Favorites.

# How much are those 'NONE' events costing?

In the **Define New Fields** options on any of the Pivot Grid reports, you can now select the **Result Type** of **Currency**. The currency symbol displayed will default to your regional/language settings of your Windows operating system.

**New Custom Expression**

Options

Field Description: Cost of NONE  Append Summary Type

Result Type

Boolean  Integer

Date/Time  String

Decimal  **Currency**

Summary Type

Count  Std Dev

Sum  Std Dev P

Min  Var

Max  Var P

Average

The sum of the values.

Cancel Proceed to Expression Editor >>

Device	Reason	Cost of NONE	Duration	Reason Count
1001_VFL1	None	\$26,539.17	17h 41m 34s	42
1001_VFL2	None	\$74,725.42	49h 49m 01s	145
1001_VFL3	None	\$32,583.33	21h 43m 20s	78
<b>Grand Total</b>		<b>\$133,847.92</b>	<b>89h 13m 55s</b>	<b>265</b>

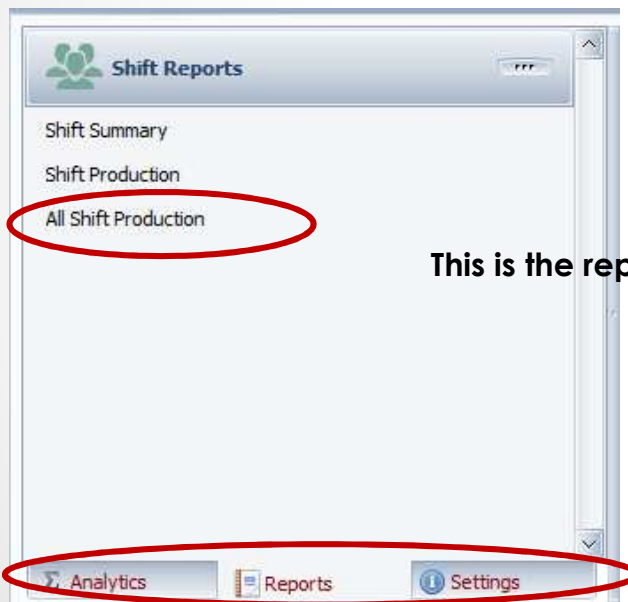


# Reports – All Shift Production

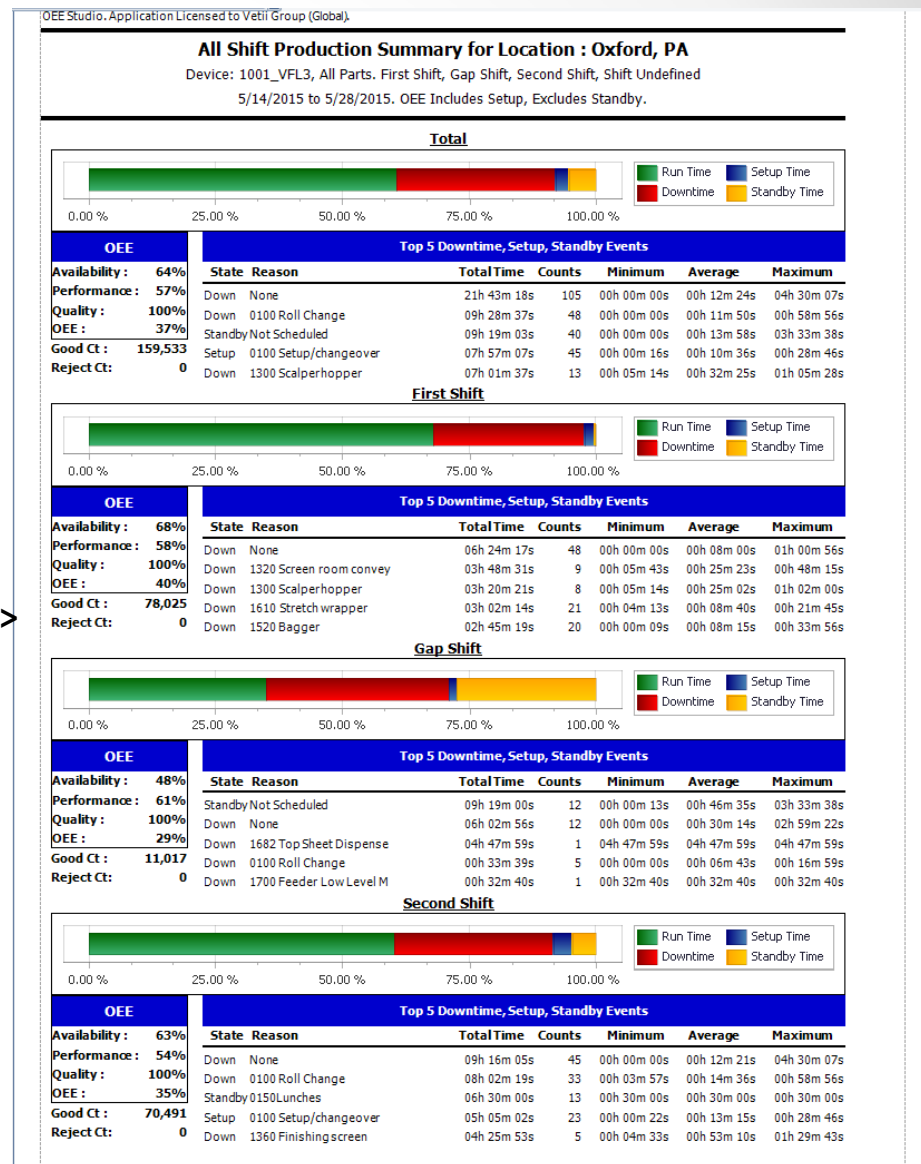
I like to call this report – **Line At-A-Glance**.

This report shows you on 1-page how the line did as a whole and then how each shift did for the selected date range.

We have also included Good Count and Reject Count



This is the report by Shift only. >>



# Reports – All Shift Production - Different Options

**All Shift Production Reporting**

Hierarchy  
Location: Oxford, PA

Date Range  
From: 5/14/2015 6:00 AM  
To: 5/28/2015 6:01 AM  
Preset Dates: Choose Preset

Production Filters  
Device: 1001\_VFL3  
Part: [All Parts]

Downtime calculation  
 Include Standby in Downtime  
 Include Setup in Downtime

Show in Top Losses  
 Downtime  
 Setup  
 Standby

Available Shifts  
 First Shift  
 Gap Shift  
 Second Shift  
 Shift Undefined

Report By  
 Shift only  
 Shift then Device  
 Device then Shift  
 Device only

Print / Preview

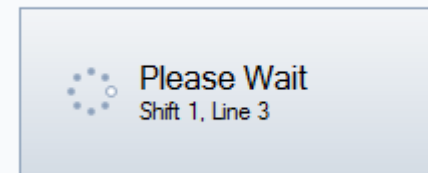
*Select shift(s) for the report or leave unchecked for all shifts listed.*

*Select specific event types or a combination - defaults to all.*

*See how each shift contributes to the whole.*

*See how each line and shift(s) contributes to the whole.*

After you click on the Print/Preview button, the Please Wait display will show you which lines and shifts are being processed.



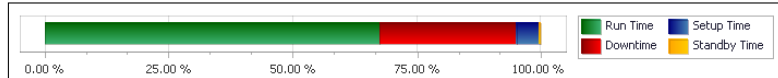
# Reports – All Shift Production – By Line Only

OOE Studio, Application Licensed to Vetil Group (Global).

## All Shift Production Summary for Location : Lebanon, CT

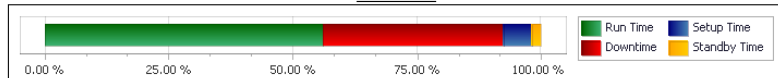
All Devices, All Parts. First Shift, Second Shift

5/14/2015 to 5/28/2015. OOE Includes Setup, Excludes Standby.



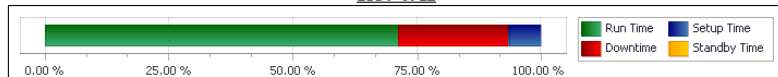
OOE	Top 5 Downtime, Setup, Standby Events					
State Reason	TotalTime	Counts	Minimum	Average	Maximum	
Down None	147h 55m 25s	420	00h 00m 00s	00h 21m 07s	12h 00m 00s	
Setup 0100 Setup/changeover	56h 04m 35s	121	00h 00m 00s	00h 27m 48s	09h 45m 58s	
Down 0050 Start-up/shut-down	24h 41m 27s	82	00h 00m 00s	00h 18m 03s	08h 17m 44s	
Down 0350 Material Shortage	23h 28m 29s	74	00h 00m 00s	00h 19m 02s	08h 30m 00s	
Down 1220 Preventive Mainten	18h 06m 55s	30	00h 00m 00s	00h 36m 13s	03h 28m 45s	

### 1004\_VFL1



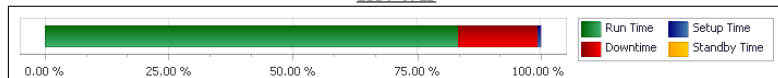
OOE	Top 5 Downtime, Setup, Standby Events					
State Reason	TotalTime	Counts	Minimum	Average	Maximum	
Down None	32h 50m 56s	90	00h 00m 00s	00h 21m 53s	10h 17m 03s	
Down 0050 Start-up/shut-down	21h 21m 21s	59	00h 00m 00s	00h 21m 43s	08h 17m 44s	
Setup 0100 Setup/changeover	14h 52m 47s	39	00h 00m 01s	00h 22m 53s	03h 30m 40s	
Down 0350 Material Shortage	13h 11m 44s	10	00h 03m 07s	01h 19m 10s	08h 30m 00s	
Down 1220 Preventive Mainten	08h 25m 32s	16	00h 00m 00s	00h 31m 35s	02h 30m 15s	

### 1004\_VFL2



OOE	Top 5 Downtime, Setup, Standby Events					
State Reason	TotalTime	Counts	Minimum	Average	Maximum	
Down None	27h 38m 44s	106	00h 00m 00s	00h 15m 38s	06h 59m 43s	
Setup 0100 Setup/changeover	16h 25m 05s	9	00h 00m 00s	01h 49m 27s	07h 08m 12s	
Down 1220 Preventive Mainten	05h 25m 25s	9	00h 00m 10s	00h 36m 09s	03h 28m 45s	
Down 1640 Air line Moisture	03h 58m 38s	2	00h 20m 40s	01h 59m 19s	03h 37m 58s	
Down 0350 Material Shortage	02h 25m 48s	15	00h 00m 39s	00h 09m 43s	00h 46m 32s	

### 1004\_VFL3



OOE	Top 5 Downtime, Setup, Standby Events					
State Reason	TotalTime	Counts	Minimum	Average	Maximum	
Down None	09h 49m 40s	72	00h 00m 00s	00h 08m 11s	02h 24m 13s	
Down 0350 Material Shortage	06h 12m 49s	44	00h 00m 00s	00h 08m 28s	00h 54m 33s	
Down 1630 Compressor Failure	04h 16m 11s	3	00h 17m 30s	01h 25m 23s	03h 37m 41s	
Down 1600 Layer Former	03h 45m 48s	16	00h 00m 00s	00h 14m 06s	01h 39m 47s	
Down 0300 Associate Meetings	02h 05m 11s	10	00h 05m 16s	00h 12m 31s	00h 26m 39s	

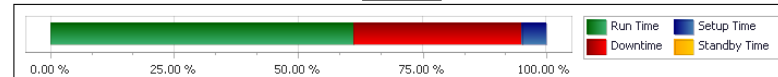
OOE Studio, Application Licensed to Vetil Group (Global).

## All Shift Production Summary for Location : Lebanon, CT

All Devices, All Parts. First Shift, Second Shift

5/14/2015 to 5/28/2015. OOE Includes Setup, Excludes Standby.

### 1004\_VFL4



OOE	Top 5 Downtime, Setup, Standby Events					
State Reason	TotalTime	Counts	Minimum	Average	Maximum	
Down None	44h 28m 53s	87	00h 00m 00s	00h 30m 40s	12h 00m 00s	
Setup 0100 Setup/changeover	12h 51m 58s	19	00h 00m 36s	00h 40m 37s	09h 45m 58s	
Down 1600 Palletizer	12h 07m 01s	16	00h 00m 00s	00h 45m 26s	06h 33m 10s	
Down 1630 Compressor Failure	05h 54m 27s	5	00h 04m 44s	01h 10m 53s	03h 39m 58s	
Down 1520 Bagger	02h 46m 12s	21	00h 00m 00s	00h 07m 54s	00h 17m 03s	

### 1004\_VFL5



OOE	Top 5 Downtime, Setup, Standby Events					
State Reason	TotalTime	Counts	Minimum	Average	Maximum	
Down None	33h 07m 12s	65	00h 00m 00s	00h 30m 34s	11h 59m 59s	
Setup 0100 Setup/changeover	10h 39m 56s	41	00h 00m 00s	00h 15m 36s	04h 25m 58s	
Down 1700 Feeder Low Level M	09h 53m 56s	30	00h 00m 00s	00h 19m 47s	01h 57m 49s	
Down 0300 Associate Meetings	08h 14m 59s	8	00h 06m 01s	01h 01m 52s	06h 47m 53s	
Down 1630 Compressor Failure	05h 32m 10s	5	00h 00m 00s	01h 06m 26s	03h 40m 13s	

This report helps you to compare all lines.

# Integration with OEE Alert

In OEE Alert (Actions – Set Comment) you can change reason codes for any production event. You can also add comments to each event.

The reason code change and the comments are saved to the database and are available through OEE Studio reporting.

**VISUALIZING DATA COMMENTS** OEEALERT)))

Home Views Filters Actions Setup Info

Active filters: Date range: Fixed : Mon Feb 23, 2015 12:00 AM - Tue Mar 03, 2015 11:30 AM, Date: Fri Mar 06, 2015, Category: Territory:Territory 2

Select Category: Territory:Territory 2 Asset: SSL45 03/04/2015

Select Category, Asset and Date, then click on a timeline event, shift or job to provide context for your comment, or to update reason text (events only).

Event ID: 52775 Start time: Wed Mar 04 2015 09:46 AM Include Event Timeline   
State: Down Reason: Adjustment Include Audit Info

Comment: Infeed Jam

save

Reason: Adjustment  
Start: Wed Mar 04 2015 09:46 AM  
Duration: 1:50:57 (h:mm:ss)  
Comment: Infeed Jam

**Event timeline**

Start Time	Duration	State	Reason Code	Reason Text	Comment
Wed Mar 04 2015 10:45:00 PM	2:15:00.58	Down	13	No Operator	
Wed Mar 04 2015 10:30:00 PM	0:00:00.02	Down	13	No Operator	



# Integration with OEE Alert

In **Availability – Tabular Analysis – Grid Analysis** you can include the comments that were added to each event through OEE Alert.

This is very useful when performing Root Cause Analysis. In this example, I filtered for all Down reasons that began with 'EM'. Now I can export this to excel for further analysis or print as is to analyze the comments.

The screenshot displays a software interface for OEE analysis. On the left, a sidebar contains 'Availability', 'Analysis', 'Combinational Analysis', 'Tabular Analysis' (circled in red), and 'Loss Events'. The main area shows a 'Grid Analysis' window with a table of events. The table has columns: 'Time', 'Type', 'State', 'Start Time', 'End Time', 'Duration', 'Reason', and 'Comment'. The 'Reason' column contains various entries, many starting with 'EM'. A filter dialog at the bottom left shows a filter rule: 'Starts with([Reason], 'EM')'. The table data includes rows such as:

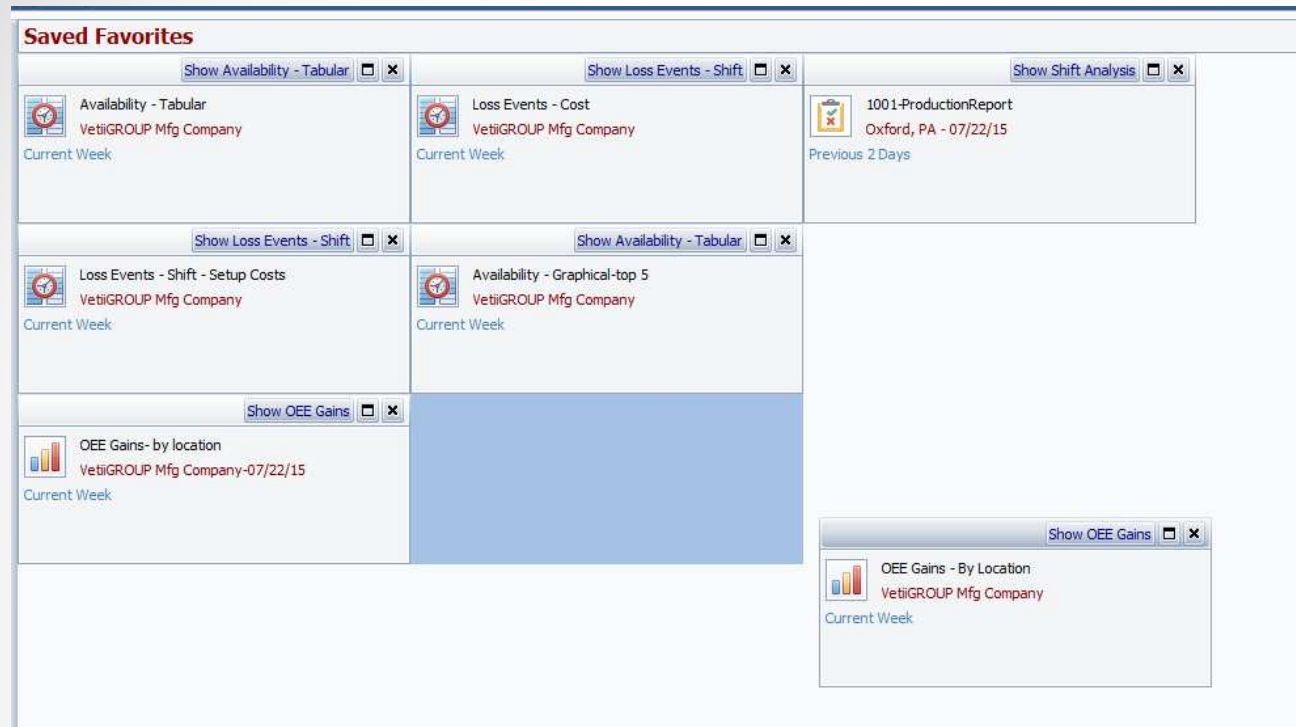
Time	Type	State	Start Time	End Time	Duration	Reason	Comment
6/18/2015 2:09 AM	Fill	Down	6/18/2015 2:09 AM	6/18/2015 2:13 AM	00h 04m 03s	EM Wait Shift	Environmental in the core
6/18/2015 2:33 AM	Fill	Down	6/18/2015 2:33 AM	6/18/2015 2:40 AM	00h 06m 49s	EM Wait Shift	EM leaving their carts in front of SICK eyes.
6/18/2015 3:55 PM	Fill	Down	6/18/2015 3:55 PM	6/18/2015 3:58 PM	00h 03m 15s	EM Wait Shift	OUTFEED CRASH ON ME
6/18/2015 4:20 PM	Fill	Down	6/18/2015 4:20 PM	6/18/2015 4:25 PM	00h 05m 33s	EM Wait Shift	adjusting seal station
6/19/2015 12:02 AM	Fill	Down	6/19/2015 12:02 AM	6/19/2015 2:23 AM	00h 02m 11s	EM Alarm Clr	Changing Fallout plates
6/19/2015 4:49 AM	Fill	Down	6/19/2015 4:49 AM	6/19/2015 4:53 AM	00h 03m 44s	EM Alarm Clr	Infeed Jam
6/18/2015 6:23 PM	Fill	Down	6/18/2015 6:23 PM	6/18/2015 6:27 PM	00h 04m 07s	EM Alarm Clr	Changing Fallout plates caused a red light waiting on EM to clear
6/18/2015 8:23 PM	Fill	Down	6/18/2015 8:23 PM	6/18/2015 8:26 PM	00h 02m 50s	EM Alarm Clr	swap out hepa cart
6/18/2015 10:25 PM	Fill	Down	6/18/2015 10:25 PM	6/18/2015 10:28 PM	00h 02m 41s	EM Alarm Clr	red light , changing plates
6/19/2015 1:29 AM	Fill	Down	6/19/2015 1:29 AM	6/19/2015 2:17 AM	00h 48m 18s	EM Wait Shift	Changed out dosing container carrier transport bearing. Corrective intervention #25
6/19/2015 3:03 AM	Fill	Down	6/19/2015 3:03 AM	6/19/2015 3:22 AM	00h 18m 40s	EM Wait Shift	EM performing monitoring air's / Attendant changing Core Plates.
6/19/2015 3:26 AM	Fill	Down	6/19/2015 3:26 AM	6/19/2015 3:26 AM	00h 00m 41s	EM Wait Shift	
6/18/2015 10:20 PM	Fill	Down	6/18/2015 10:20 PM	6/18/2015 10:20 PM	00h 00m 14s	EM Alarm Clr	waiting on m15
6/18/2015 10:37 PM	Fill	Down	6/18/2015 10:37 PM	6/18/2015 10:48 PM	00h 10m 53s	EM Alarm Clr	Safety Presentation and lunch
6/19/2015 7:52 AM	Fill	Down	6/19/2015 7:52 AM	6/19/2015 8:40 AM	00h 47m 44s	EM Wait Shift	Glass breaking
6/19/2015 8:01 AM	Fill	Down	6/19/2015 8:01 AM	6/19/2015 8:15 AM	00h 14m 19s	EM Wait Shift	EM in the core monitoring
6/19/2015 8:25 AM	Fill	Down	6/19/2015 8:25 AM	6/19/2015 8:25 AM	00h 00m 27s	EM Wait Shift	
6/19/2015 8:56 AM	Fill	Down	6/19/2015 8:56 AM	6/19/2015 9:02 AM	00h 05m 24s	EM Wait Shift	Waiting on sanitation and post cleans after corridor remediation. Could not pull stoppers out of the pass through until post cleans were complete.
6/20/2015 1:08 AM	Fill	Down	6/20/2015 1:08 AM	6/20/2015 3:14 AM	02h 06m 18s	EM Wait Shift	Spo had to go out to change his glove.
6/20/2015 1:08 AM	Fill	Down	6/20/2015 1:08 AM	6/20/2015 3:09 AM	02h 01m 27s	EM Wait Shift	Changed out needle tip deat #2.
6/20/2015 9:42 AM	Fill	Down	6/20/2015 9:42 AM	6/20/2015 9:42 AM	00h 00m 10s	EM Wait Shift	Short staffed. Had to send two attendants into the core to clean and mop Lyo SPO's out after Lyo 8 adjustments.
6/20/2015 6:53 AM	Fill	Down	6/20/2015 6:53 AM	6/20/2015 7:04 AM	00h 10m 35s	EM Wait Shift	Environmental monitoring isolator
6/20/2015 8:13 AM	Fill	Down	6/20/2015 8:13 AM	6/20/2015 8:22 AM	00h 08m 56s	EM Wait Shift	em in core
6/20/2015 8:32 AM	Fill	Down	6/20/2015 8:32 AM	6/20/2015 8:43 AM	00h 10m 17s	EM Wait Shift	Performing EOR MIT
6/20/2015 9:02 AM	Fill	Down	6/20/2015 9:02 AM	6/20/2015 9:09 AM	00h 06m 58s	EM Wait Shift	em core aires
6/20/2015 9:38 AM	Fill	Down	6/20/2015 9:38 AM	6/20/2015 9:41 AM	00h 02m 35s	EM Wait Shift	m16 attendant changing plates in core
6/20/2015 7:48 AM	Fill	Down	6/20/2015 7:48 AM	6/20/2015 7:54 AM	00h 05m 32s	EM Wait Shift	

# NEW ~ Favorite Reports

The screenshot displays a software dashboard with a left-hand navigation menu and a main content area. The navigation menu includes options like 'Home', 'Dashboard', 'About', 'Favorites', 'Analysis', 'Trends', 'Availability', 'Performance', 'Quality', 'Shift Data', and 'Job Data'. The 'Favorites' option is circled in red. The main content area is titled 'Saved Favorites' and contains several report thumbnails, each with a title, company name, and time period. The reports include: 'Availability - Tabular' (Current Week), 'Loss Events - Cost' (Current Week), '1001-ProductionReport' (Previous 2 Days), 'OEE Gains - By Location' (Current Week), 'Loss Events - Shift - Setup Costs' (Current Week), 'Availability - Graphical-top 5' (Current Week), and 'OEE Gains - by location' (Current Week).

- The Favorites Dashboard lets you see all of the reports that you have saved as a favorite.
- You can launch the report from this dashboard, make a few parameter changes and refresh the report.

# NEW ~ Favorite Reports



- You can move the report tiles around on the screen.
- Drag the favorite to where you want it to appear. The colored box shows you where the report will land when you let go of the mouse.

# Add To Favorites

At the top right of every screen is a button that lets you Add the report to your Favorites.

The screenshot shows the 'OEE Trend' report interface. It features several configuration panels: 'Hierarchy' (Enterprise, VetiiGROUP Mfg Company), 'Date Range' (From: 5/14/2015 6:00 AM, To: 5/28/2015 6:01 AM), 'Production Filters' (Shift: [All Shifts], Device: [All Devices], Part: [All Parts]), 'Downtime calculation' (Include Standby in Downtime, Include Setup in Downtime), 'Display' (OEE, Performance, Availability, Quality), and 'Data Indicators' (Trend Line (Regression), Average: Simple, 2 Data Points, Show Target line: 50%). Buttons for 'Apply / Refresh' and 'Print / Export' are also visible. Two 'Add to Favorites' buttons are highlighted: one in the top right corner of the report area, circled in red, and another in a separate box below it, also circled in red. A red arrow points from the text above to the top-right button, and another red arrow points from the text below to the bottom button.

First, set up the report parameters, such as specific Hierarchy, Production Filters, etc.

Then click on the Add to Favorites button.



# Add to Favorites

**All Shift Production Reporting**

Hierarchy  
Location: Lebanon, CT

Date Range  
From: 5/14/2015 6:00 AM  
To: 5/28/2015 6:01 AM  
Preset Dates: Choose Preset

Production Filters  
Device: 1004\_VFL5  
Part: [All Parts]

Downtime calculation  
 Include Standby in Downtime  
 Include Setup in Downtime

Show in Top Losses  
 Downtime  
 Setup  
 Standby

Available Shifts  
 First Shift  
 First Shift WE  
 Gap Shift  
 Second Shift  
 Shift Undefined

Report By  
 Shift only  
 Shift then Device  
 Device then Shift  
 Device only

Print / Preview

*Type in additional information in the Title or Description.*

*Select the Range for either Day(s) or Week(s).*

*Select to make the report Available to All users or just yourself.*

**Add to Favorites**

Identification  
Title: All Shift Production Summary Report-no standby  
Description: Lebanon, CT  
1004\_VFL5  
First Shift

Date Range  
Range: 1 Day(s)  Week(s)  
Available To:  All Users  Just Me

OK Cancel

Show All Shift Production Summary Report

All Shift Production Summary Report-no standby  
Current Week

Lebanon, CT  
1004\_VFL5  
First Shift

# Launch Your Favorite Report

The screenshot shows a 'Saved Favorites' dashboard with a grid of report tiles. Each tile has a title, a time period, and a company name. At the top of each tile is a 'Show' button with a refresh icon and a close icon. A red circle highlights the 'Show Job Analysis' button at the top of the bottom-most tile, with an arrow pointing to it.

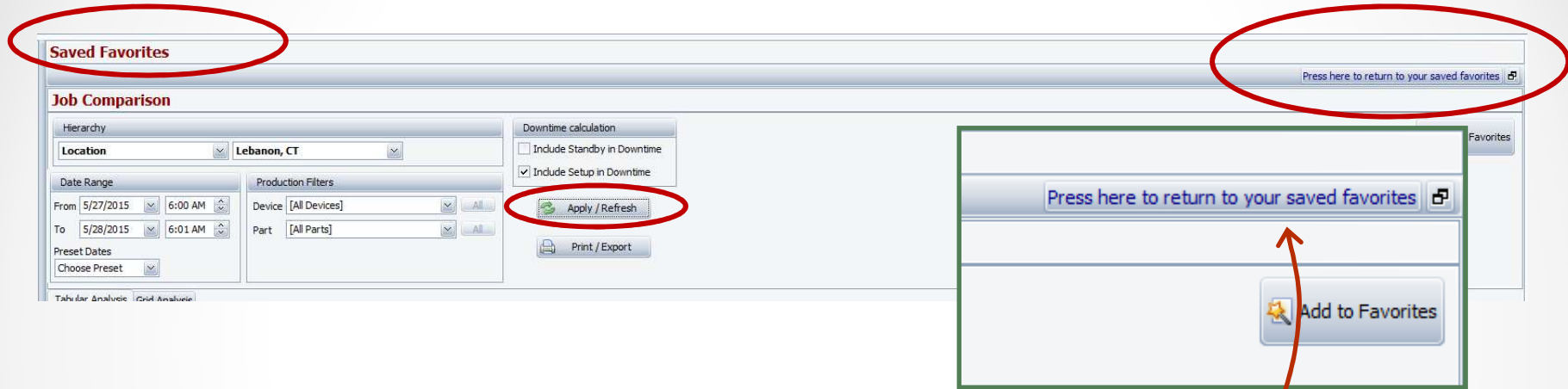
Report Title	Time Period	Company	Action Button
Year to Date OEE-Grp by Date	Current Week	VetiGROUP Mfg Company	Show Year to Date OEE
OEE Gains-No Q This quarter	Previous 3 Weeks	VetiGROUP Mfg Company	Show OEE Gains
OEE Trend -No P or Q	Current Week	VetiGROUP Mfg Company	Show OEE Trend
Shift Analysis-Full Production Report	Current Week	VetiGROUP Mfg Company	Show Shift Analysis
Shift Analysis-2 weeks	Previous 2 Weeks	Lebanon, CT	Show Shift Analysis
Job Analysis-ProductShift Report Jobs	Current Week	Lebanon, CT	Show Job Analysis
Job Analysis-Alt Job Report	Current Week	Lebanon, CT	Show Job Analysis
Job Analysis-Grid Analysis HierarchyDetail	Current Week	VetiGROUP Mfg Company	Show Job Analysis
Job Analysis-LebanonCT-Shift Good Count 1 day	Current Day	Lebanon, CT	Show Job Analysis

Click on the button at the top of the Favorite report that you want to view.

This will display your report, with the saved parameters.

Click the Apply/Refresh button to view the data.

# View your Favorite Report



You are now viewing your Favorite report.

To go back to the Favorites home page, click on the “Press here to return to your saved favorites”.

# Shift OEE Report

**Shift Reports**

- Production
  - Shift Production
  - All Shift Production
  - Shift Summary
  - Shift OEE**

## Shift OEE Report

1004\_VFL5 First Shift

Report Date: 8/31/2015 Shift Start: 06:00  
Shift End: 16:30

OEE		Production Times			
Availability:	82.0%	Run Time:	8	08h 36m 21s	82.0%
Performance:	89.2%	Down Time:	10	01h 48m 50s	17.3%
Quality:	99.8%	Setup Time:	1	00h 04m 46s	0.8%
OEE:	73.0%	Standby Time:	1	00h 00m 00s	0%
		Total:	20	10h 29m 57s	100.0%

Productivity		Performance	
Target Count:	11,563	Good Count:	11,543
Goal Count:	10,000	Reject Count:	20
Average Rate:	1,101	Total Count:	11,563
		Takt Time:	2.86
		Avg. Cycle Time:	2.69
		Ideal Cycle Time:	2.40

OEE for the last 7 days

Top 5 Production Events							
State	Reason	Total Time	Counts	Minimum	Average	Maximum	% To Total
Running	Running	08h 36m 22s	8	00h 00m 02s	01h 04m 32s	03h 40m 05s	82.0%
Down	None	00h 43m 09s	4	00h 05m 16s	00h 10m 47s	00h 24m 22s	6.8%
Down	1600 Pallet Dispenser	00h 36m 30s	2	00h 09m 39s	00h 18m 15s	00h 26m 51s	5.8%
Down	1700 Feeder Low Level M	00h 20m 30s	2	00h 04m 33s	00h 10m 15s	00h 15m 57s	3.3%
Down	1520 Film Unwinder	00h 08m 41s	1	00h 08m 41s	00h 08m 41s	00h 08m 41s	1.4%

**Top 5 Event Time**

**Top 5 Event Count**

**New Report ~**  
 Prints one page per line, per shift providing a good summary for the shift with an OEE Trend graph for the last 7 days.

# OEE Studio v 3.0

In order to support the new Vorne v1.3.x firmware, you must upgrade to the latest

**XL Bolt-on Data Collector version 1.8.4**

<http://www.sulzerconsulting.com/downloads/vorne/XL Bolt-On Data Collector.zip>

**Version 3.0 of OEE Studio supports all versions of Vorne XL device firmware.**

Smart Installation

<http://oeestudio.com/installs/release/v3/setup/InstallOEEStudio.exe>

If you have questions or need assistance, please contact either

Debbie Olk (OEE Studio, OEE Alert or custom reports)

Debbie.olk@debtechsystems.com

or

Jim Sulzer (XL Bolt-On Data Collector).

jim@sulzerconsulting.com



# OEE Studio v3.0

OEE Studio version 3.0 is available for upgrade.

If you have an older version that was manually installed, please uninstall that version of OEE Audit before installing this version of OEE Studio. This can be determined by looking at the bottom right of the OEE Audit software.



- The OEE Studio installation manual is available for downloading on our new website – <http://www.oestudio.com/toolbox.html>

# Contact Us

- As the Vorne Authorized Reporting Consultants, we provide customized reporting solutions, including working with data from your ERP/MRP systems.
- In addition to customized reporting, we provide support and customization for the **OEE Studio** reporting software (designed specifically for the data captured from the Vorne XL devices).
- We also provide sales, support and customization for OEE Alert. ([www.OEEAlert.com](http://www.OEEAlert.com))

OEE Studio, OEE Alert and XL Bolt-On Data Collector are part of the Marketing brand of

**Vetii | GROUP**