OEE Studio Release Note

Version 5.0

Deb-Tech Systems, Inc. & Production Improvement Systems Ltd.
Debbie.Olk@DebTechSystems.com
Russell@ProductionImprovement.com
1-800.975.3181 ext. 2

What's New in 5.0

Enhancements

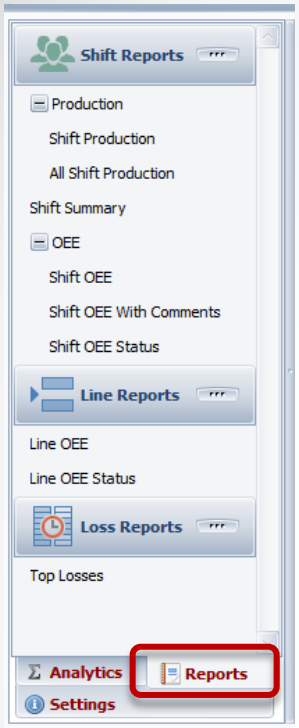
- **Reports with OEE Trend Chart** – Optionally add Availability, Performance, Quality, Target trends and Good Count bar chart to your reports.
- **NEW! Report – Shift OEE Status** – New layout – OEE Metric – big and bold!
- **NEW! Report – Line OEE Status** – New layout – OEE Metric – big and bold! Includes comments.
- **NEW! TEEP By Hierarchy** – Compare TEEP metric across locations, lines, etc.
- **NEW! Efficiency Trend** – View Efficiency compared to OEE or on its own.
- **NEW! Duration formatting** – Create custom formatted duration fields with the new Duration Result Type. Great for creating MIN, MAX & AVG durations in HH:MM:SS format.

Defect fixes

- OEE Gains and OEE Losses – Filtering by Part is fixed.

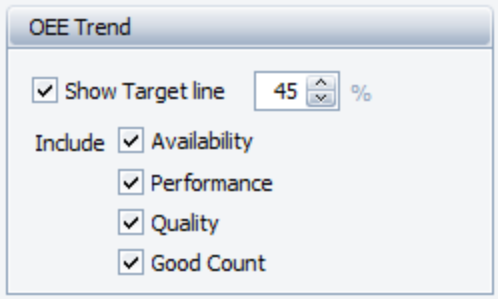
Updated Website – More online help - check it out!! www.oeestudio.com/toolbox.html

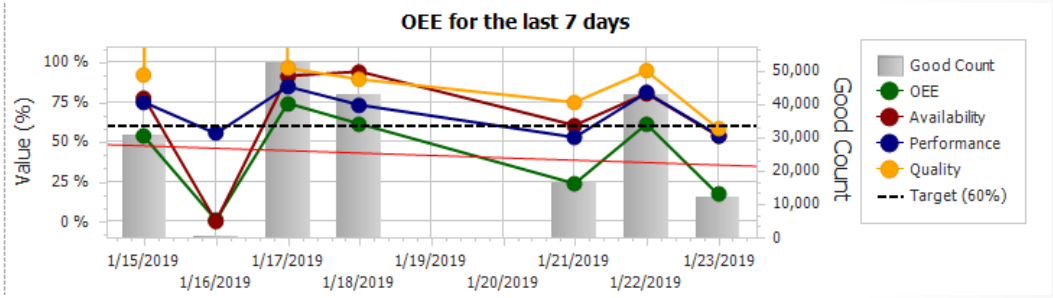
Reports – OEE Trend Chart Options

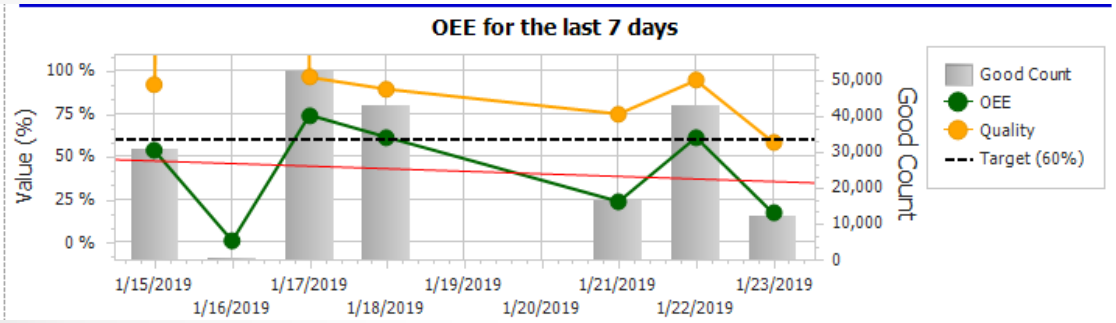


Optionally add **Availability**, **Performance**, **Quality** trends, **Good Count** bar chart and **Target** line to these reports.

- **All Shift Production**
- **Shift OEE**
- **Shift OEE Status**
- **Line OEE**
- **Line OEE Status**

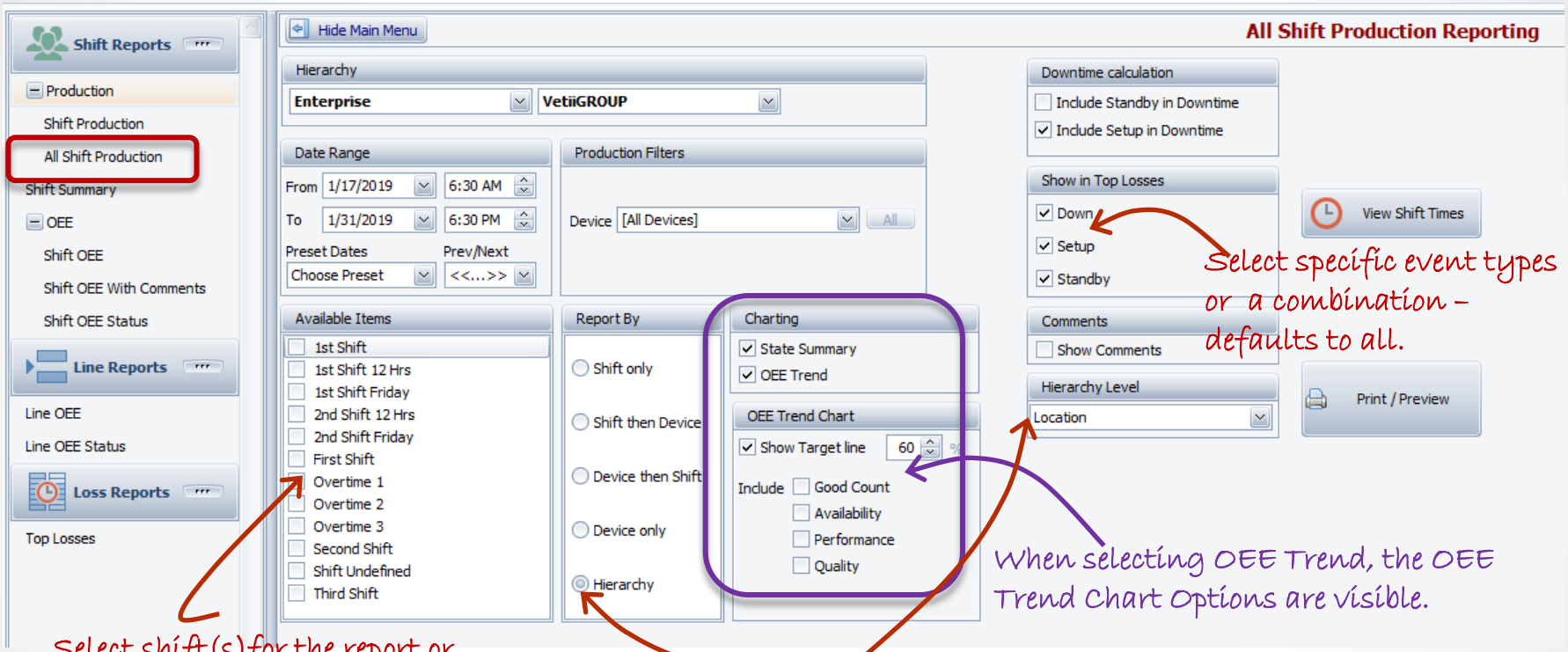






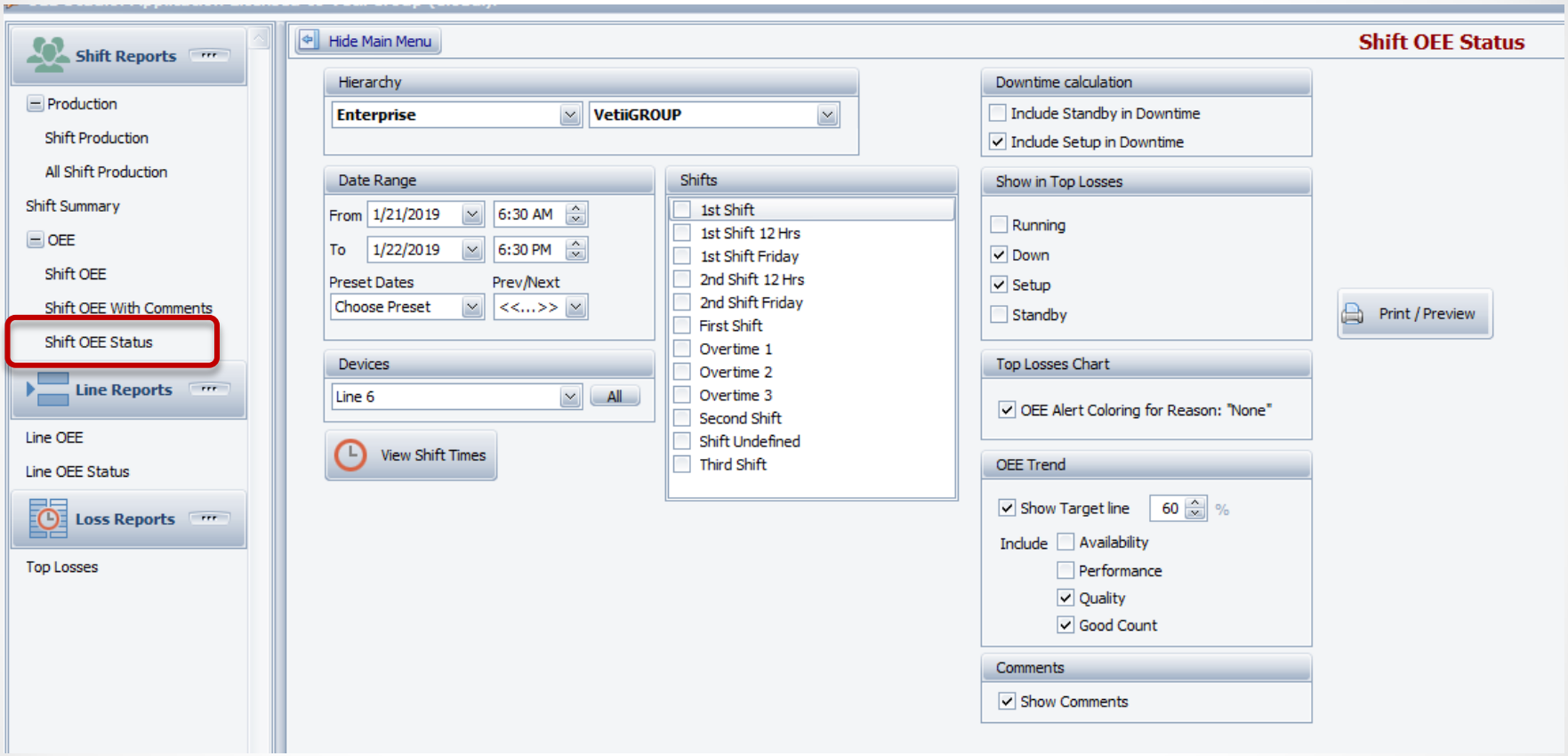
Reports – All Shift Production

More! Optional Report capabilities



Reports – Shift Reports – Shift OEE Status

Optional Report capabilities



Reports – Shift Reports – Shift OEE Status

Instant OEE

OEE Studio. Application Licensed to Vetti Group (Global).

Shift OEE Status With Comments

Line 6 — **First Shift**

Report Date: 1/21/2019

Shift Start: 06:30
Shift End: 14:50

Productivity

Target Count:	68,140	Good Count:	33,264
Goal Count:	59,500	Reject Count:	4,784
Average Rate:	4,690	Total Count:	38,048
Efficiency:	48.8%	Scrap %:	12.60%

OEE: 48.8%

Availability:	79.1%
Performance:	70.6%
Quality:	87.4%

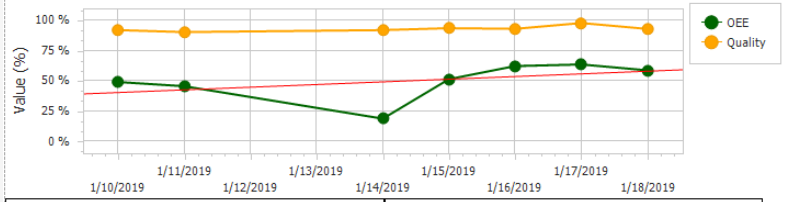
Performance - Speed Loss

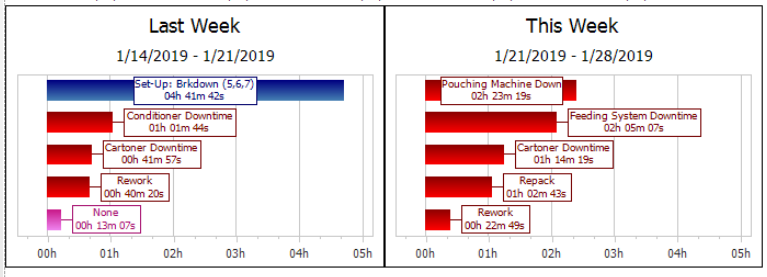
Cycles	Time	Counts	Average
Standard:	04h 50m 57s	18,919	00h 00m 00s
Slow:	00h 00m 00s	0	00h 00m 00s
Small Stops:	01h 33m 51s	105	00h 00m 53s
Total Run Time:	06h 24m 48s	14	

Top 5 Production Events (Down, Setup)

State	Reason	Total Time	Counts	Minimum	Average	Maximum	% To Total
Down	Feeding System Downtime	01h 03m 09s	12	00h 00m 26s	00h 05m 15s	00h 17m 08s	12.6%
Down	Repack	00h 28m 49s	3	00h 07m 39s	00h 09m 36s	00h 11m 12s	5.8%
Down	Pouching Machine Down	00h 05m 43s	1	00h 05m 43s	00h 05m 43s	00h 05m 43s	1.1%
Down	Butler Downtime	00h 04m 13s	1	00h 04m 13s	00h 04m 13s	00h 04m 13s	0.8%

OEE for the last 7 days





OEE Studio. Application Licensed to Vetti Group (Global).

Shift OEE Status With Comments

Line 6 — **Third Shift**

Report Date: 1/21/2019

Shift Start: 22:50
Shift End: 06:30

Productivity

Target Count:	59,671	Good Count:	19,040
Goal Count:	59,500	Reject Count:	-6,216
Average Rate:	1,736	Total Count:	12,824
Efficiency:	31.9%	Scrap %:	-48.50%

OEE: 52.5%

Availability:	69.4%
Performance:	51.0%
Quality:	148.5%

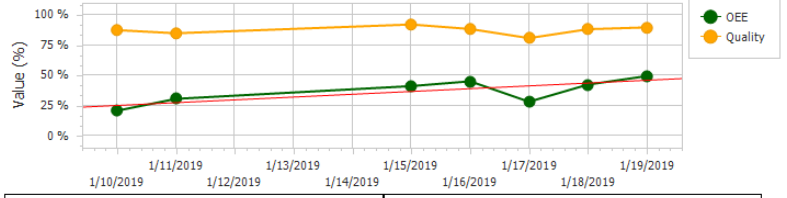
Performance - Speed Loss

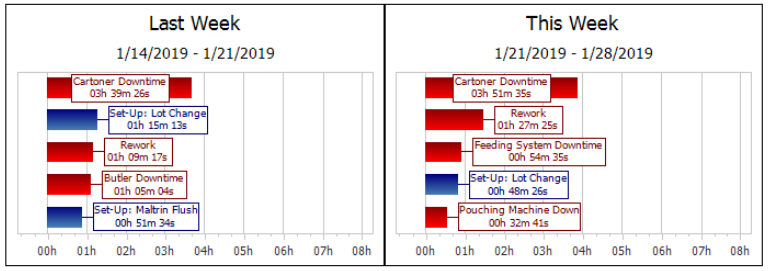
Cycles	Time	Counts	Average
Standard:	02h 46m 47s	10,846	00h 00m 00s
Slow:	00h 00m 00s	0	00h 00m 00s
Small Stops:	02h 20m 58s	133	00h 01m 03s
Total Run Time:	05h 07m 46s	19	

Top 5 Production Events (Down, Setup)

State	Reason	Total Time	Counts	Minimum	Average	Maximum	% To Total
Down	Cartoner Downtime	00h 53m 29s	4	00h 03m 12s	00h 13m 22s	00h 39m 06s	11.6%
Down	Feeding System Downtime	00h 23m 56s	5	00h 03m 12s	00h 04m 47s	00h 08m 39s	5.2%
Setup	Set-Up: Lot Change	00h 16m 58s	1	00h 16m 58s	00h 16m 58s	00h 16m 58s	3.7%
Down	Rework	00h 15m 36s	2	00h 06m 26s	00h 07m 48s	00h 09m 10s	3.4%
Down	Butler Downtime	00h 11m 21s	2	00h 00m 00s	00h 05m 40s	00h 11m 21s	2.5%

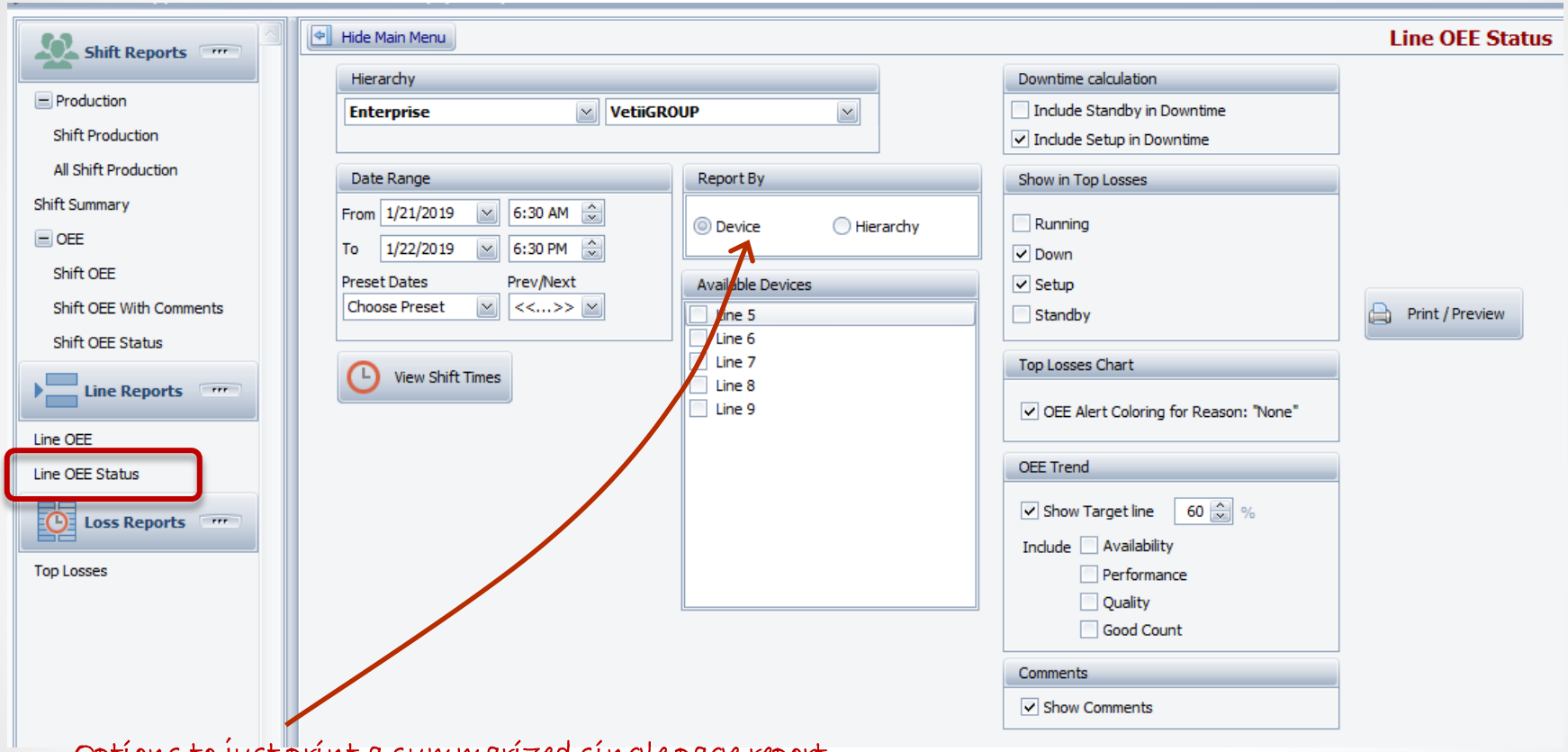
OEE for the last 7 days





Reports - Line Reports – Line OEE Status

Optional Report capabilities



Options to just print a summarized single page report based on the Hierarchy and Production Filters to the left. Or, print a separate page per selected device.

Reports – Line Reports – Line OEE Status

Instant OEE

Line OEE Status Report

1/23/2019 to 1/24/2019

Line 5

Productivity

Target Count:	260,594	Good Count:	91,147
Goal Count:	238,000	Reject Count:	23,731
Average Rate:	14,731	Total Count:	114,878
Efficiency:	35.0%	Scrap %:	20.70%

OEE: 34.5%

Availability: 74.8%

Performance: 58.2%

Quality: 79.3%

Production Times

Run Time:	71	23h 30m 39s	72.6%
Down Time:	63	07h 33m 42s	23.4%
Setup Time:	3	00h 21m 35s	1.1%
Standby Time:	10	00h 56m 56s	2.9%
Total:	147	32h 22m 52s	100.0%

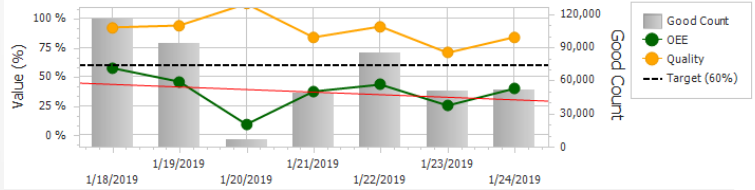
Performance - Speed Loss

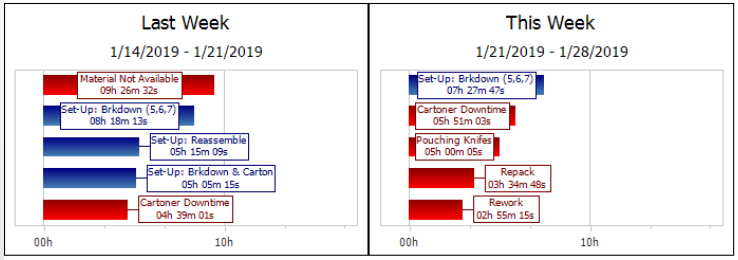
Cycles	Time	Counts	Average
Standard:	00h 00m 59s	80	00h 00m 00s
Slow:	15h 46m 36s	56,796	00h 00m 01s
Small Stops:	07h 40m 03s	462	00h 00m 59s

Top 5 Production Events (Down, Setup)

State	Reason	Total Time	Counts	Minimum	Average	Maximum	% To Total
Down	Repack	03h 04m 54s	12	00h 00m 00s	00h 15m 24s	00h 35m 00s	9.5%
Down	Feeding System Downtime	00h 56m 23s	12	00h 00m 39s	00h 04m 41s	00h 13m 16s	2.9%
Down	Rework	00h 35m 54s	4	00h 00m 00s	00h 08m 58s	00h 13m 37s	1.8%
Down	Pouching Machine Down	00h 28m 55s	7	00h 00m 00s	00h 04m 07s	00h 08m 20s	1.5%
Down	Butler Downtime	00h 27m 46s	4	00h 03m 13s	00h 06m 56s	00h 11m 03s	1.4%

OEE for the last 7 days





Line OEE Status Report

1/23/2019 to 1/24/2019

Line 6

Productivity

Target Count:	200,864	Good Count:	91,770
Goal Count:	238,000	Reject Count:	9,722
Average Rate:	15,076	Total Count:	101,492
Efficiency:	45.7%	Scrap %:	9.60%

OEE: 41.3%

Availability: 69.9%

Performance: 65.3%

Quality: 90.4%

Production Times

Run Time:	64	18h 26m 17s	57.0%
Down Time:	52	05h 28m 29s	16.9%
Setup Time:	4	02h 27m 22s	7.6%
Standby Time:	13	05h 57m 51s	18.4%
Total:	133	32h 19m 59s	100.0%

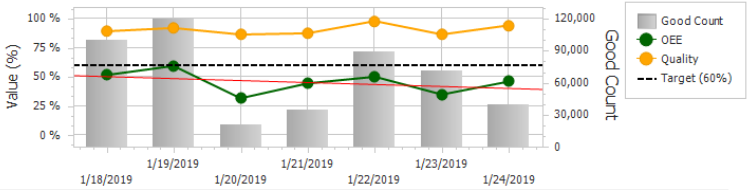
Performance - Speed Loss

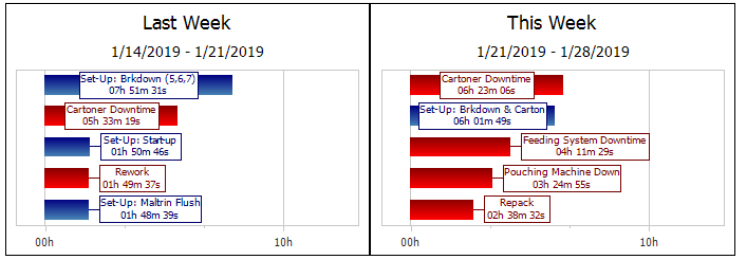
Cycles	Time	Counts	Average
Standard:	06h 58m 37s	27,243	00h 00m 00s
Slow:	06h 21m 55s	22,907	00h 00m 01s
Small Stops:	05h 05m 43s	432	00h 00m 42s

Top 5 Production Events (Down, Setup)

State	Reason	Total Time	Counts	Minimum	Average	Maximum	% To Total
Setup	Set-Up: Maltrin Flush	02h 02m 23s	1	02h 02m 23s	02h 02m 23s	02h 02m 23s	6.3%
Down	Feeding System Downtime	01h 23m 39s	13	00h 03m 07s	00h 06m 26s	00h 23m 39s	4.3%
Down	Cartoner Downtime	01h 04m 35s	13	00h 00m 10s	00h 04m 58s	00h 18m 02s	3.3%
Down	Rework	00h 53m 36s	2	00h 12m 40s	00h 26m 48s	00h 40m 56s	2.8%
Down	Repack	00h 43m 41s	3	00h 06m 19s	00h 14m 33s	00h 29m 35s	2.3%

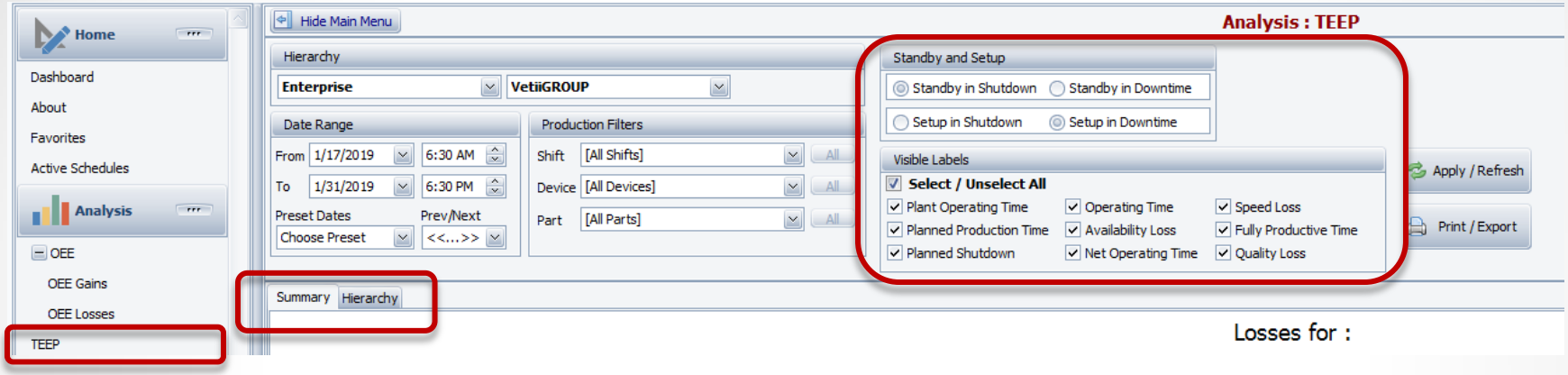
OEE for the last 7 days





Analysis – TEEP – Summary and Hierarchy Tabs

The values making up the charts are displayed within their respective section. Includes the ability to select which values to display.

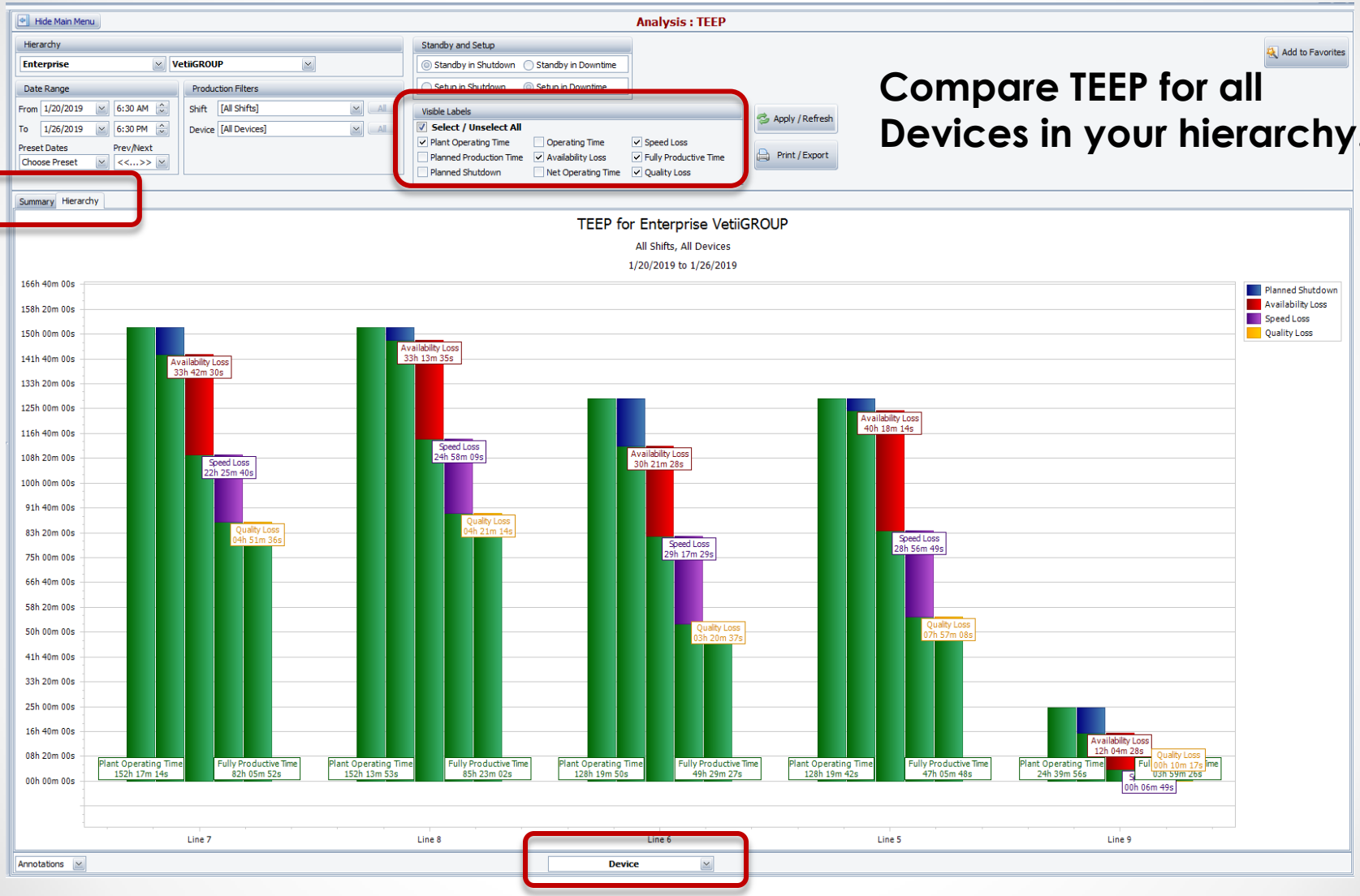


Total Effective Equipment Performance (TEEP) considers maximum time to be All Available Time – that is 24 hours, 365 days a year. (*This includes Standby in Downtime to be selected*)
TEEP = Performance x Quality x Availability (where Availability = Actual Production Time / All Time).

Overall Operations Effectiveness (OOE) takes unscheduled time into account, looking at Total Operations Time as the maximum.
Performance x Quality x Availability (where Availability = Actual Production Time / Operating Time)

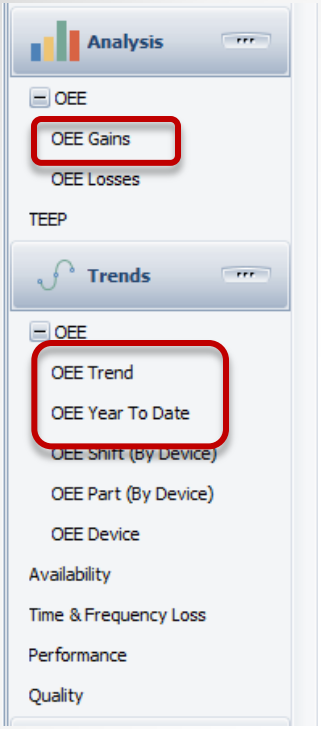
Overall Equipment Effectiveness (OEE) only considers scheduled time. If a machine is down due to maintenance, and it's not scheduled for work, OEE ignores this time. (*Standby in Shutdown would be selected*)
Performance x Quality x Availability (where Availability = Actual Production Time / Scheduled Time)

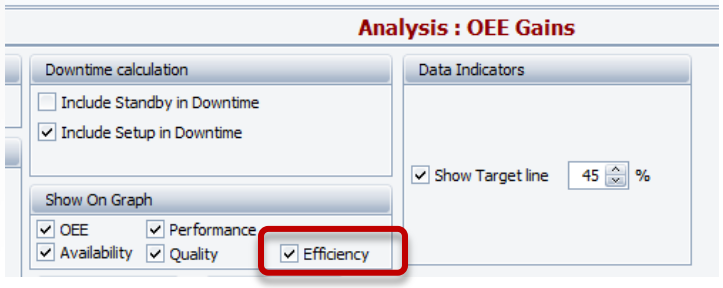
Analysis – TEEP – Summary and Hierarchy Tabs

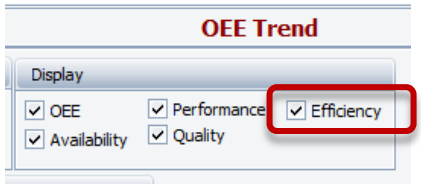


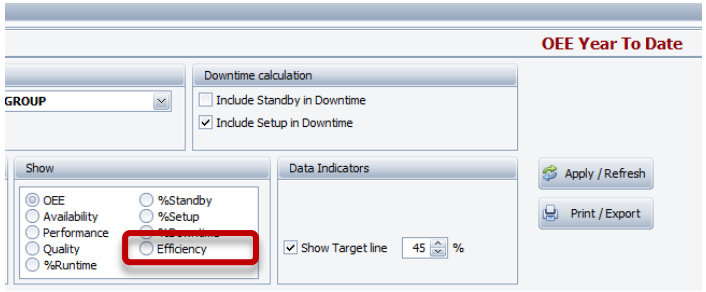
Compare TEEP for all Devices in your hierarchy.

Efficiency Trend – in OEE Chart Options





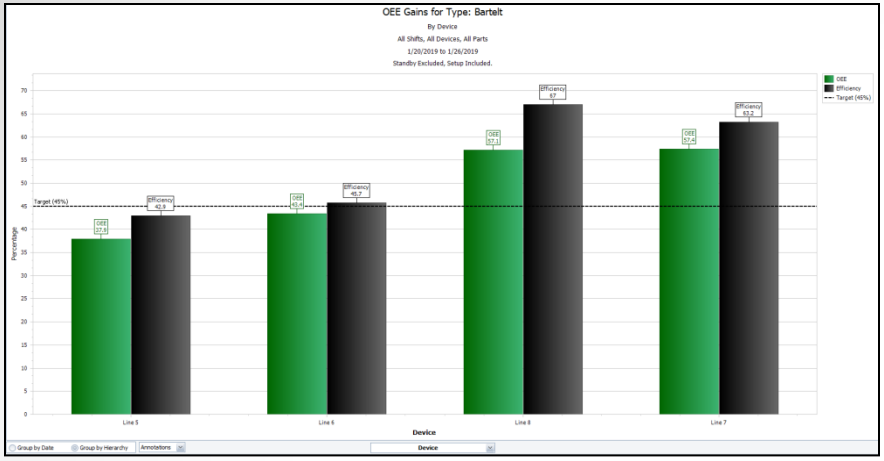


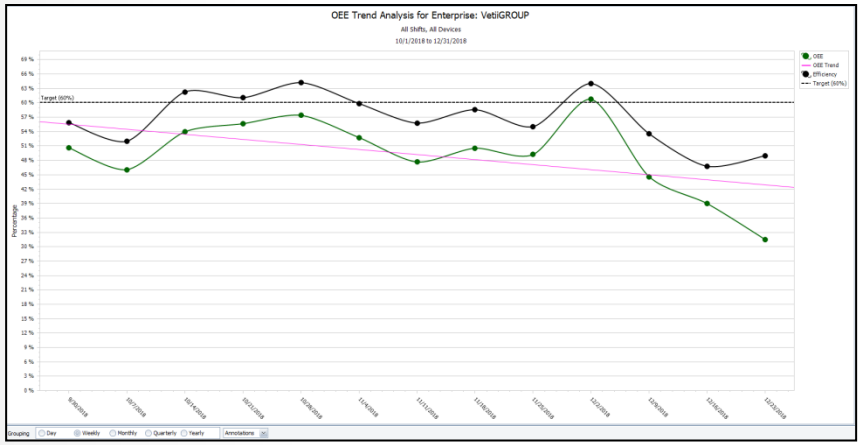


Optionally add **Efficiency** to these charts.

- **Analysis – OEE – OEE Gains**
- **Trends – OEE – OEE Trend**
- **Trends – OEE – OEE Year To Date**

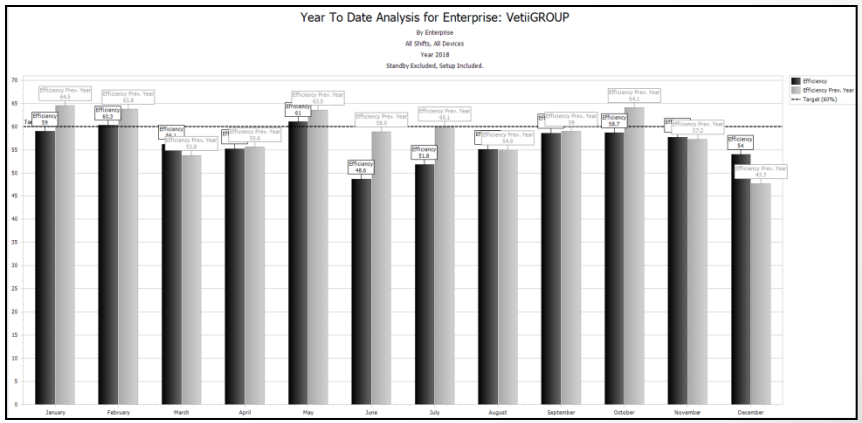
Efficiency Trend – in OEE Chart Options





Optionally add **Efficiency** to these charts.

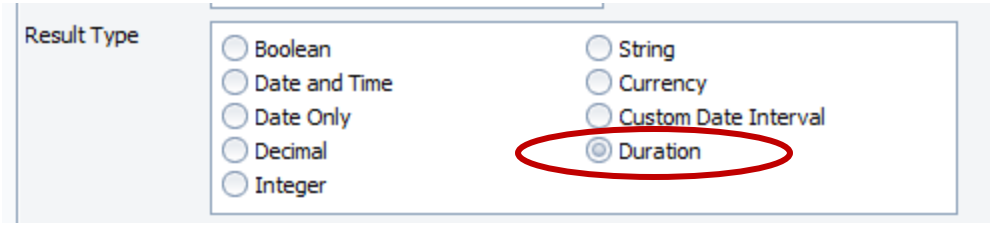
- **Analysis – OEE – OEE Gains**
- **Trends – OEE – OEE Trend**
- **Trends – OEE – OEE Year To Date**

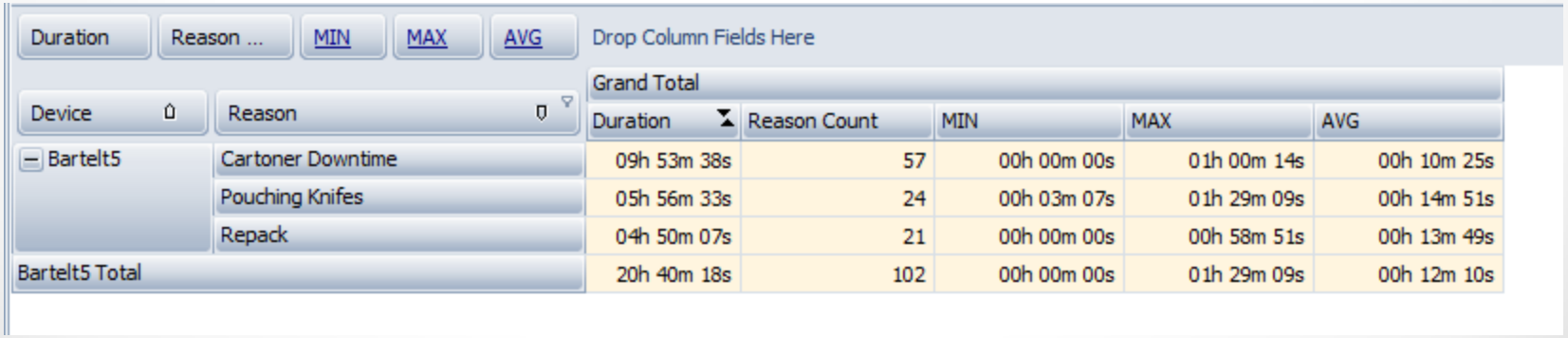


Tool-Tip – Min-Max-AVG

We now have a new Result Type for Custom Defined Fields

- This provides the ability to format the **Duration** field as HH:MM:SS





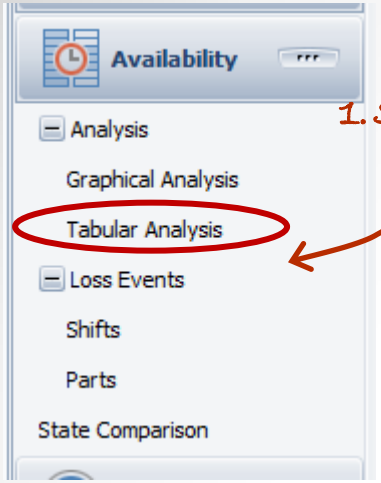
Creating the Report

The process is the same whether you select

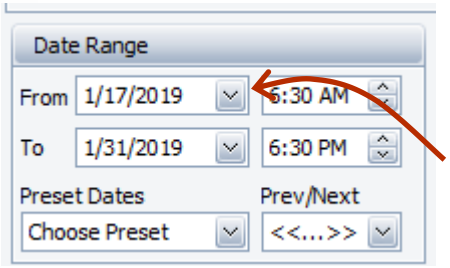
Availability – Tabular Analysis or

Availability - Loss Events – Shift or

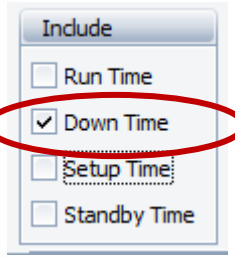
Loss Events – Parts.



1. Select Availability – Tabular Analysis



2. Select the Date Range



3. Select Down Time

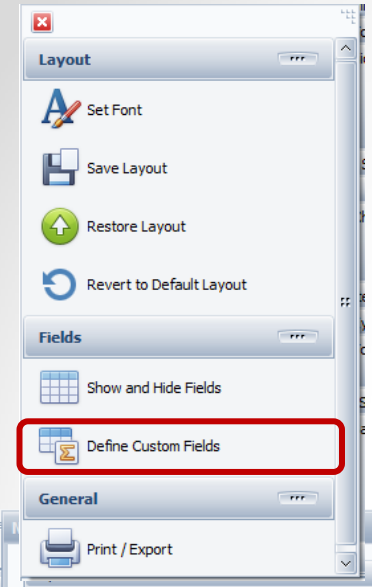
4. Click Apply/Refresh to view your data. >>>

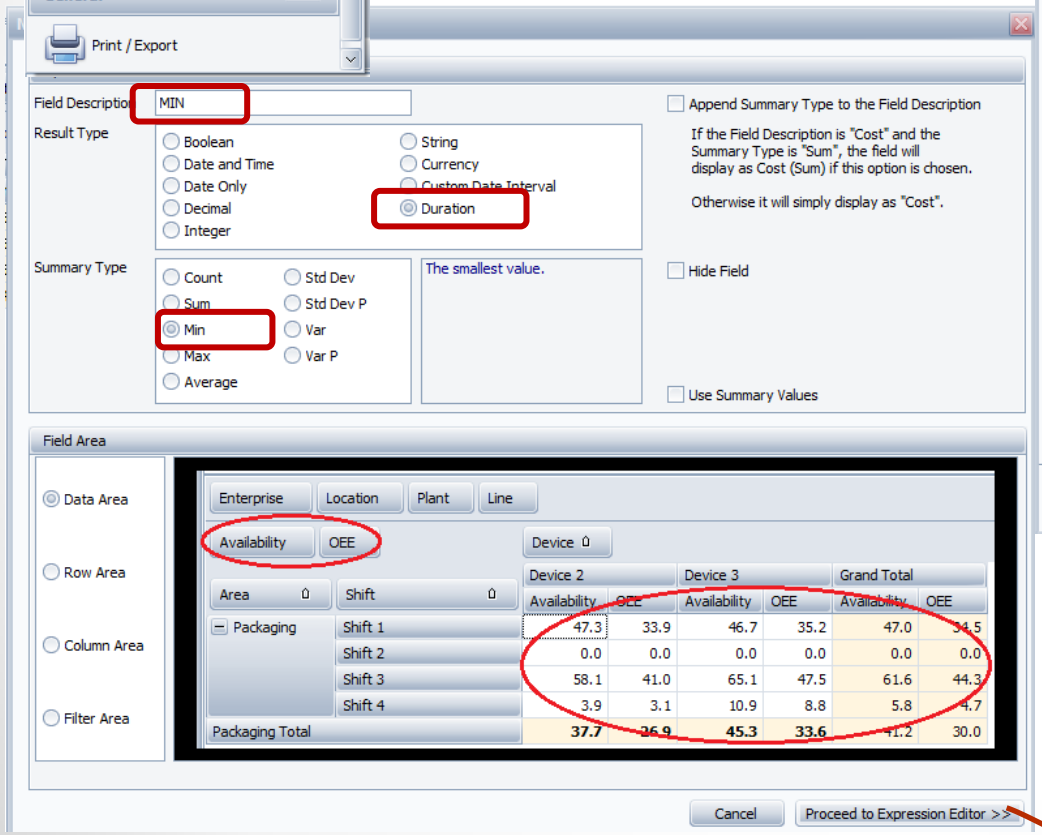
	St...	Loss Reason	Grand Total Duration (Sum)	Grand Total Reason Count
t5	Down	Butler Downtime	03h 06m 34s	31
		Carton Checkweigher Down	00h 06m 40s	2
		Cartoner Downtime	09h 53m 38s	57
		Combi Scales / Conveyor	00h 10m 42s	3
		Conditioner Downtime	00h 56m 07s	13
		Feeding System Downtime	04h 09m 22s	43
		Late Downtime	00h 02m 48s	5
		Material Not Available	02h 37m 30s	12
		None	02h 10m 38s	40
		Pickoff Assembly	00h 06m 47s	2
		Pouch Checkweigher Down	00h 31m 59s	6
		Pouching Fill Heads	00h 57m 39s	7
		Pouching Knifes	05h 56m 33s	24
		Pouching Machine Down	02h 36m 25s	27
		Pouching Seal Bars	02h 33m 18s	21
		Repack	04h 50m 07s	21
		Rework	04h 27m 00s	20
		X-ray Downtime	00h 33m 37s	7
	Down Total		45h 47m 24s	341
t6	Down	Butler Downtime	01h 20m 49s	19
		Carton Checkweigher Down	00h 03m 26s	1
		Cartoner Downtime	11h 36m 25s	101

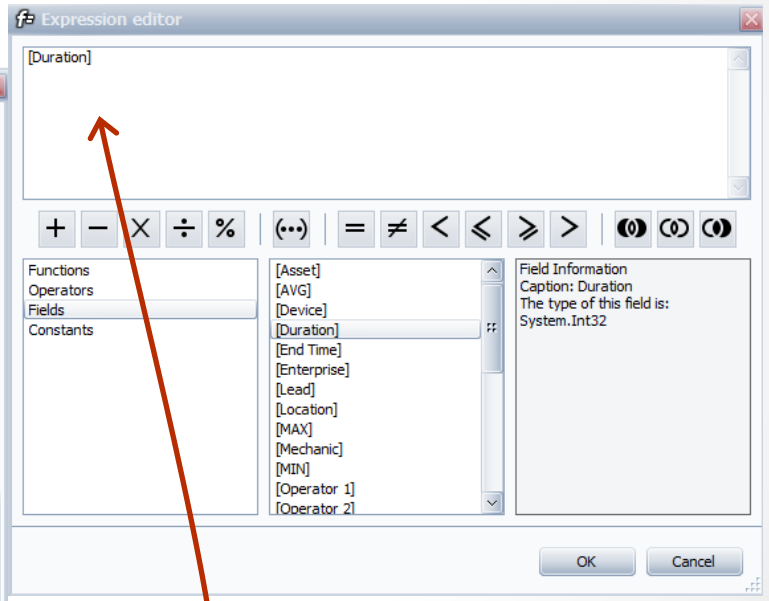
Creating the MIN Calculation

At the bottom of the screen, you will find the Click here for Printing, etc option.

Select the **Define Custom Fields** Option – select **Duration** and **Min**



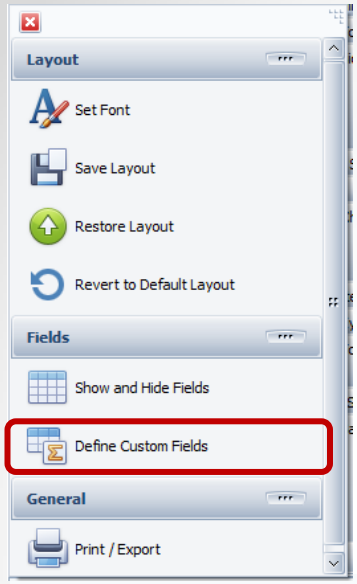


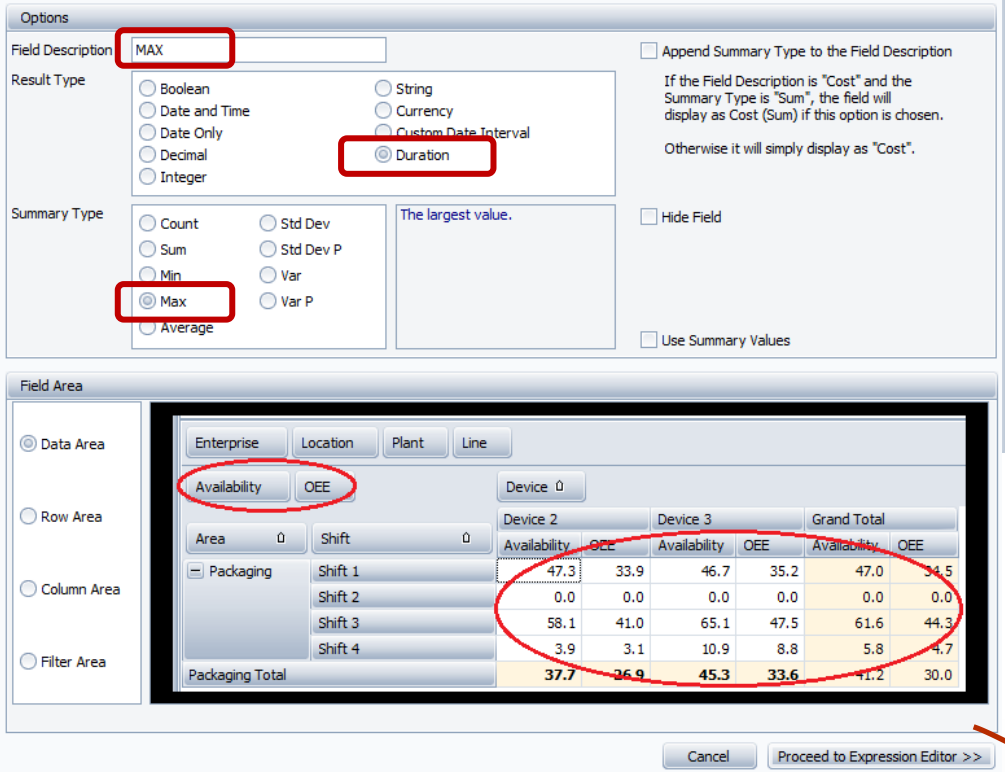


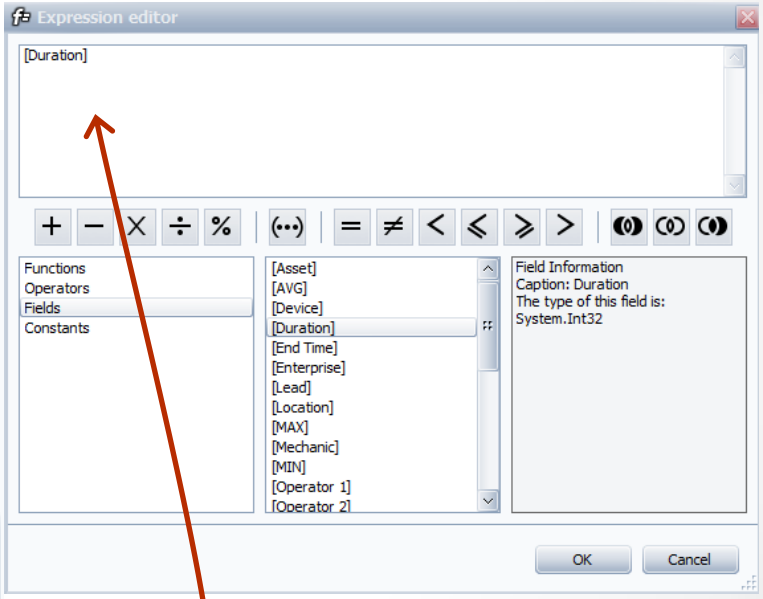
Creating the MAX Calculation

At the bottom of the screen, you will find the Click here for Printing, etc option.

Select the **Define Custom Fields** Option – select **Duration** and **Max**

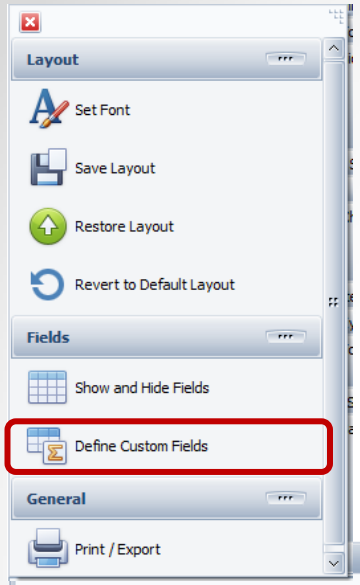




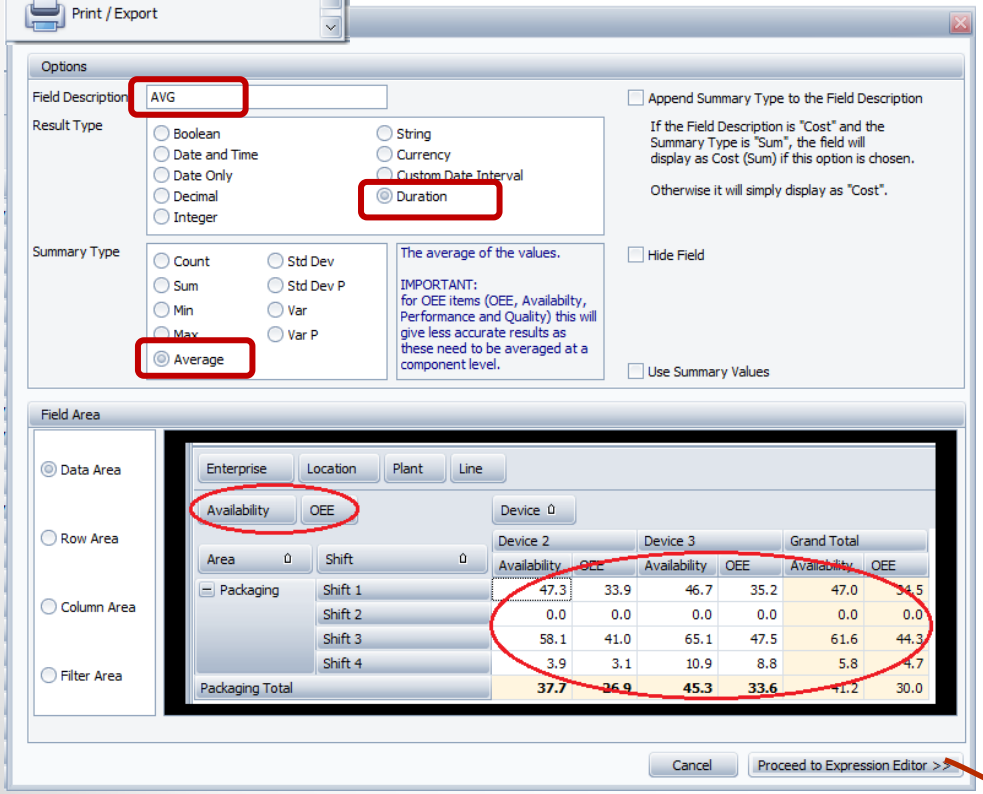


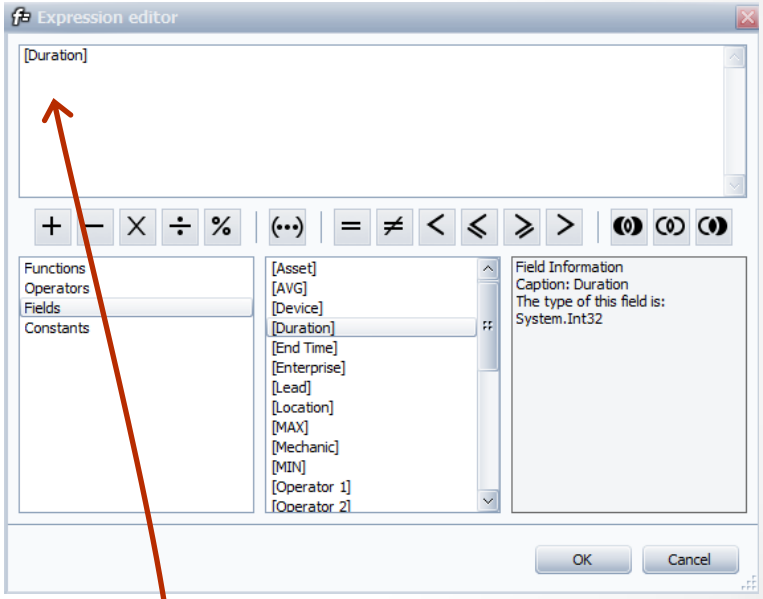
Creating the AVG Calculation

At the bottom of the screen, you will find the Click here for Printing, etc option.



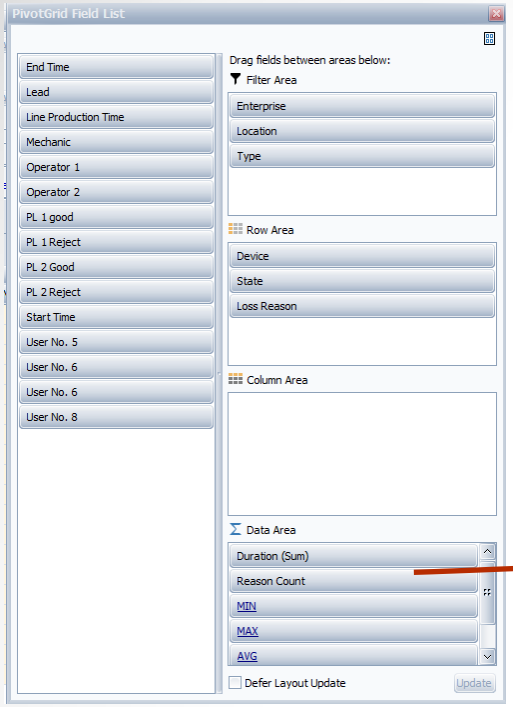
Select the **Define Custom Fields** Option – select **Duration** and **Average**





Completing the Report

The new fields appear in the Data Area.



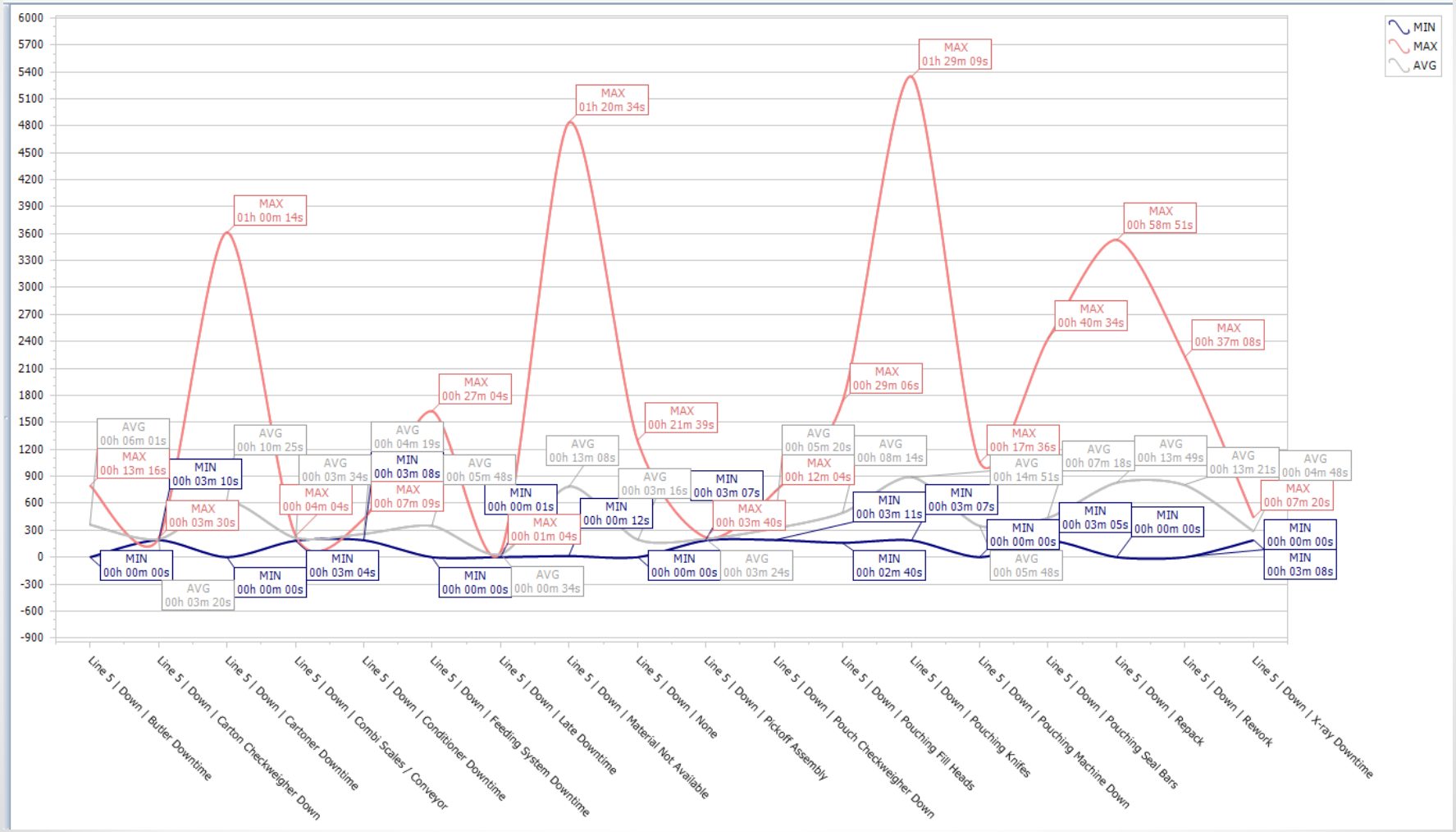
Enterprise | Location | Type

Durati... | Reaso... | MIN | MAX | AVG | Drop Column Fields Here

De...	State	Loss Reason	Grand Total				
			Duration (Sum)	Reason Count	MIN	MAX	AVG
Line 5	Down	Butler Downtime	03h 06m 34s	31	00h 00m 00s	00h 13m 16s	00h 06m 01s
		Carton Checkweigher Down	00h 06m 40s	2	00h 03m 10s	00h 03m 30s	00h 03m 20s
		Cartoner Downtime	09h 53m 38s	57	00h 00m 00s	01h 00m 14s	00h 10m 25s
		Combi Scales / Conveyor	00h 10m 42s	3	00h 03m 04s	00h 04m 04s	00h 03m 34s
		Conditioner Downtime	00h 56m 07s	13	00h 03m 08s	00h 07m 09s	00h 04m 19s
		Feeding System Downtime	04h 09m 22s	43	00h 00m 00s	00h 27m 04s	00h 05m 48s
		Late Downtime	00h 02m 48s	5	00h 00m 01s	00h 01m 04s	00h 00m 34s
		Material Not Available	02h 37m 30s	12	00h 00m 12s	01h 20m 34s	00h 13m 08s
		None	02h 10m 38s	40	00h 00m 00s	00h 21m 39s	00h 03m 16s
		Pickoff Assembly	00h 06m 47s	2	00h 03m 07s	00h 03m 40s	00h 03m 24s
		Pouch Checkweigher Down	00h 31m 59s	6	00h 03m 11s	00h 12m 04s	00h 05m 20s
		Pouching Fill Heads	00h 57m 39s	7	00h 02m 40s	00h 29m 06s	00h 08m 14s
		Pouching Knifes	05h 56m 33s	24	00h 03m 07s	01h 29m 09s	00h 14m 51s
		Pouching Machine Down	02h 36m 25s	27	00h 00m 00s	00h 17m 36s	00h 05m 48s
		Pouching Seal Bars	02h 33m 18s	21	00h 03m 05s	00h 40m 34s	00h 07m 18s
		Repack	04h 50m 07s	21	00h 00m 00s	00h 58m 51s	00h 13m 49s
		Rework	04h 27m 00s	20	00h 00m 00s	00h 37m 08s	00h 13m 21s
		X-ray Downtime	00h 33m 37s	7	00h 03m 08s	00h 07m 20s	00h 04m 48s
	Down Total		45h 47m 24s	341	00h 00m 00s	01h 29m 09s	00h 08m 03s

Graphing the Report

Click on the MIN, MAX and AVG column headings to automatically graph the results.



OEE Studio v 5.0

Version 5.x of OEE Studio supports all versions of Vorne XL device v1.x firmware.

Smart Installation

http://www.oeestudio.com/installs/release/v4/setup/InstallOEEStudio.exe

If you have questions or need assistance, please contact

Debbie Olk ~ Debbie.olk@debtechsystems.com

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

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