

OEE Reporting System - Manual Version 1.0

Prepared for PETCO Gulf by MetrX

Overview:

The Excel workbook will act as an automated and consolidated OEE reporting system that will also function as a production management and control system. The dashboards built into the workbook will allow for managerial insights as well as decision making support. By structuring the analysis for Performance, Quality, and Availability into an easy to understand visualization. The dashboards will help facilitate a better understanding of the numbers being output by the system. This is turn will essentially lead to a plethora of business intelligence insights and more informed decisions being made.

Statement of Goals:

- 1. Template to input monthly data
- 2. Macro to automate required OEE calculations
- 3. Macro to consolidate inputted data with historical data
- 4. Provide a customizable filtering mechanism to slice and analyze data in different dimensions
- 5. Visualization of data through four dashboards

Purpose:

This manual will help you understand and use the excel file named DashboardPrototypes, to execute the OEE reporting procedure.

Background:

The file has 7 different tabs.

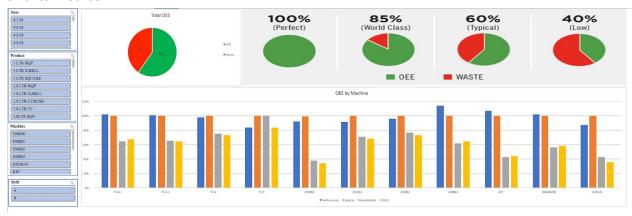
"Input Form"- This tab is where production data is inputted according to the following template.

A	В	C	D	E	F	G	н		J	K	L	M	N	0	P
Date	Shift	Product	Weight	Machine	Cavity	Opening-Shot	Closing-shot	Opening-Blow	Closing-Blow	No. Bags	QTY/Bag	WIP/MISS	Purge	Cycle Time	Running Hours

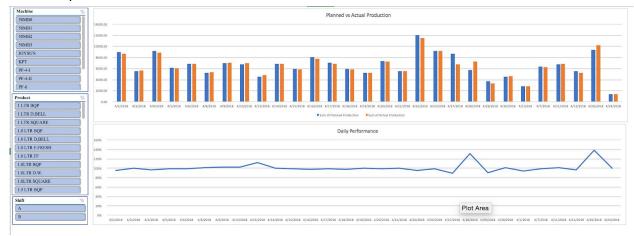
"Data"- This tab is where all data is compiled

"PivotTables" - This is where the pivot tables used to create the Dashboards are made.

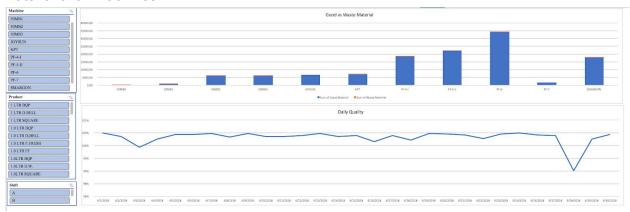
"Main Dashboard" - This tab shows the main dashboard with a high level visualization of OEE and its metrics.



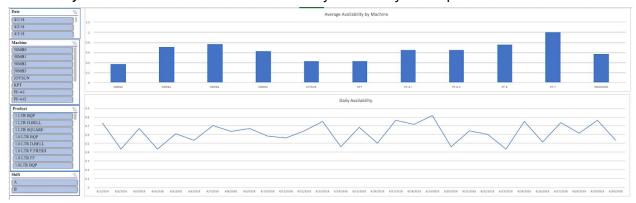
"Performance Dashboard" - This tab shows the daily performance of the plant, and the planned vs actual production of all machines.



"Quality Dashboard" - This tab shows the daily quality of the plant, and the good vs waste material of all machines.



"Availability Dashboard" - This tab shows the daily availability of the plant and the machines.



Each dashboard can be further filtered by date, product, machine, and shift.

Instructions:

Steps to operate the excel sheet.

- Open the excel file "DashboardPrototypes" and enable macros
- 2. Go to "PivotTables" tab and click on the first pivot table to the left of the screen. Search for "Pivot Table Analyze" on the ribbon.
- 3. In there click the "Refresh All" button.
- 4. Go to "Input Form" tab.
- 5. Input all the daily data for each product and machine.
- 6. Click "Get OEE!" button.



PivotTable Analyze

Connections

Design

Refresh

Refresh All

7. Calculations should appear in columns to the right

Total Shot	Total Blow	Good Bottles	Rejected Preform	Rejected Bottles	Good Material	Waste Material	Planned Production	Actual Production	Performance by Product	Quality by Product	Availability	OEE
4160	4160	4160	0	0	486.72	0.00	450.00	462.22	102.72%	100.00%	37.50%	38.52%
1796	1787	1768	9	19	91.94	1.47	676.06	446.75	66.08%	98.40%	16.67%	10.84%
6760	6760	6760	0	0	351.52	0.00	676.06	643.81	95.23%	100.00%	43.75%	41.66%
7696	7662	7614	34	48	357.86	2.60	676.06	666.26	98.55%	99.27%	47.92%	46.88%
14600	14574	14499	26	75	681.45	1.22	676.06	662.45	97.99%	99.82%	91.67%	89.66%

- 8. All the dashboards will be updated with the new data.
- 9. You can go to any Dashboard and the new data will be populated.
- 10. If you want to filter for a specific product, machine or day, just click on the option in the left hand side filters.
- 11. If you want to select two or more options inside one filter, press **control** as you click them and multiple options will be selected.

