LOIS Advanced Washer Aisle User Manual

Powerful Tools for Better Performance

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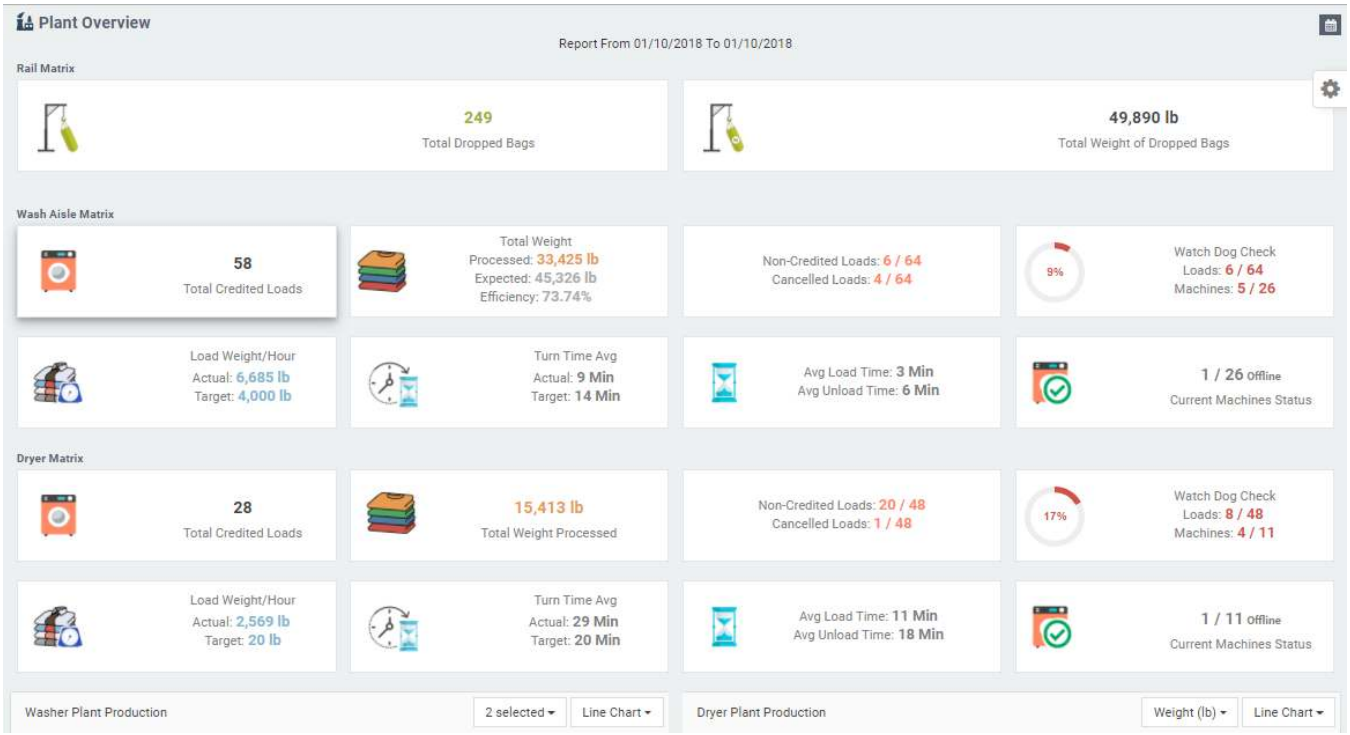
LOIS Introduction

Softrol's Laundry Operation Information System (LOIS) enables people throughout your organization to view real-time and historical data anywhere, anytime. This will help improve decision making which may ultimately result in greater profitability. Each part of your laundry managed by Softrol applications gathers information which is consolidated in LOIS. LOIS dashboards allow users to view today's production information at a glance. With drill down capability for date ranges, more extensive reports can be viewed for comparisons and past production performance.

Plant Overview

The Plant Overview provides a high-level overview of the production facility. An authorized user can quickly see information at a corporate level or for a specific plant. The information can be for a single day or a date range. The default date is the current day so a quick overview of today's data can be viewed. Each area of the plant can be quickly assessed to see if there are any areas needing immediate attention. Graphs can be shown for any area within your plant running Softrol applications such as Wash Aisle, Dryer, or Rail Systems.



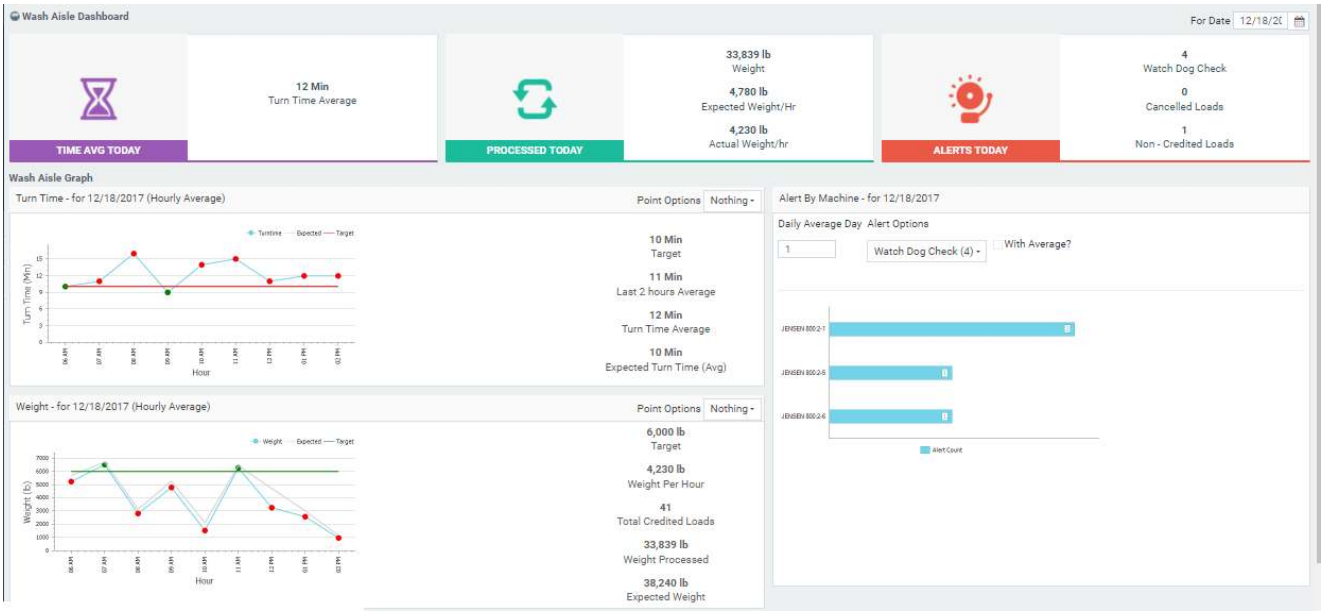
From the Plant Overview screen, a user can drill down for additional information by double clicking on a widget.

Dashboards

Are you looking for more information than is provided in the Overview? This is done by going to My Dashboard and selecting the Dashboard to get specific information on the area of the plant. Multiple Dashboards are available depending on what areas of your laundry are managed by Softrol solutions. The Dashboards provide today's current, actionable information specific to each area of your laundry. Dashboards include:

- Rail
- Wash Aisle
- Dryer
- Garment Sort
- Utility
- Productivity
- Efficiency

Sample Wash Aisle Dashboard:

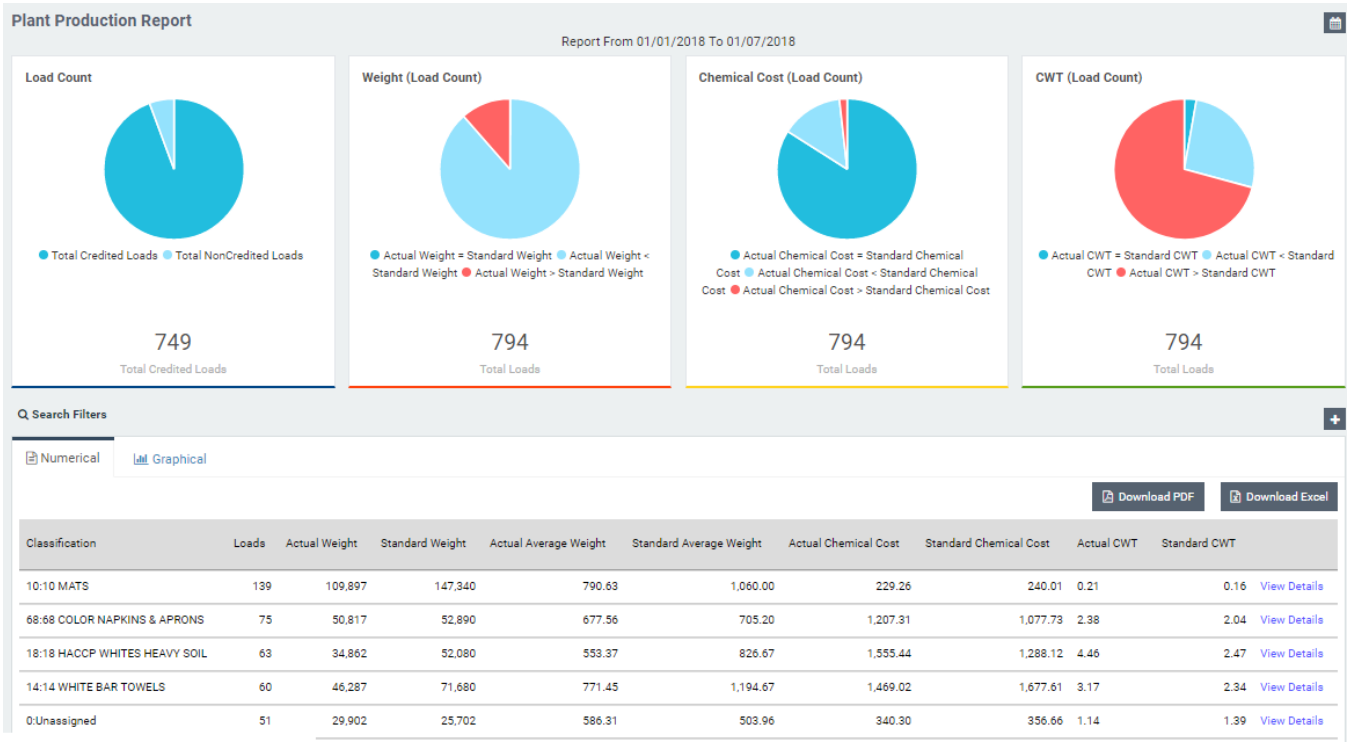


If additional details are needed, the user can go to specific reports.

Reports

Detailed information is available through LOIS Reports for each area of your plant run with a Softrol application. Data collected throughout Softrol solutions is used to provide detailed reports for each area of your facility. These are organized in such a way to answer questions regarding cost, efficiency, production totals and diagnostics. The reports can be seen in graphical or table form. Reports can be highly customized by each user 'on the fly' using various filters and selection criteria they specify. This allows them to see information they need when they need it without having to ask someone else for it. Many can be downloaded in PDF format or to an Excel spreadsheet for further analysis.

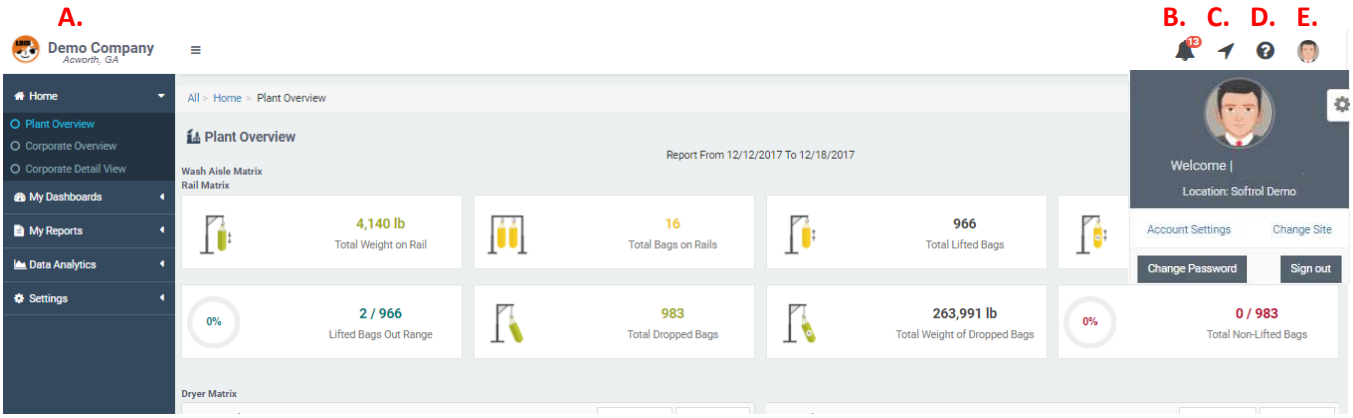
Sample Plant Production Report:



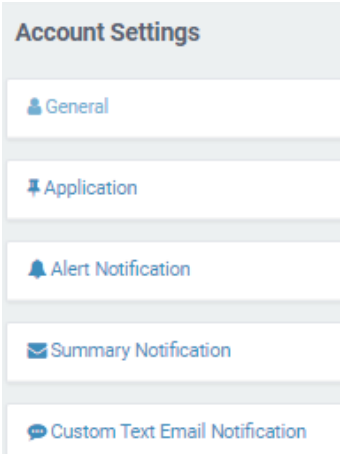
LOIS Navigation

Once your user ID and password are entered in LOIS, you come to your personal Home page.

- **A.** This identifies which plant location is being viewed
- **B.** Any notifications are indicated here
- **C.** Allows you to change location if you are authorized to view multiple facilities
- **D.** Takes you to LOIS Help
- **E.** Takes you to your Profile and Account Settings



Account Settings



Account Settings allows each user to customize LOIS.

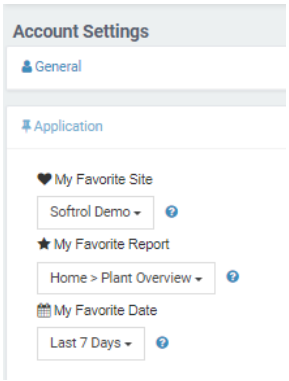
Manage User Name, Email and Password

Set user default Favorites

Set parameters, identify recipients and the reports they are to receive for Alert Notifications.

Define data range, frequency and recipient(s)

Define when custom email notifications should be sent and who will receive them

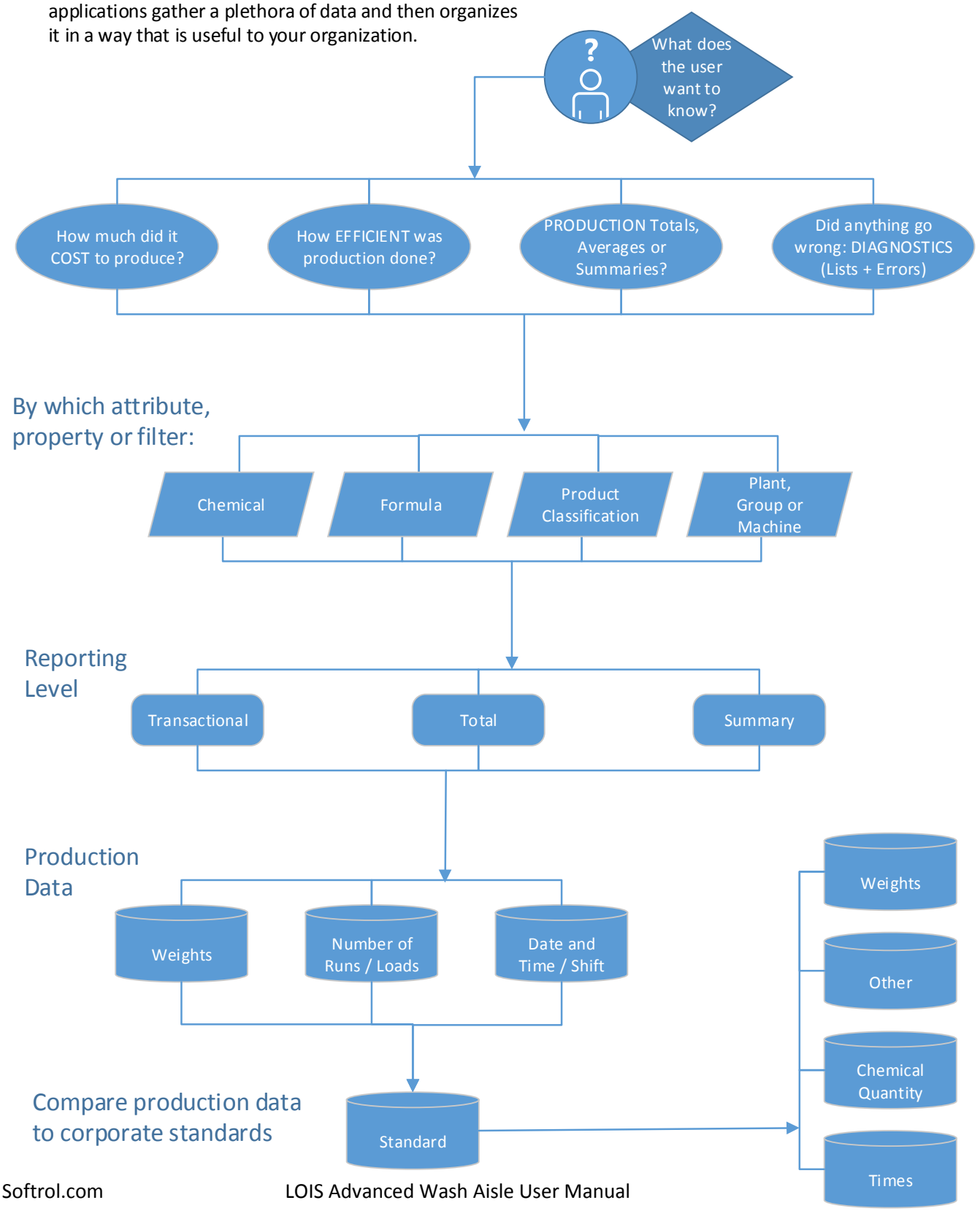


The Application tab allows the user to define their Favorites

“My Favorite” are the defaults you set which LOIS remembers to personalize the Plant Location, Report or Dashboard, and Date(s) used on your Home page.

LOIS Data

Any report is only as good as the data behind it. Softrol applications gather a plethora of data and then organizes it in a way that is useful to your organization.



Washer Load Data

Softrol's Advanced Wash Aisle (AWA) collects the following data that is accessed through LOIS.

Date: The date the load was started

Time: The time the Load or Event started

Group / Machine: Machine group (Jensen, Milner, etc.) and the specific machine within the group

Formula: Number and name of the formula being run for this load

Classification: Product being processed

Credited Weight: Weight credited to your production totals. The automated rail system provides this value or the operator manually enters the weight.

Total Time: Amount of time it took to load, wash and unload the machine

Standard Total Time: The expected time this Load should take including standard load and unload times based on corporate goals

Load Time: Actual time it took to put the product into the washer for this Load

Standard Load Time: Expected time it should take to load product into the washer based on corporate goals

Unload Time: Actual time it took to remove product from the washer after the Load was complete

Standard Unload Time: Expected time it should take to unload the washer once the load is complete

This information is shown in the Load Summary Numerical Report:

	Date	Time	Group / Machine	Formula	Classification	Credited Weight	Total Time	Standard Total Time	Load Time	Standard Load Time	Unload Time	Standard Unload Time
+	Wed 12/13	10:56 PM	2/3	100 : 01 COL IND SHT	01 COL IND SHIRTS	348	56:09	40:25	2:36	5:00	16:54	5:00
+	Tue 12/12	12:19 PM	2/2	102 : 02 COL IND PNTS	02 COL IND PANTS	358	41:10	37:25	2:30	5:00	3:31	5:00
+	Wed 12/13	6:25 PM	2/8	74 : 34 BBP HOSP/SURG	34 BBP SURGICAL ITEMS	372	80:26	55:55	4:24	5:00	22:45	5:00

If more information is desired, the user can drill down for any particular load by clicking the + located to the left of date. The following table will then appear with additional information:

	Date	Time	Group / Machine	Formula	Classification	Credited Weight	Total Time	Standard Total Time	Load Time	Standard Load Time	Unload Time	Standard Unload Time
−	Wed 12/13	8:42 PM	2/1	109 : 17 DENIM PNT	17 COTTON GARMENTS	916	89:02	37:55	3:32	5:00	52:23	5:00

Date	Time	Group / Machine	Event	Formula	Credited Weight	Clock Time	Standard Time	Formula Satisfy Time	Chemical Satisfy Time	Pause Time	Watchdog Time
Wed 12/13/2017	7:16 PM	2/1	Start Load	17 DENIM PNT		3:32	5:00				
	7:49 PM		Compl Load	17 DENIM PNT		33:07	27:55	10:44	2:21	0:26	
	8:42 PM		Unload End	17 DENIM PNT	916	52:23	5:00				
	8:42 PM		▶	Formula Total	916	89:02	37:55	10:44	2:21	0:26	

Details

Event: Three primary events constitute a formula: load, complete, and unload. If non-credited loads are selected in the criteria section, results will include incomplete statuses.

Formula Satisfy Time: Time in minutes and seconds accumulated while the formula waited for machine events to complete i.e. time to fill or drain washer with water. Formula Satisfy Time includes Chemical Satisfy Time.

Chemical Satisfy Time: Time in minutes and seconds the machine received chemical injections

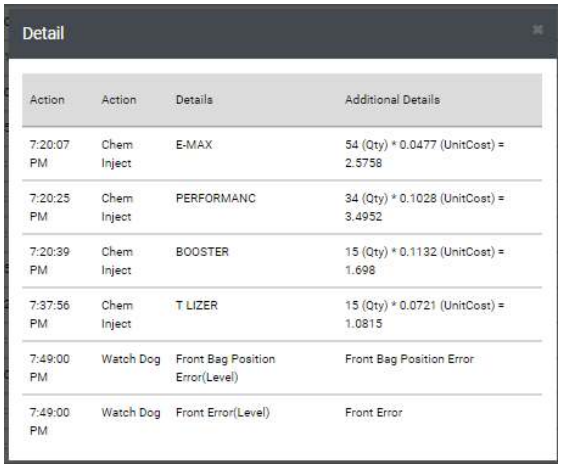
Pause Time: Time in minutes and seconds the machine waited in pause mode while operator completed a task that enabled the formula to proceed i.e. add dye.

Watchdog Time: Elapsed time in minutes and seconds while the machine waited for the operator to respond to an error condition.

Flags: The system flags formulas based on selections in the Washer Settings as determined by plant management. The following flags may be observed:

- Canceled Loads – Loads canceled by the operator.
- Loads with watchdog time – Loads that had alerts that went unattended longer than a specified amount of time.
- Run time flag – Loads that complete above or under a specified run time.
- Load time flag – Loads where the load time exceeded or fell short of the standard load time.
- Unload time flag – Loads where the unload time exceeded or fell short of the standard unload time.

Additional formula event information can be obtained by selecting [Details].



Action	Action	Details	Additional Details
7:20:07 PM	Chem Inject	E-MAX	54 (Qty) * 0.0477 (UnitCost) = 2.5758
7:20:25 PM	Chem Inject	PERFORMANC	34 (Qty) * 0.1028 (UnitCost) = 3.4952
7:20:39 PM	Chem Inject	BOOSTER	15 (Qty) * 0.1132 (UnitCost) = 1.698
7:37:56 PM	Chem Inject	T LIZER	15 (Qty) * 0.0721 (UnitCost) = 1.0815
7:49:00 PM	Watch Dog	Front Bag Position Error(Level)	Front Bag Position Error
7:49:00 PM	Watch Dog	Front Error(Level)	Front Error

This collection of data is used to create the following LOIS Advanced Wash Aisle Reports.

Wash Aisle Reports

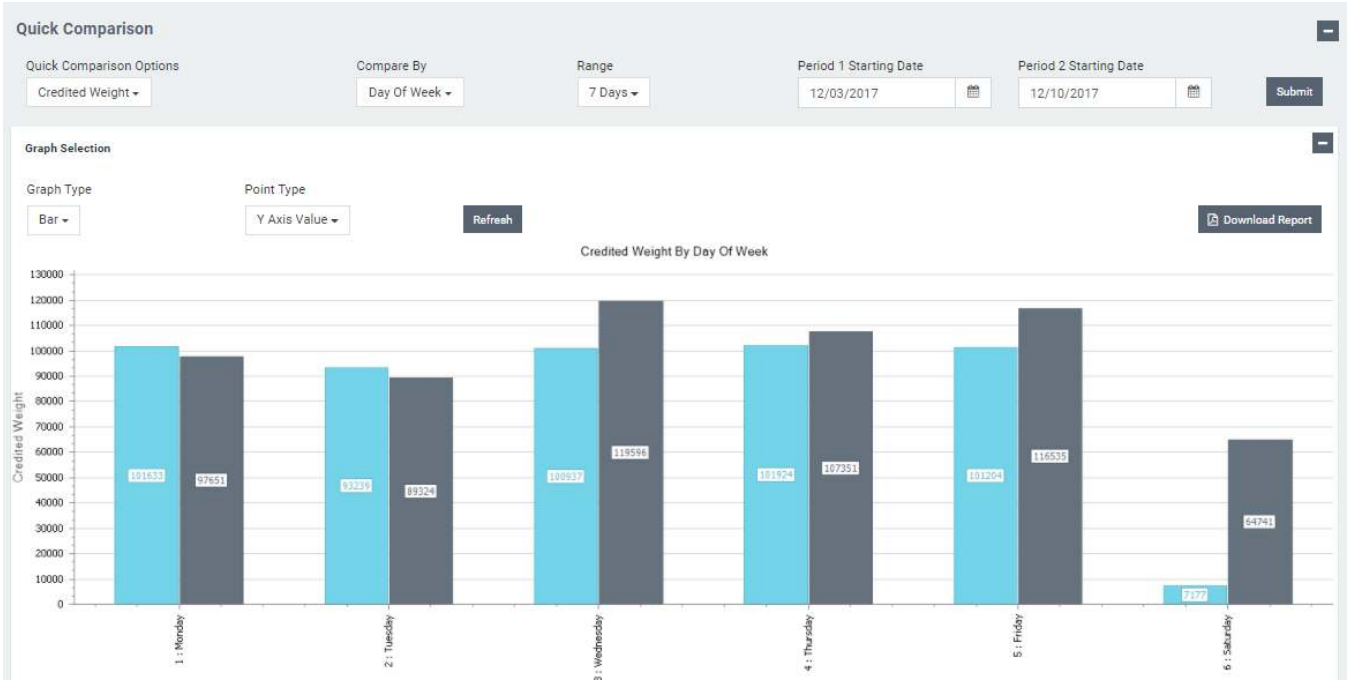
There are multiple ways to get and display data with Advance Wash Aisle (AWA) reports. Although most AWA reports provide multiple tiers of information, they typically fit into one of five information categories: Totals, Cost, Efficiency, Diagnostic or Configuration/Informational. There are also reports providing configuration and informational pages.

Note: Depending on your plant and its equipment, you may not have access to all of the reports listed below.

Wash Aisle Totals Reports

I. **Quick Comparison Report** focuses on a single production indicator and can be customized based on the following options:

Here is a sample Quick Comparison report based upon the above criteria:



II. **Plant Production Report** provides an overview of your washer costs along with your production totals. Comparing your Actual and Standard CWT (cost per hundredweight) reveals significant differences in the actual versus standard load weights.

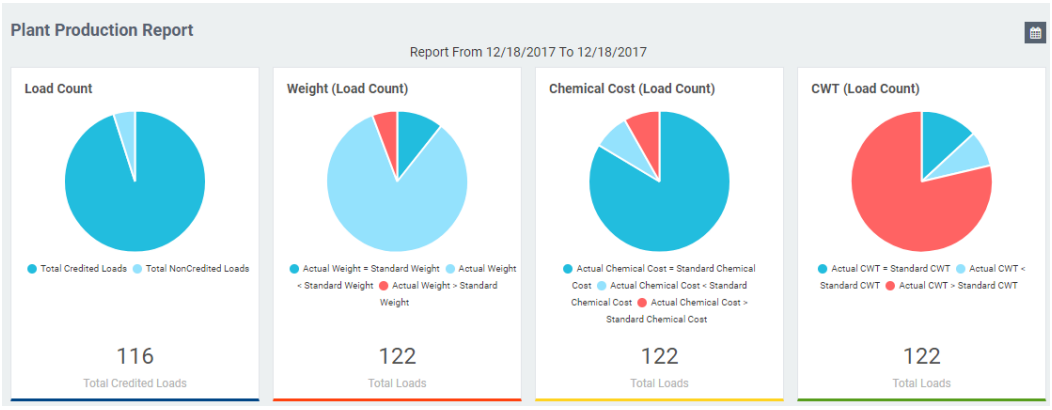
Report Criteria:

- *Plant:* Selecting "Plant" from the "Include Machines By" drop-down indicates the resulting dataset includes information from all of the wash aisle machines.
- *Group:* When adding the machines to your system, you designated machine groups such as "Tunnel Washers" or "Ellis 900." You can filter your data on any group or collection of groups.
- *Machine:* Selecting "Machine" enables you to select one or more machines regardless of their group.
- *Shift:* View data by any combination of shifts operating at the plant.
- *Classification:* Selecting “Classification” in the "Show By" dropdown, data will be grouped by the previously designated product grouping or classification (e.g. mats, shop towels, bar towels).

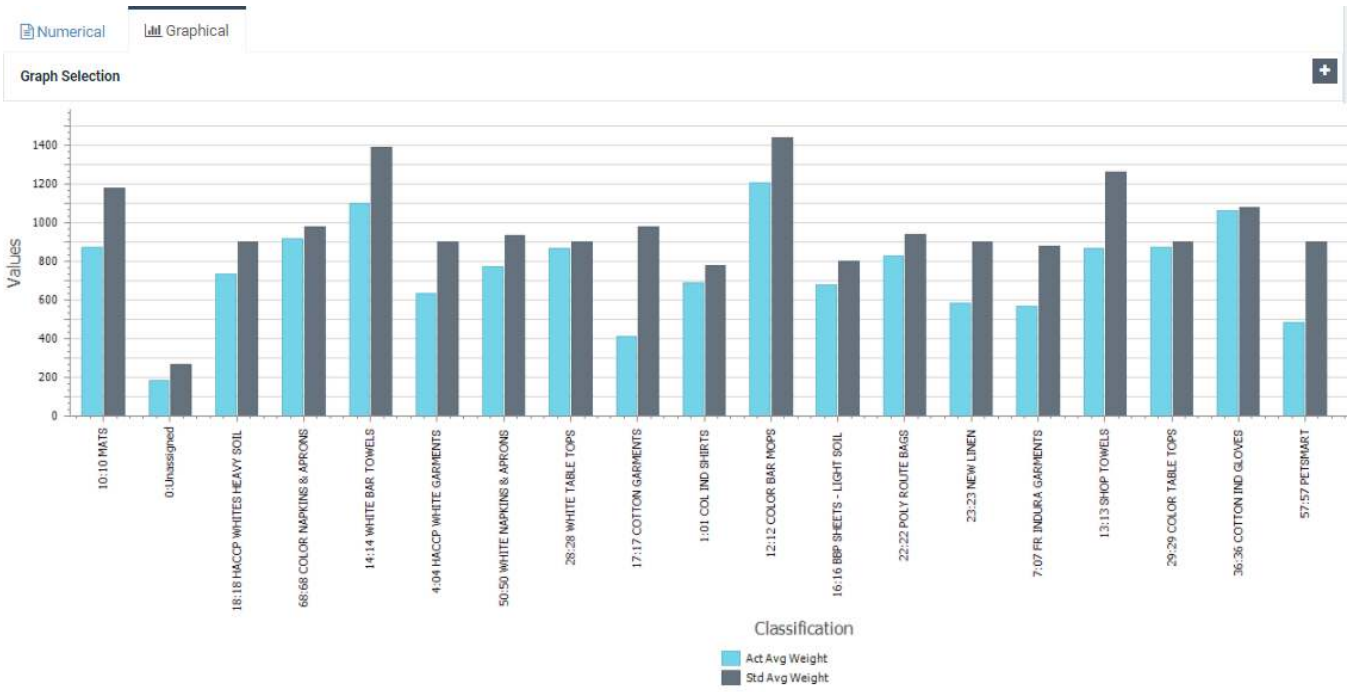
Result Set: Your data is displayed either in a chart (graphical) or a table (numerical) format. The user can determine which of the following data will be displayed.

- *Loads:* Number of loads completed for that classification or formula.
- *Act Weight (Actual Weight):* Weight of load based on weights received from the rail or sling system.
- *Act Avg Weight (Actual Average Weight):* Average weight based on real values received from the rail or sling system.
- *Std Weight (Standard Weight):* Combined weights based on standard load weights for various machines.
- *Std Avg Weight (Standard Average Weight):* Average weight based on standard weights for various machines.
- *Act Chem Cost (Actual Chemical Cost):* Amount spent on chemicals to produce the clean product based on values from the washer or chemical systems.
- *Std Chem Cost (Standard Chemical Cost):* Cost for chemicals based on a predetermined value.
- *Act CWT (Actual Cost per Hundredweight):* Cost to produce 100 pounds of finished product.
- *Std CWT (Standard Cost Per Hundredweight):* Cost to produce 100 pounds of finished product based on a predetermined standard.

Sample Plant Production Graph:



:



Sample Plant Production Numerical Report:

Classification	Loads	Actual Weight	Standard Weight	Actual Average Weight	Standard Average Weight	Actual Chemical Cost	Standard Chemical Cost	Actual CWT	Standard CWT	
10:10 MATS	24	20,958	28,320	873.25	1,180.00	27.21	29.68	0.13	0.10	View Details
68:68 COLOR NAPKINS & APRONS	11	10,093	10,780	917.55	980.00	189.04	189.04	1.87	1.75	View Details
14:14 WHITE BAR TOWELS	9	9,923	12,500	1,102.56	1,388.89	219.43	246.68	2.21	1.97	View Details

Clicking on [View Details] will bring up the **Washer Load Summary Report** for that Classification.

	Date	Time	Group / Machine	Formula	Classification	Credited Weight	Total Time	Standard Total Time	Load Time	Standard Load Time	Unload Time	Standard Unload Time
+	Mon 12/18	6:49 AM	2/1	85 : 68 COLOR NAPKINS	68 COLOR NAPKINS & APRONS	873	87:47	54:10	3:24	5:00	31:20	5:00
+	Mon 12/18	8:59 AM	2/1	45 : 68 COLOR NAPKIN	68 COLOR NAPKINS & APRONS	930	129:16	54:10	3:32	5:00	69:26	5:00
+	Mon 12/18	3:52 PM	2/1	49 : 68 COLOR APRONS	68 COLOR NAPKINS & APRONS	886	140:10	54:10	69:16	5:00	16:02	5:00
+	Mon 12/18	7:22 AM	2/2	85 : 68 COLOR NAPKINS	68 COLOR NAPKINS & APRONS	980	110:33	54:10	4:09	5:00	55:01	5:00
+	Mon 12/18	11:16 AM	2/3	85 : 68 COLOR NAPKINS	68 COLOR NAPKINS & APRONS	878	65:20	54:10	2:59	5:00	8:39	5:00

III. **Washer Load Summary Report** provides detailed information about the loads ran for selected dates. The report provides all of the important totals in one place. The report contains information about:

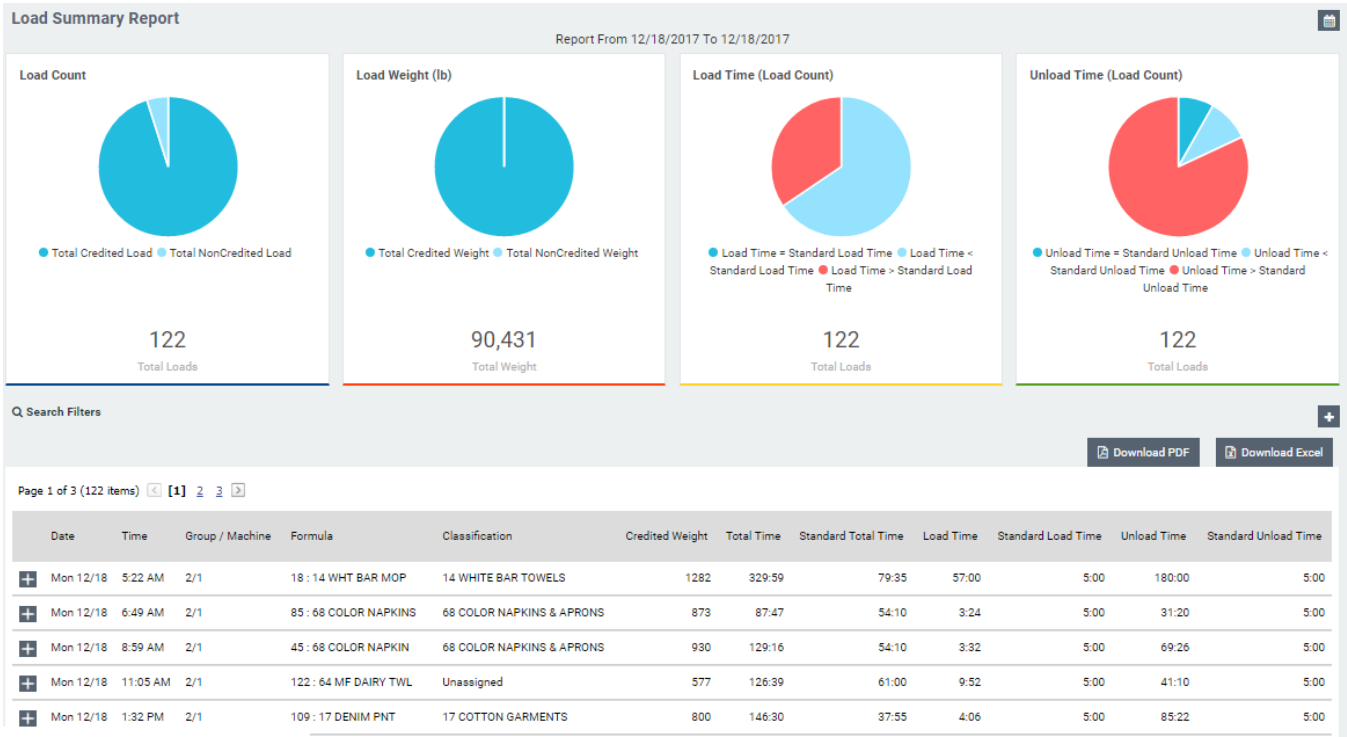
- Credited weight
- Actual and standard times for loading and unloading
- Actual and standard load time
- Actual and standard unload time

Report Criteria:

- *Report Dates:* The report uses the date to determine which data to display
- *Include Machines:* Get formula histories for a single or a combination of machines using the Include Machines drop-down.
- *View by Shift or Time:* Fine-tune the data for a particular shift or time of day.
- *Show Only Credited Loads:* Check the Show Only Credited Loads checkbox to exclude formulas that didn't complete.

Result Set:

- *Credited Weight:* Weight credited to plant production totals. The automated rail system provides this value or the operator manually enters the weight.
- *Std. (Standard) Total Time:* Amount of time expected for the load to complete including the standard times for load and unloading.
- *Load Time:* Actual amount of time used to load the machine.
- *Std. (Standard) Load Time:* Expected amount of time used to load the machine.
- *Unload Time:* Actual amount of time used to unload the machine.
- *Std. (Standard) Unload Time:* Expected amount of time used to unload the machine.



Date	Time	Group / Machine	Formula	Classification	Credited Weight	Total Time	Standard Total Time	Load Time	Standard Load Time	Unload Time	Standard Unload Time
Mon 12/18	5:22 AM	2/1	18 : 14 WHT BAR MOP	14 WHITE BAR TOWELS	1282	329:59	79:35	57:00	5:00	180:00	5:00
Mon 12/18	6:49 AM	2/1	85 : 68 COLOR NAPKINS	68 COLOR NAPKINS & APRONS	873	87:47	54:10	3:24	5:00	31:20	5:00
Mon 12/18	8:59 AM	2/1	45 : 68 COLOR NAPKIN	68 COLOR NAPKINS & APRONS	930	129:16	54:10	3:32	5:00	69:26	5:00
Mon 12/18	11:05 AM	2/1	122 : 64 MF DAIRY TWL	Unassigned	577	126:39	61:00	9:52	5:00	41:10	5:00
Mon 12/18	1:32 PM	2/1	109 : 17 DENIM PNT	17 COTTON GARMENTS	800	146:30	37:55	4:06	5:00	85:22	5:00

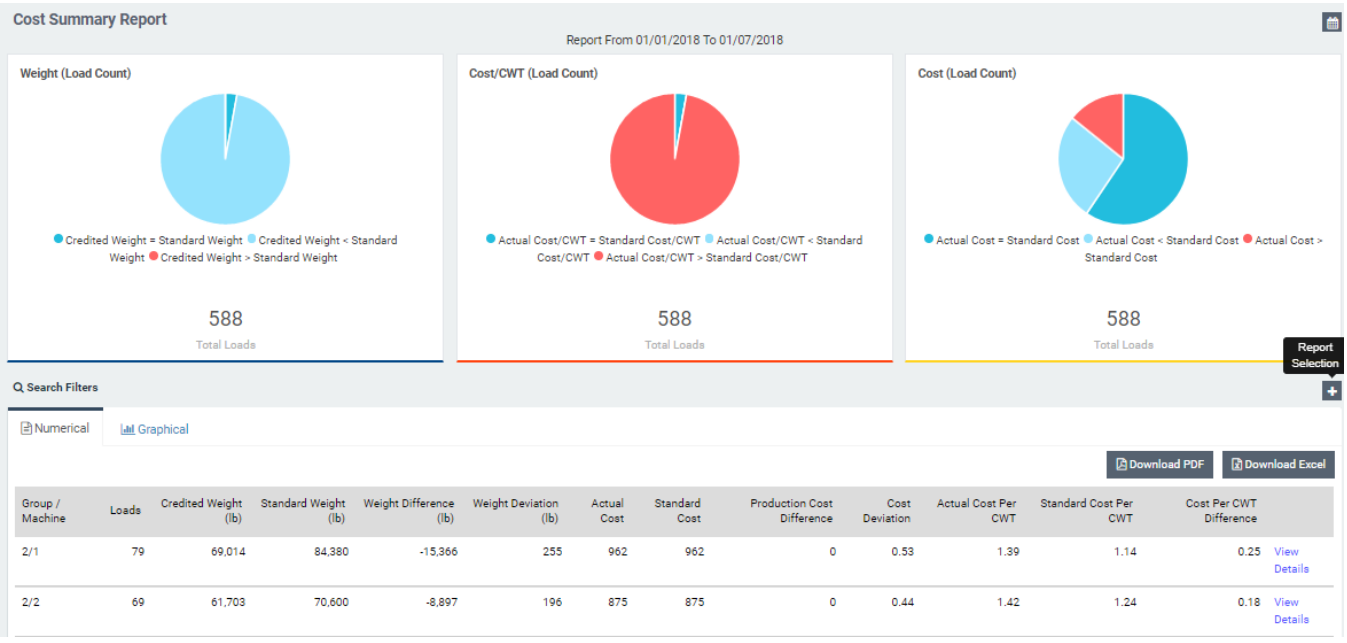
I. **Cost Summary Report** contrasts your actual weights and costs against the standard weights and costs.

Report Criteria:

- *Report Dates:* The report uses the date to determine which data to display
- *Include Machines:* Get weight and cost summaries for a single or a combination of machines using the Include Machines drop-down.
- *View by Shift or Time:* Fine-tune the data for a particular shift or time of day.
- *Show Only Credited Loads:* Check the Show Only Credited Loads checkbox to exclude formulas that didn't complete.
- *Show by:* Formula, classification or chemical

Table Results

- *Loads:* Number of loads run on a particular washer
- *Credited Weight:* Sum of the actual product weight
- *Standard Weight:* Expected weight for the formula multiplied by the number of loads
- *Weight Difference:* Difference between the credited and standard weight
- *Weight Deviation:* Standard deviation of the weight for all bags meeting the selection criteria
- *Actual Cost:* Actual chemical cost to produce the product
- *Standard Cost:* Expected chemical cost to produce the finished product
- *Production Cost Difference:* Difference between the actual and standard chemical costs
- *Cost Deviation:* Standard deviation of the chemical costs for loads meeting selection criteria
- *CWT:* Actual chemical cost per hundredweight
- *Standard CWT:* Expected cost per hundredweight
- *CWT Difference:* Difference between the actual and standard chemical cost per hundredweight



Selecting [View Details] will take the user to the Cost History Report

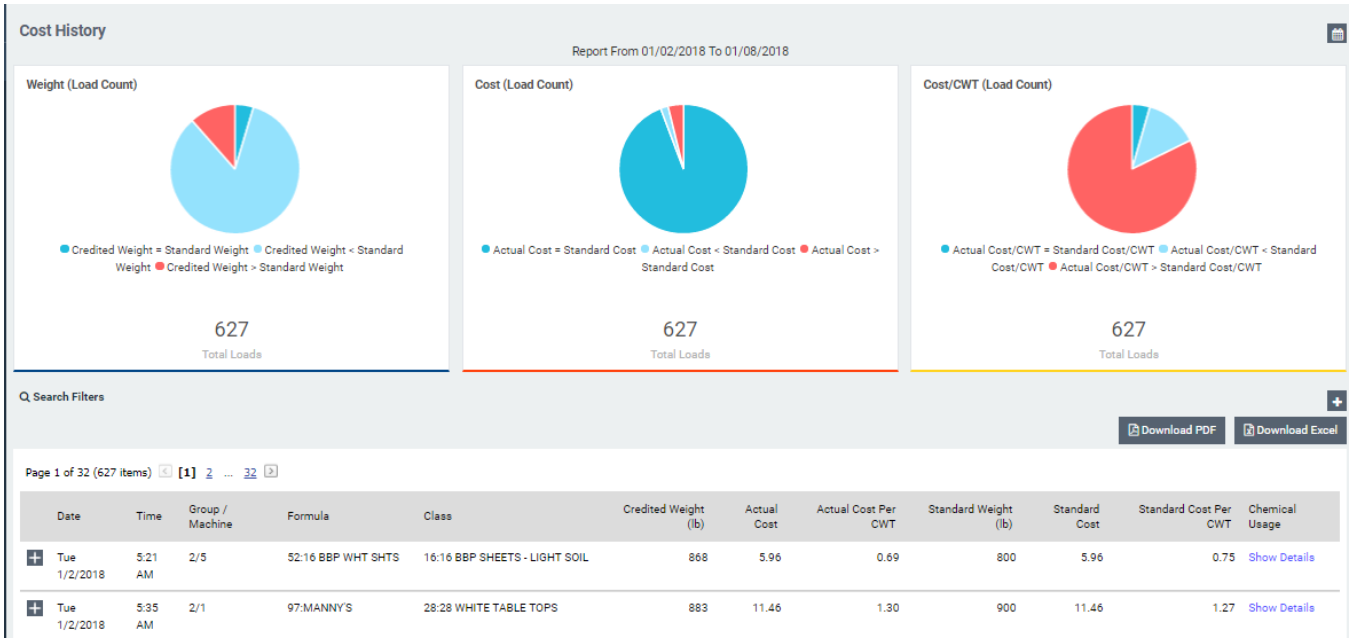
II. **Cost History Report** is a highly detailed report providing a comparison between actual and expected costs per hundredweight on a load-by-load basis. By selecting the "Show" option for any record, you can get a breakdown of events, chemicals used, and associated costs.

Report Criteria:

- *Report Dates:* The report uses the date to determine which data to display
- *Include Machines:* Machines can be included by plant, group, or specific machine
- *View by Shift or Time:* Fine-tune the data for a particular shift or time of day.
- *Show Only Credited Loads:* Check the Show Only Credited Loads checkbox to exclude formulas that didn't complete.
- *Show by:* Formula or classification

Result Set:

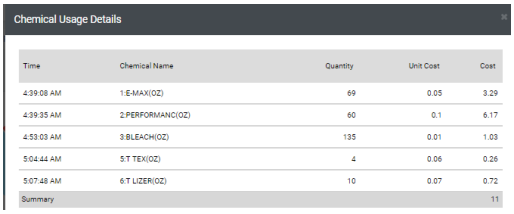
- *Date:* The date the load was started
- *Time:* The clock time the load was started
- *Group/Machine:* Machine group (Jensen, Milner, etc.) and the specific machine within the group
- *Formula:* Number and name of the formula being run for this load
- *Class:* Classification of product being processed
- *Credited Weight:* Weight credited to your production totals
- *Actual Cost:* Actual cost of chemicals to produce the load
- *Actual Cost per CWT:* Chemical cost to produce 100 pounds of finished product
- *Standard Weight:* The expected weight
- *Standard Cost:* The expected chemical cost to produce the load
- *Standard CWT:* The expected cost per hundredweight



Show Detail:

- *Time:* The clock time for the chemical introduction
- *Chemical Name:* The specific name of the chemical injected

- *Quantity:* The liquid measurement for the injected chemical (typically in ounces)
- *Unit Cost:* The cost per unit injected (typically per-ounce)
- *Cost:* The total cost for the chemical



III. **Proof of Delivery Report** provides a highly detailed view of your formulas chemical deliveries, and it contrasts the actual quantity and cost to the expected quantity and costs. The report flags loads that fall outside the acceptable tolerance and highlights the faulty delivery in the details page.

The report allows the user to drill down to get details on the chemical usage and to see other formula specifics by linking to the Washer Formula History Report.

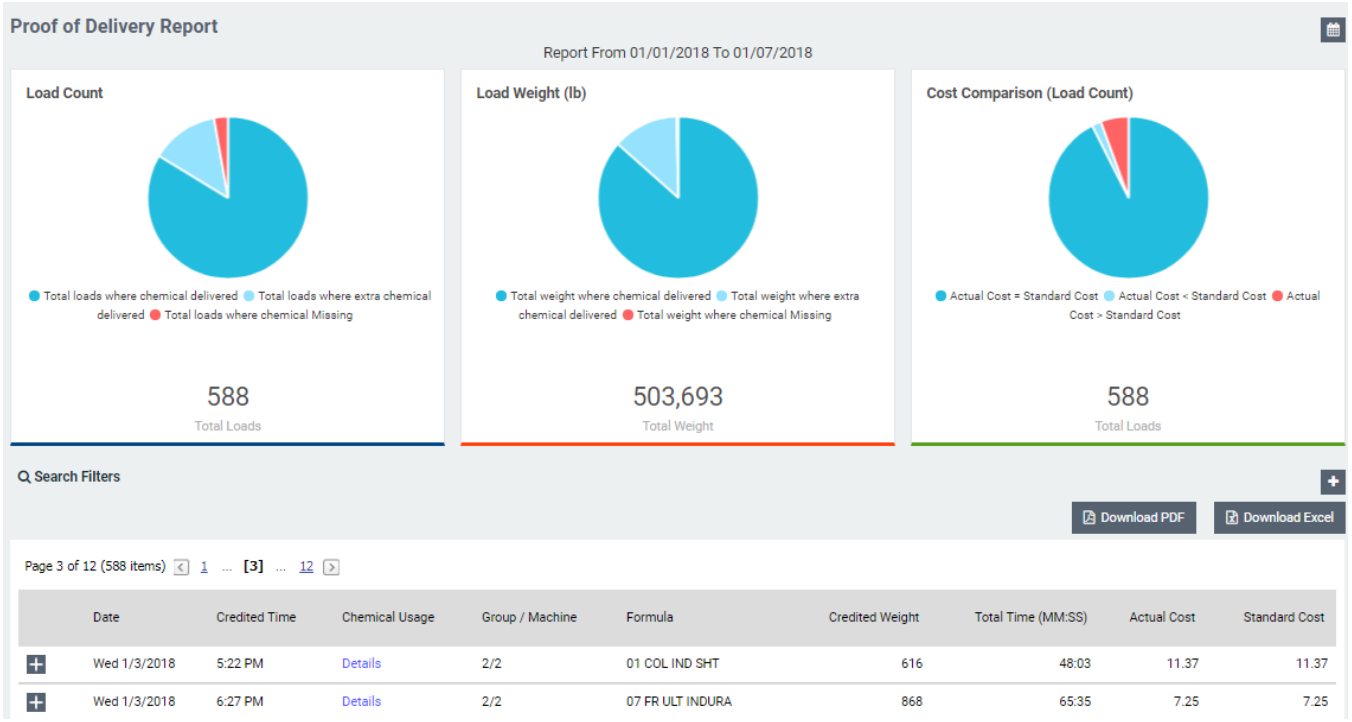
Report Criteria:

- *Report Dates:* The report uses the date to determine which data to display
- *Include Machines:* Specific machine(s) to include
- *View by Shift or Time:* Fine-tune the data for a particular shift or time of day.
- *Show Only Credited Loads:* Check the Show Only Credited Loads checkbox to exclude formulas that didn't complete.
- *Show by:* Formula or classification

Result Set:

- *Credited Time:* The finishing time for the load
- *Chemical Usage:* The details link displays a list of the chemicals used. The pop-up table includes the chemical name, quantity planned, quantity delivered, unit cost, planned cost, and the actual cost for each chemical used in the formula. Any chemicals that failed to deliver appear in red.
- *Group/Mach (Group/Machine):* The group number with machine number
- *Formula:* The formula used. Clicking the link takes you to the Formula History Report for that formula
- *Credited Weight:* The weight credited to the washed product based on that formula usage event.
- *Total Time:* The time for the formula to run
- *Actual Cost:* The chemical cost for the formula run

- *Standard Cost:* The expected cost of the formula run.



	Date	Credited Time	Chemical Usage	Group / Machine	Formula	Credited Weight	Total Time (MM:SS)	Actual Cost	Standard Cost
+	Wed 1/3/2018	5:22 PM	Details	2/2	01 COL IND SHT	616	48:03	11.37	11.37
+	Wed 1/3/2018	6:27 PM	Details	2/2	07 FR ULT INDURA	868	65:35	7.25	7.25

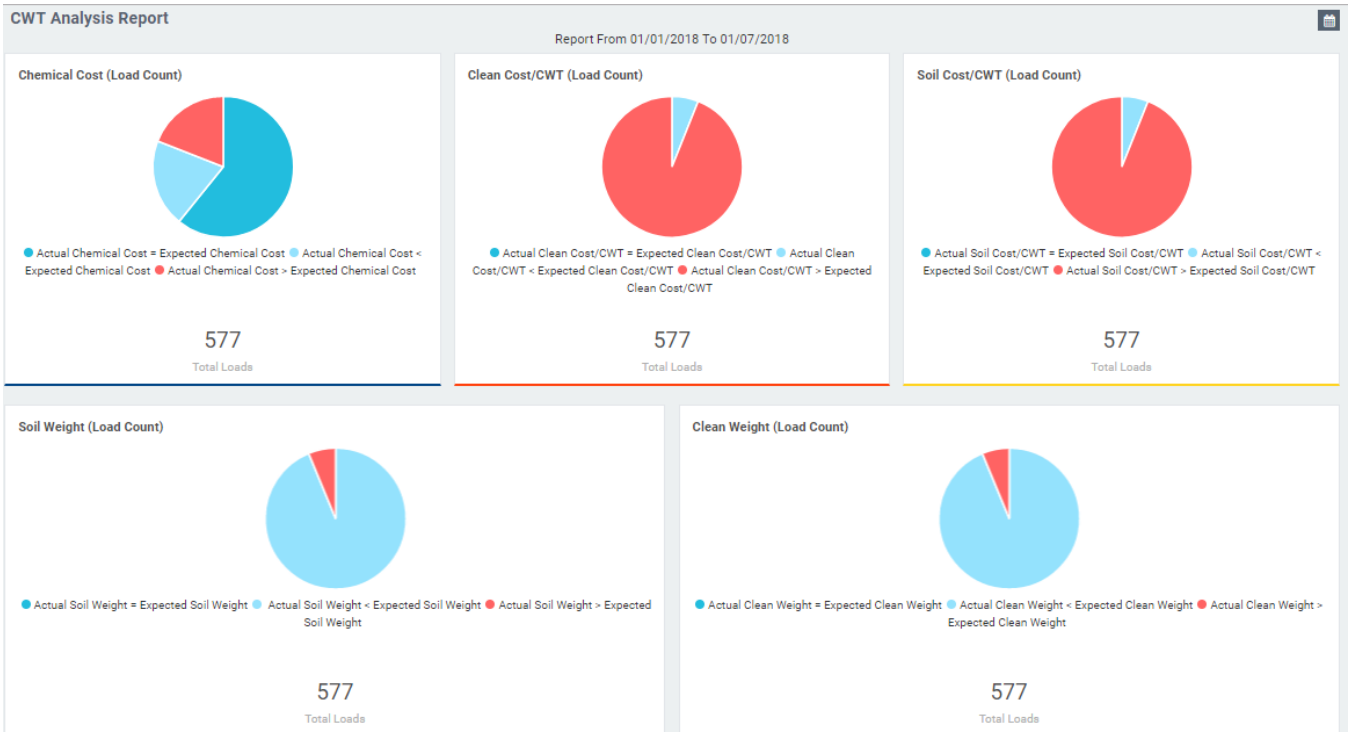
IV. **CWT Analysis Report** allows plants to compare expected and actual weights and costs for soil and clean products. The graphical tab provides visual comparisons of any of the actual and expected values.

Report Criteria:

- *Report Dates:* The report uses the date to determine which data to display
- *Include Machines:* Machines can be included by plant, group, or specific machine
- *View by Shift or Time:* Fine-tune the data for a particular shift or time of day.
- *Show Only Credited Loads:* Check the Show Only Credited Loads checkbox to exclude formulas that didn't complete.
- *Show by:* Formula or classification

Result Set:

- *Classification:* Product being processed
- *Loads:* Number of loads completed of a particular item over specified date(s) or shift(s)
- *Exp. Soil Weight:* Total expected weight of soiled product based on standard weights goals
- *Exp. Clean Weight:* Total expected weight of clean product based on standard weights goals
- *Act. Soil Weight:* Actual weight of soiled product
- *Act. Clean Weight*: Actual weight of product once cleaned
- *Exp. Chem Cost*: Expected chemical cost based on predetermined values for items being processed
- *Act. Chem Cost:* Amount spent on chemicals to produce clean product
- *Exp. Cost/CWT Soil:* Expected cost per hundredweight soiled product
- *Exp. Clean:* Expected cost per hundredweight clean product
- *Act. Cost/CWT Soil:* Actual cost per hundredweight soil product
- *Act Clean:*



Selecting [View Details] takes the user to the Cost Summary Report for the specified Classification.

Classification	Loads	Weight				Chemical Cost		Cost/CWT Expected				Cost/CWT Actual				
		Exp. Soil Weight (lb)	Exp. Clean Weight (lb)	Act. Soil Weight (lb)	Act. Clean Weight (lb)	Exp. Chem Cost	Act. Chem Cost	Exp. Soil	Exp. Clean	Act. Soil	Act. Clean	Exp. Soil	Exp. Clean	Act. Soil	Act. Clean	
10 MATS	118	139,240	139,240	111,424	111,424	145.92	142.21	0.10	0.10	0.13	0.13	0.10	0.10	0.13	0.13	View Details

I. **Washer Efficiency Summary Report** provides machine efficiencies on a load-by-load basis. The report provides efficiencies for:

- Process and process times
- Loading times
- Unload times
- Turn time
- Weight
- Overall machine effectiveness ratings

The report allows you to choose the table columns to fit your reporting needs. Once saved, the system remembers your choices when you return. The graphical tab allows you to specify which efficiency you would like to see. Further analysis can be completed by downloading the data to an Excel spreadsheet.

Report Criteria:

- *Report Dates:* The report uses the date to determine which data to display
- *Include Machines:* Get summaries for a single or a combination of machines using the Include Machines drop-down
- *Show by:* Formula or classification

Table Results:

- *Date:* Date the load was started
- *Time:* The time the load or event started
- *Grp/Machine:* Machine group (Jensen, Milner, etc.) and the specific machine within the group
- *Formula:* Number and name of the formula being run for this load
- *Classification:* Product being processed
- *Process Time:* Actual clock time for the formula to complete
- *Excess Load Time:* Amount of time loading took over the standard load time
- *Weight Efficiency (%):* Load weight as compared to the expected load weight
- *Excess Process Time:* Amount the actual formula run time exceeds the standard formula run time
- *Process Efficiency (%):* Formula run time compared to the standard formula run time
- *Loading Efficiency (%):* Load time compared to the standard load time
- *Load Time:* Time used to load the machine
- *Excess Unload:* Amount of time used to unload the machine that exceeds the standard unload time
- *Unloading Efficiency (%):* Unload time compared to the standard unload time
- *Unload Time:* Time used to unload the machine
- *Excess Turn Time:* Time that the sum of the load and unload time exceeds the sum of the standard load and unload times
- *Turn Efficiency (%):* Load and unload times compared to the standard load and unload times
- *Turn Time:* Total amount of time to unload and load the machine
- *Excess Machine Time:* Amount of time the sum of the formula run, load, and unload times exceeds the sum of the standard formula run, load, and unload times
- *Machine Efficiency (%):* Formula run, unload, and load times compared to the standard formula run, unload, and load times
- *Total Weight:* Load weight

- *Expected Weight:* Standard weights for the formula
- *Overall Efficiency (%):* Percentage based on the weight and machine efficiency
- *Machine Effectiveness:* Calculated using the total of the run, load, and unload clock times as compared to the expected run times with the weight efficiency.

Sample Washer Efficiency Summary Report graphic:

Sample Washer Efficiency Summary Report table based on user selection criteria:

Date	Time	Grp / Mach	Formula	Classification	Process Efficiency (%)	Loading Efficiency (%)	Unloading Efficiency (%)	Machine Efficiency (%)	Weight Efficiency (%)	Overall Efficiency (%)
Mon 1/8/2018	7:38 AM	2/1	119:50 CHECK NAP/APR	50:50 WHITE NAPKINS & APRONS	96.44	118.11	60.36	93.52	128	119.44
Mon 1/8/2018	10:07 AM	2/1	72:18 HACCP VHS WHT	18:18 HACCP WHITES HEAVY SOIL	112.58	132.74	52.17	104.68	95	99.80
Mon 1/8/2018	1:01 PM	2/1	105:07 FR ULT INDURA	7:07 FR INDURA GARMENTS	94.26	110.29	9.39	45.17	93	42.09

If the [+] is selected in the above table, detailed information will appear:

Date	Time	Grp / Mach	Formula	Classification	Process Efficiency (%)	Loading Efficiency (%)	Unloading Efficiency (%)	Machine Efficiency (%)	Weight Efficiency (%)	Overall Efficiency (%)
Mon 1/8/2018	7:38 AM	2/1	119:50 CHECK NAP/APR	50:50 WHITE NAPKINS & APRONS	96.44	118.11	60.36	93.52	128	119.44

Date	Time	Group / Machine	Event	Formula	Credited Weight	Clock Time	Standard Time	Formula Satisfy Time	Chemical Satisfy Time	Pause Time	Watchdog Time
Mon 1/8/2018	6:31 AM	2/1	Start Load	50 CHECK NAP/APR		4:14	5:00				
	7:29 AM		Compl Load	50 CHECK NAP/APR		58:30	56:25	12:26	4:36	0:25	
	7:38 AM		Unload End	50 CHECK NAP/APR	894	8:17	5:00				
	7:38 AM		▶	Formula Total	894	71:01	66:25	12:26	4:36	0:25	

Action Details

Additional information can be seen by selecting [Action Details]:

Action Details

Time	Action	Details	Additional Details
6:31:45 AM	Chem Inject	E-MAX	19 (Qty) * 0.0477 (UnitCost) = 0.9063
6:35:16 AM	Chem Inject	E-MAX	73 (Qty) * 0.0477 (UnitCost) = 3.4821
6:35:38 AM	Chem Inject	PERFORMANC	60 (Qty) * 0.1028 (UnitCost) = 6.168
6:50:17 AM	Chem Inject	PERFORMANC	26 (Qty) * 0.1028 (UnitCost) = 2.6728
6:59:12 AM	Chem Inject	BLEACH	159 (Qty) * 0.0076 (UnitCost) = 1.2084
7:12:32 AM	Chem Inject	T TEX	9 (Qty) * 0.0642 (UnitCost) = 0.5778
7:15:39 AM	Chem Inject	T LIZER	12 (Qty) * 0.0721 (UnitCost) = 0.8652
7:29:00 AM	Watch Dog	Front Bag Position Error(Level)	Front Bag Position Error
7:29:00 AM	Watch Dog	Front Error(Level)	Front Error

II. **Washer Overall Efficiency Report** provides machine efficiencies based on the average load for the machine during the reporting period. The system provides these machine level efficiencies for:

- Process time
- Load time
- Unload time
- Turn time
- Weight
- Machine effectiveness
- Overall machine efficiency ratings

The report allows you to limit the table columns to fit your current needs, and the report saves these settings for when you return to the report. The graphical tab allows you to specify which efficiency you would like to see.

Report Criteria:

- *Report Dates:* The report uses the date to determine which data to display
- *Include Machines:* Get summaries for a single or a combination of machines using the Include Machines drop-down.
- *Show by:* Formula or classification

Table Results:

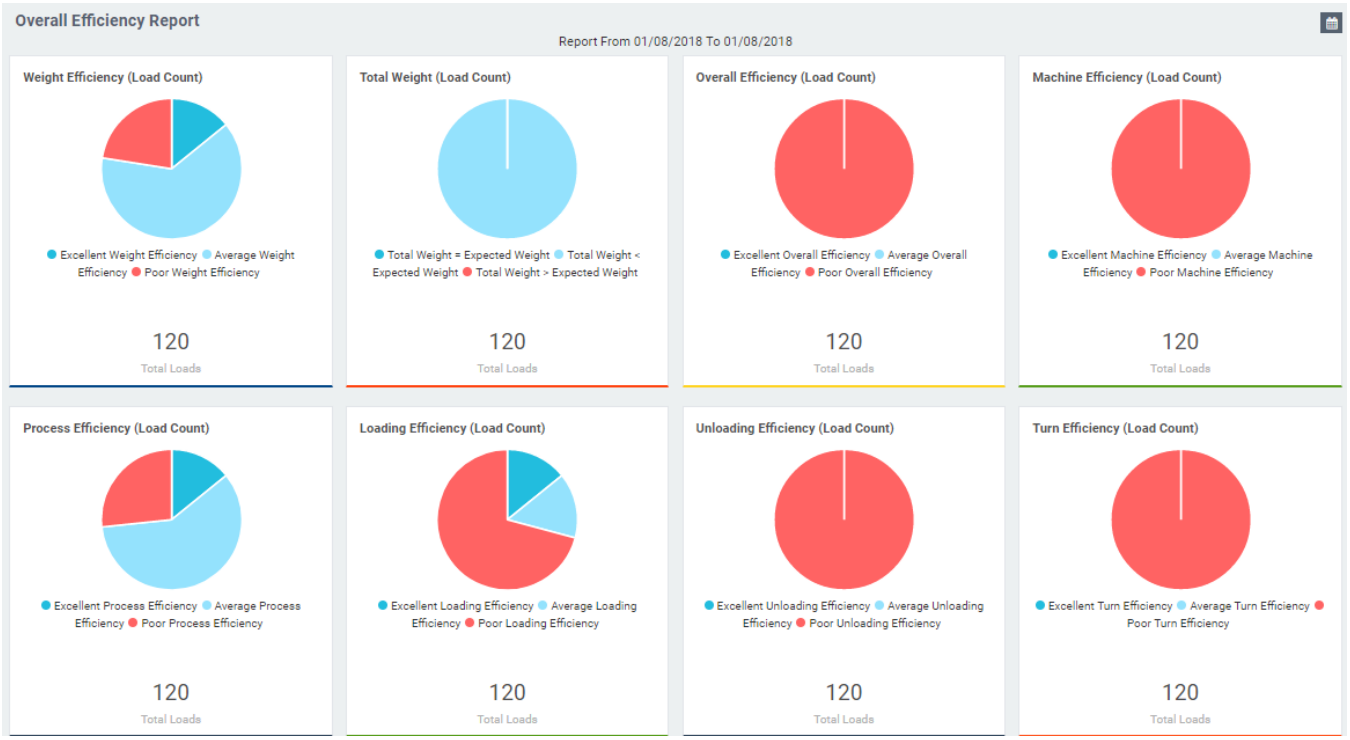
- *Excess Process Time:* Difference when the sum of all formula clock times exceeds the sum of standard formula run times for the reporting period

- *Process Efficiency:* Sum of actual clock formula runtimes compared to the sum of standard times
- *Average Process Time:* Average time for all of the formula runtimes for the reporting period
- *Excess Load Time:* Amount of time greater than the standard load times for all loads during the reporting period
- *Loading Efficiency (%):* Sum of all load times compared to the sum of the standard load times for the reporting period
- *Average Load Time:* Sum of all load times divided by the number of credited loads for the reporting period
- *Excess Turn Time:* Time the total load and unload times exceeds the sum of the standard load and unload times for the reporting period

- *Turn Efficiency (%):* Sum of all load and unload times compared to the sum of the standard load and unload times for the reporting period
- *Average Turn Time:* Sum of all the load and unload times divided by the number of the credited loads for the reporting period
- *Excess Machine Time:* Amount of time the total formula run, load, and unload times exceeds the total standard formula run, load, and unload times for the reporting period
- *Machine Efficiency (%):* Total formula run, unload, and load times compared to the total standard formula run, unload, and load times for the reporting period
- *Average Cycle Time:* Sum of the formula run, load, and unload times divided by the number of credited loads for the reporting period
- *Total Weight:* Sum of the weight for all of the credited loads for the reporting period
- *Expected Weight:* Sum of standard weights for all of the credited loads for the reporting period
- *Weight Efficiency (%):* Actual total weight as compared to the expected weight for the reporting period
- *Average Weight:* Total weight divided by the number of credited loads for the reporting period

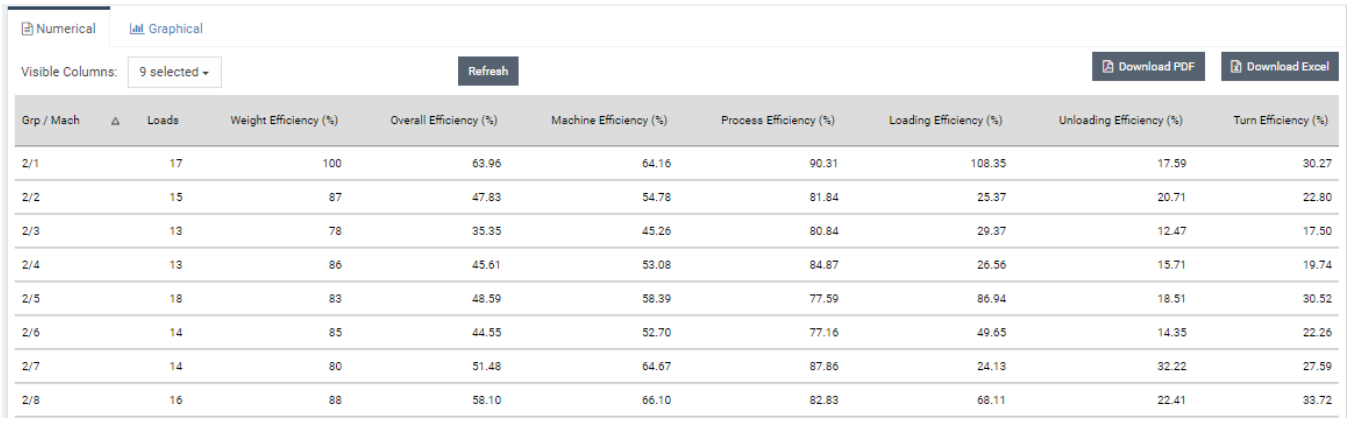
- *Overall Efficiency:* Percentage based on the weight and machine efficiencies for the reporting period
- *Machine Effectiveness:* Calculated using the total run, load, and unload clock times as compared to the expected run times with the weight efficiency for the reporting period

Sample Washer Overall Efficiency Report graph:



Sample Overall Efficiency graph by machine:

Sample Numerical Table for overall efficiency:



Numerical | Graphical

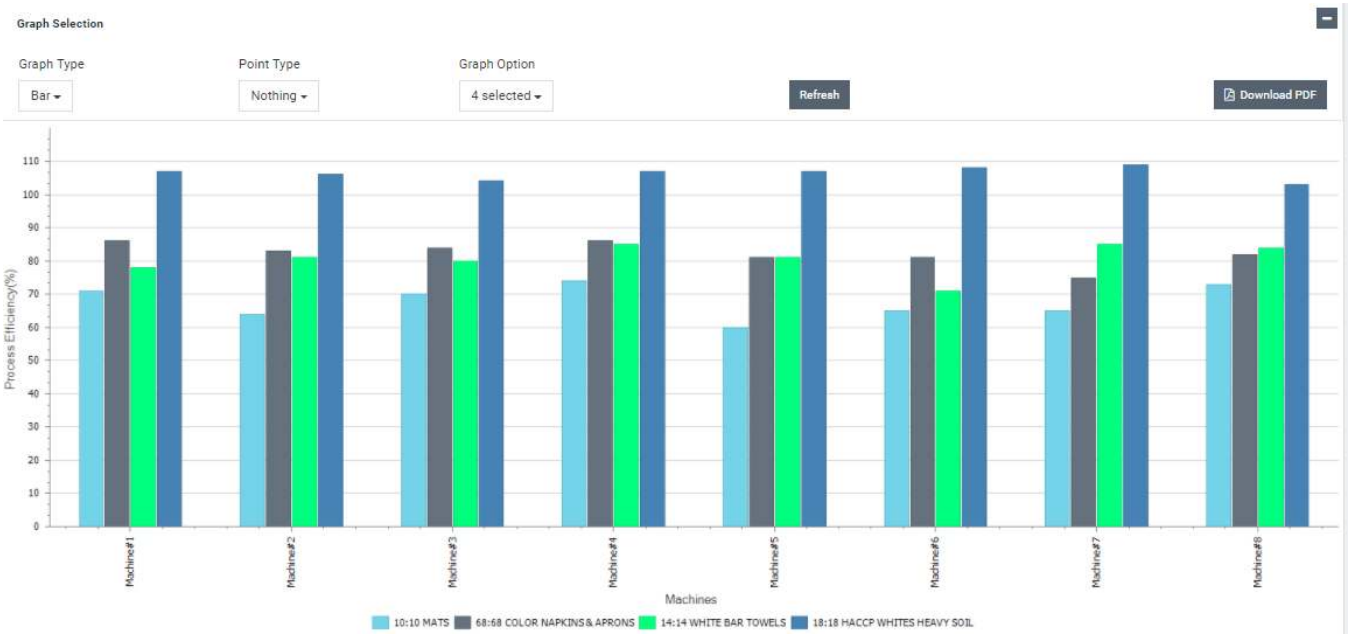
Visible Columns: 9 selected | Refresh | Download PDF | Download Excel

Grp / Mach	Loads	Weight Efficiency (%)	Overall Efficiency (%)	Machine Efficiency (%)	Process Efficiency (%)	Loading Efficiency (%)	Unloading Efficiency (%)	Turn Efficiency (%)
2/1	17	100	63.96	64.16	90.31	108.35	17.59	30.27
2/2	15	87	47.83	54.78	81.84	25.37	20.71	22.80
2/3	13	78	35.35	45.26	80.84	29.37	12.47	17.50
2/4	13	86	45.61	53.08	84.87	26.56	15.71	19.74
2/5	18	83	48.59	58.39	77.59	86.94	18.51	30.52
2/6	14	85	44.55	52.70	77.16	49.65	14.35	22.26
2/7	14	80	51.48	64.67	87.86	24.13	32.22	27.59
2/8	16	88	58.10	66.10	82.83	68.11	22.41	33.72

III. **Washer Efficiency Comparison Report** provides a machine-by-machine comparison of the efficiencies for a formula or classification. Using the Numerical tab, you set the tolerance so efficiencies below a specified percent get highlighted in red. The graphical tab allows you to specify which efficiency you would like to see.

Report Selection Criteria:

- *Date:* Specify date or date range of the data to be displayed
- *Efficiency Type:* The user can select what efficiency metric to display (Process, Load, Unload or Turn)
- *Grp:* Specify which group of machines to include
- *View by:* View data by any combination of shifts or time of day
- *Show by:* The user can select to view by Formula(s) or Classification(s)



Sample Washer Efficiency Comparison Numerical Report:

Highlight all records with efficiency less than 90 % Refresh Download PDF Download Excel

Classification (Sorted by num of runs)	Machine#1	Machine#2	Machine#3	Machine#4	Machine#5	Machine#6	Machine#7	Machine#8	Average	Standard	Efficiency(%)	
68:68 COLOR NAPKINS & APRONS	55:57	55:18	57:31	54:58	55:30	53:25	53:13	59:09	55:36	44:10	79	View Details
14:14 WHITE BAR TOWELS	90:51	91:08	84:28	84:36	90:18	85:57	85:53	87:42	87:33	69:35	79	View Details
18:18 HACCP WHITES HEAVY SOIL	52:32	53:52	55:09	54:02	56:03	59:24	53:29	54:11	55:01	56:40	103	View Details

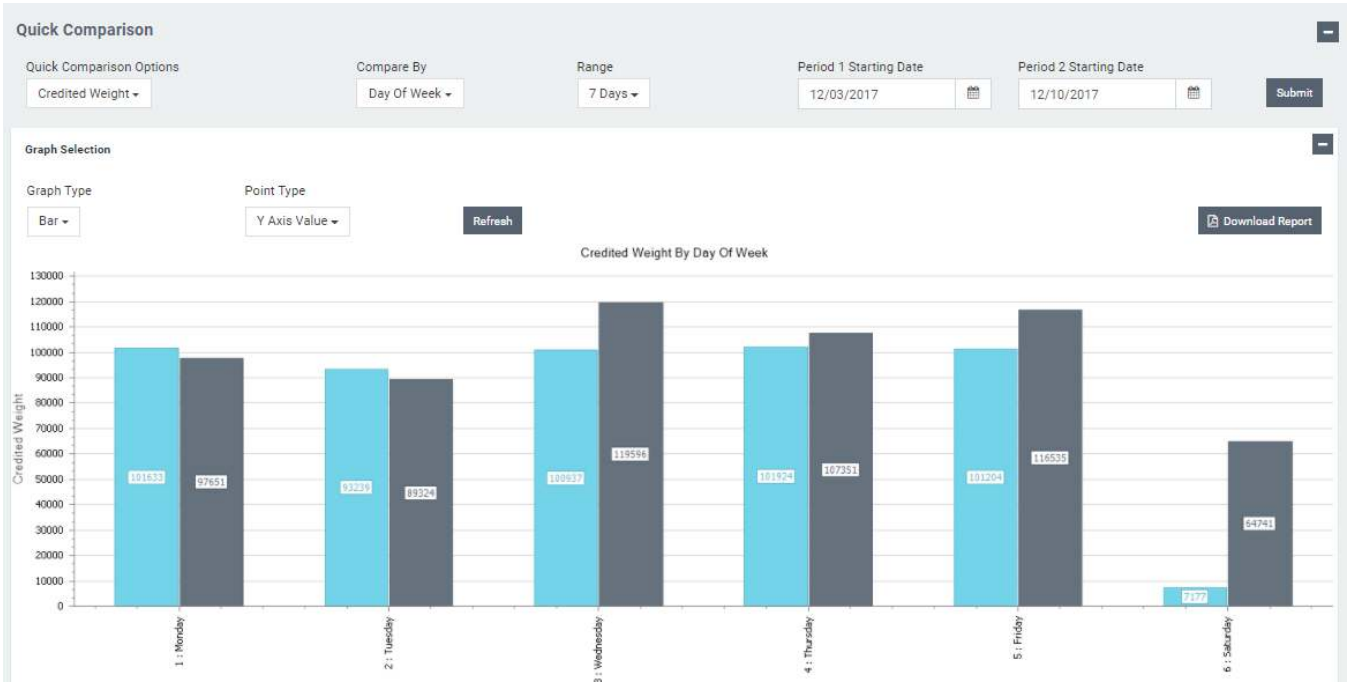
Data can be downloaded to an Excel spreadsheet for further analysis. By selecting [View Details], the user will be taken to the Washer Efficiency Summary Report.

I. **Quick Comparison Report** allows you to compare key indicators for two different dates or date ranges. You can graph data for chemical cost, credited loads or weight, CWT, non-credited chemical cost, loads, or weights. You can further refine your data by group, machine, formula, classification, month, week, day, or hour.

Graphed Results:

- *Chemical Cost:* Get a breakdown of chemical cost per day.
- *Credited Loads:* Number of credited loads per day
- *Credited Weight:* Total credited weight per day
- *CWT (Cost per hundredweight):* Daily average cost per hundredweight
- *Non-credited Chemical Costs:* Daily total cost for non-credited chemical use
- *Non-credited Loads:* Number of loads uncredited per day
- *Non-credited Weights:* Total weight of uncredited per day

Here is a sample Quick Comparison report based upon the above criteria:



II. **Washer Average Performance Comparison** contrasts the key performance indicators for two different time frames. The compared values include:

- Weights
- Formula run times
- Load times
- Turn times
- Unload times

The Numeric tab provides two tables for comparing the two date ranges; while the Graphical tab provides charts comparing the number of loads, average time, and efficiency for each key indicator.

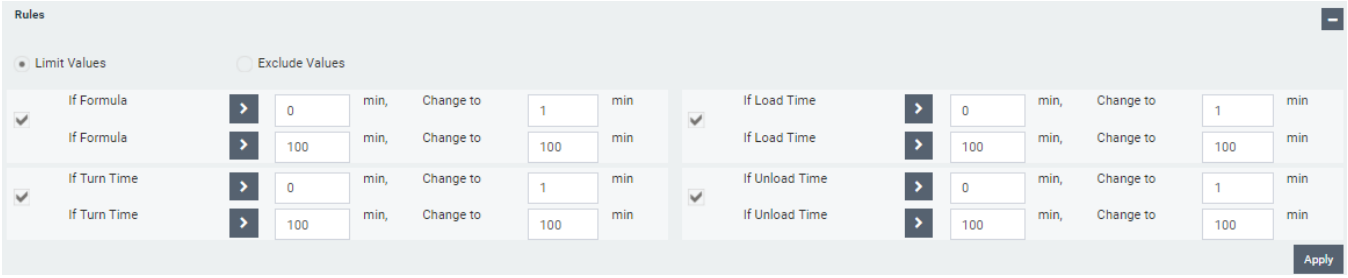
Report Criteria

- *Duration:* Choose a duration of one day up to one year. Choose "Other" to input a number of your choice
- *Period 1 and 2 Starting dates:* Use the calendar controls to choose your starting date for each period. Avoid starting dates that cause the two periods to overlap
- *Use Clean Weights:* Select this option to use the product clean weights over the soil weight
- *Machine Types:* Limit your returned data to selected machine types (default "All")

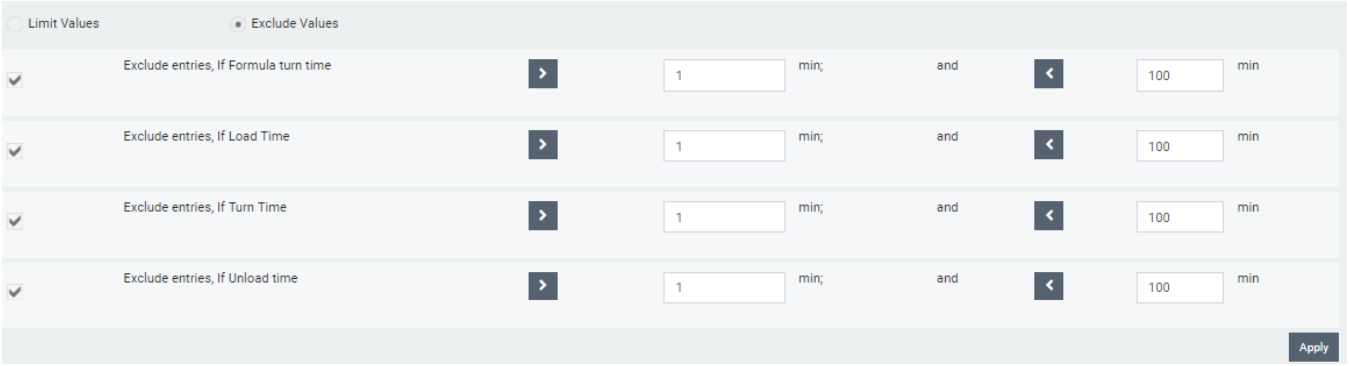
Rules

Outliers, or data outside the acceptable range, can have a huge impact on your final numbers. To prevent these outliers from influencing your report data, you can use the Rules section to either exclude or limit these values. If you choose to not limit or exclude values, select an option and uncheck the four options.

- *Limit Values:* When you select the Limit Values option, you can limit values that exceed or fall short of the expected values for Formula Run Time, Load Time, Turn Time, and Unload Times. Limiting values allows you to include the data without adversely affecting your totals.



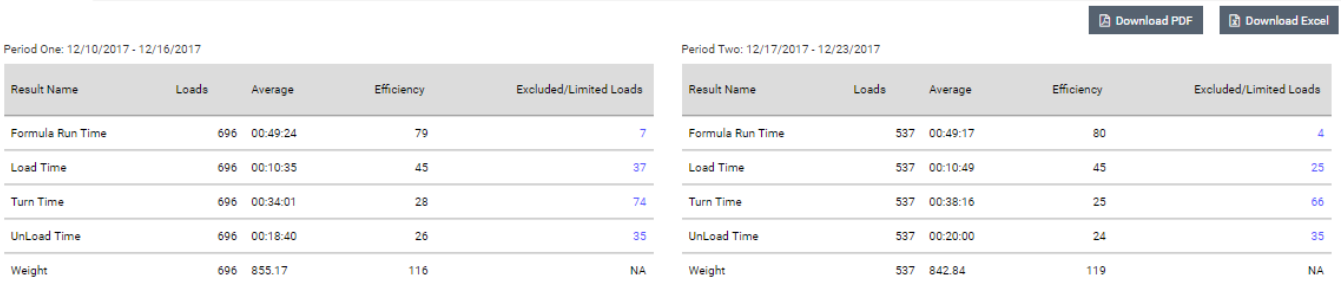
- *Exclude Values:* When you select the Exclude Values option, you can exclude those values that exceed or fall short of the expected values for Formula Run Time, Load Time, Turn Time, and Unload Times. Excluding values keeps outliers from affecting your totals, but those weights do not appear in your report.



Result Set: Numerical

The resulting tables contain five rows each. The table on the left contains values for Period One, and the table on the right contains values for Period Two. Each table contains values for The Formula Run Time, Load Time, Turn Time, Unload Time, Weight.

- *Loads:* Number of loads completed for the period
- *Average:* Average time in hours: minutes: seconds
- *Efficiency:* Efficiency in percentage form as compared to the standard
- *Limited or Excluded Loads:* The last column of data represents the number of limited or excluded loads. For values above zero, the number serves as a link to the Summary Load Report where you can get detailed information on the limited or excluded loads.



Result Set: Graphical

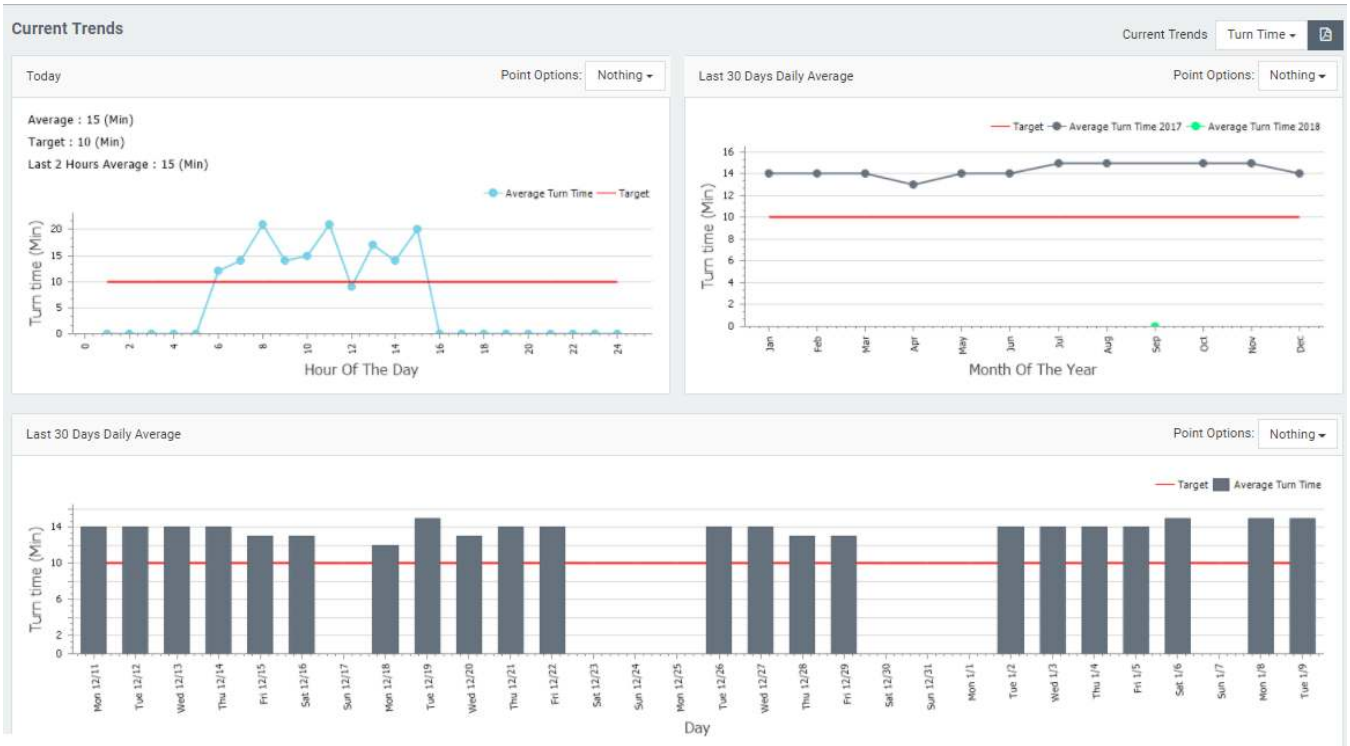
Your time and rules selections results in five sets of three graphs. These bar graphs give you a side-by-side comparison of the two duration's loads, average time (in minutes) and efficiency percentage. To choose one of the five key indicators use the View drop-down in the Graph Selection.

III. **Current Trends Report** is a graphical display of either your turn times, weights, chemical costs, or monthly results. The report provides data based on the current date, the current month, and the previous thirty days. Alongside the actual totals, you can see how those values compare to your goals.

Report Criteria

There are five options in the Current Trends Dropdown:

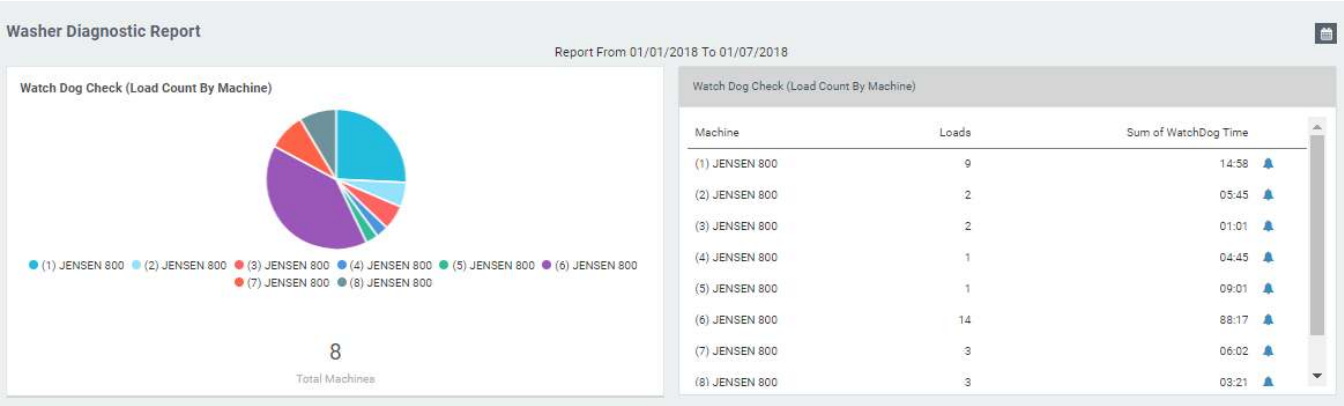
- *Turn Time:* See turn time trends
- *Weight:* See production weights
- *Chemical Costs:* See Chemical Costs
- *Monthly Results:* Gives monthly weights and costs for the current year contrasted with the average from the previous year. The graph includes CWT.



IV. **Washer Diagnostic Report** assists in identifying which washers are experiencing watch dogs, cancelled loads or non-credited loads.

Report Selection Criteria

- *Date:* Specify date or date range of the data to be displayed
- *Shifts:* View data by any combination of shift(s) or time of day
- *Rules:* Select to report on Watch Dog Check, Cancelled Loads, or Non-credited Loads



The table can be ordered by any of the columns in either ascending or descending order by clicking on the column heading. This table is in descending order based on Watch Dog Time.

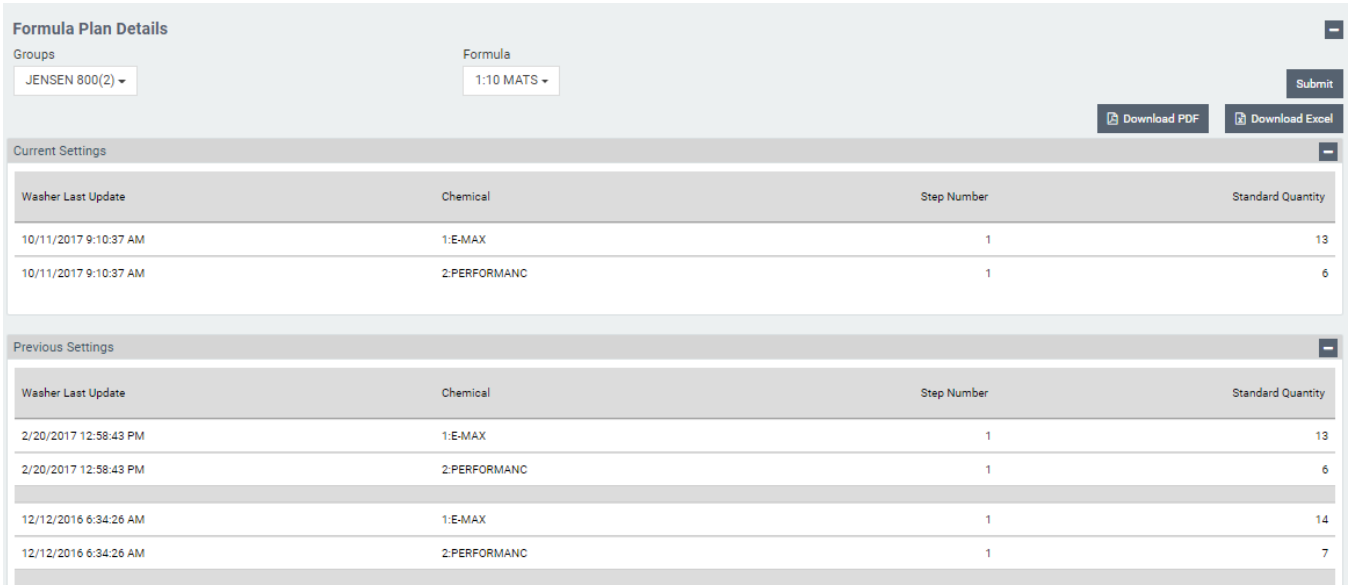
Drag a column header here to group by that column

Date	Time	Grp / Mach	Formula	Load Time Eff (%)	Run Time Eff (%)	Unload Time Eff (%)	Watch dog Time	Credited	Cancelled	Weight Eff (%)	Pause Time	Chem Sat Time	Form Sat Time	WD Time (MM:SS)
Wed 1/3/2018	6:22 AM	2/6	20 : 14 WHT MASS TWL	2.78	64.72	135.14	18:53	True	False	162.53	00:25	05:36	48:16	18:53
Wed 1/3/2018	9:56 AM	2/6	18 : 14 WHT BAR MOP	148.51	69.86	131.00	16:31	True	False	103.37	00:07	05:46	39:50	16:31
Tue 1/2/2018	6:39 AM	2/6	18 : 14 WHT BAR MOP	2.78	66.99	20.31	12:09	True	False	109.01	00:27	20:38	44:07	12:09
Fri 1/5/2018	6:56 AM	2/6	19 : 12 COL BAR	66.67	75.11	144.93	10:54	True	False	108.27	00:47	02:55	37:58	10:54

Detailed information regarding the Watch Dog for a particular load can be viewed by clicking on 🔔

This may help identify problems needing to addressed.

I. **Formula Plan Details** allows you to view your current and previous formula settings for each machine group and by formula. The report shows when the last update was made and what previous settings were.



Formula Plan Details

Groups: JENSEN 800(2) | Formula: 1:10 MATS | Submit | Download PDF | Download Excel

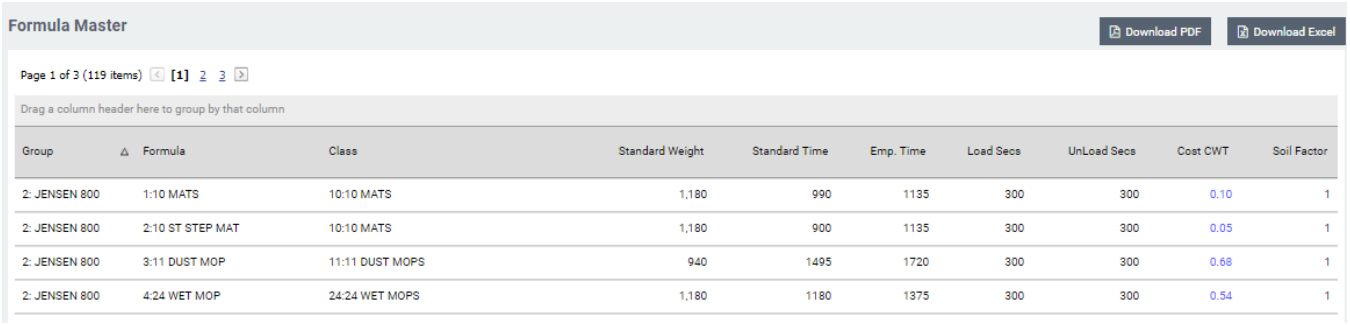
Current Settings

Washer Last Update	Chemical	Step Number	Standard Quantity
10/11/2017 9:10:37 AM	1:E-MAX	1	13
10/11/2017 9:10:37 AM	2:PERFORMANC	1	6

Previous Settings

Washer Last Update	Chemical	Step Number	Standard Quantity
2/20/2017 12:58:43 PM	1:E-MAX	1	13
2/20/2017 12:58:43 PM	2:PERFORMANC	1	6
12/12/2016 6:34:26 AM	1:E-MAX	1	14
12/12/2016 6:34:26 AM	2:PERFORMANC	1	7

II. **Formula Master**



Formula Master

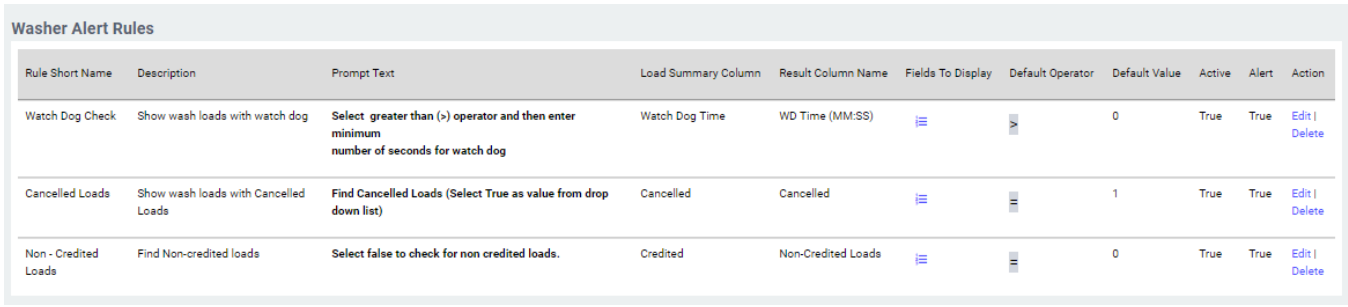
Download PDF | Download Excel

Page 1 of 3 (119 items) [1] 2 3

Drag a column header here to group by that column

Group	Formula	Class	Standard Weight	Standard Time	Emp. Time	Load Secs	UnLoad Secs	Cost CWT	Soil Factor
2: JENSEN 800	1:10 MATS	10:10 MATS	1,180	990	1135	300	300	0.10	1
2: JENSEN 800	2:10 ST STEP MAT	10:10 MATS	1,180	900	1135	300	300	0.05	1
2: JENSEN 800	3:11 DUST MOP	11:11 DUST MOPS	940	1495	1720	300	300	0.68	1
2: JENSEN 800	4:24 WET MOP	24:24 WET MOPS	1,180	1180	1375	300	300	0.54	1

III. **Washer Alert Rules**



Washer Alert Rules

Rule Short Name	Description	Prompt Text	Load Summary Column	Result Column Name	Fields To Display	Default Operator	Default Value	Active	Alert	Action
Watch Dog Check	Show wash loads with watch dog	**Select greater than (>) operator and then enter minimum number of seconds for watch dog**	Watch Dog Time	WD Time (MM:SS)		>	0	True	True	Edit | Delete
Cancelled Loads	Show wash loads with Cancelled Loads	**Find Cancelled Loads (Select True as value from drop down list)**	Cancelled	Cancelled		=	1	True	True	Edit | Delete
Non - Credited Loads	Find Non-credited loads	**Select false to check for non credited loads.**	Credited	Non-Credited Loads		=	0	True	True	Edit | Delete