SYSCON PLANTSTAR

PlantStar 4.0
Operator's Guide

SYSCON PLANTSTAR

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1. Accessing the DCM

1.1. DCM Access

Each DCM has a unique IP address. Open your browser and enter the correct IP address to access the DCM.

Browsing access to the various DCM information pages is generally open and unrestricted. Operator actions on a DCM can be fully unrestricted or can be limited through any of three different security mechanisms.

The refresh rate of the DCM is configurable (default is 30 seconds). Contact your SYSCON PlantStar team to have the refresh rate changed.

1.2. DCM Actions

Depending on security configuration, an operator can do any of the following actions from a DCM:

End Job	Start Idle
Start Selected Job in Queue	End Idle
Suspend Job	Start Multi-Machine Idle
Edit Current Running Job on Machine	End Multi-Machine Idle
Create Reject Reason Parts Entry	Save New Tool Maintenance Event
Select Job Event Reason	Save Job Tool Changes
Edit History of Job Event Reason	Operator Machine Login

Note: Each action can have a different security setting. Depending on the configuration set up by your system admin, you may be unable to perform certain actions if you have not been given the necessary permissions.

1.3. Security Models

The PlantStar 4.0 system has four distinct security models at the DCM, each of which provides a different level of user track-and-trace. The DCM security model(s) and permissions are set by a system administrator via the APU. Security permissions can be set separately for each DCM function, or you may choose to manage all via a common method. Your install tech will guide you through the process of configuring the security for your system.

Open

The Open model means that DCM actions are unrestricted. Anybody can use any device to perform any action on any machine. Open actions will be tracked but attributed in the User Action Event log to a generic user.

You can choose to set any or all DCM actions to Open according to your preference for action accessibility. While this model is most convenient, PlantStar recommends that you consider the benefits of using our enhanced security models for improved individual accountability. Any DCM action with Open security will allow unrestricted access to that action and no record will be maintained of who performed it.

CAUTION: If you set permissions to Open for Operator Check-In, the log-in screen will display the names and check-in status of each user of your system, and any user will have the ability to check another person in or out of the system.

Access Code

The Access Code model provides restricted access to DCM actions through use of a shared access code credential. Anyone who knows the access code can perform any of the DCM actions that are secured behind that credential. Actions completed using the access code will be tracked but attributed to a generic user in the User Action Event log.

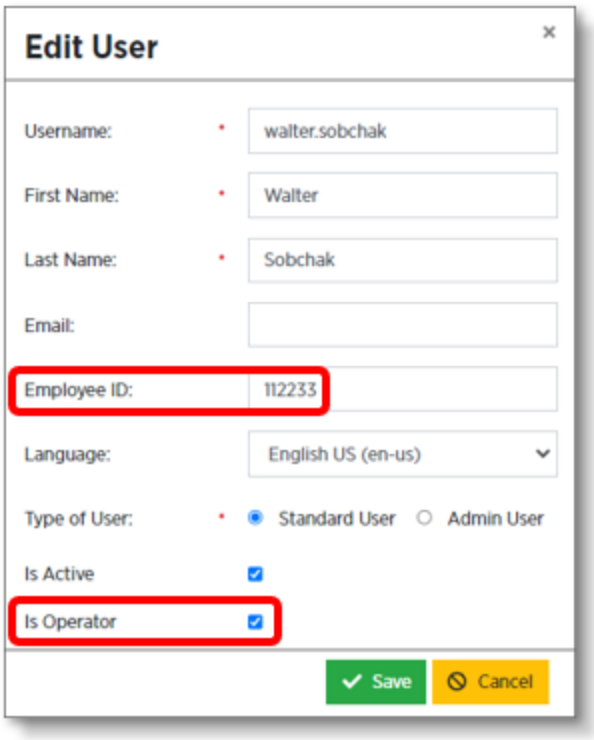
You can choose to set any or all DCM actions to Access Code according to your preference for action accessibility. This model provides a basic level of security and can restrict actions but does not provide individual accountability. Any DCM action with Access Code security will allow restricted access to that action and no record will be maintained of who performed it.

CAUTION: If you set permissions to Access Code for Operator Check-In, the log-in screen will display the names and check-in status of each user of your system, and any user with the Access Code will have the ability to check another person in or out of the system.

Employee ID

The Employee ID model provides additional system security as well as basic individual accountability for system actions. Actions secured using this model will be tracked and attributed to the individual Employee ID in the User Action Event log.

When Users are configured on the APU, a unique ID (perhaps using an existing Employee ID number) can be assigned to each Operator. Make sure to check the box for Is Operator, which will allow that Employee ID to be used for Operator Check-In at a DCM. Anyone who has been configured as an Operator and knows their Employee ID can perform DCM actions that are secured behind that credential. Actions completed using the Employee ID will be tracked and attributed to that user in the User Action Event log.



CAUTION: Since this security model does not require a password, anyone who knows someone else's Employee ID can potentially impersonate that individual and perform actions which the system will attribute to the Employee ID in use.

Username / Password

The Username / Password model provides the highest level of system security and individual accountability for system actions. Actions secured using this model will be tracked and attributed to each individual username in the User Action Event log.

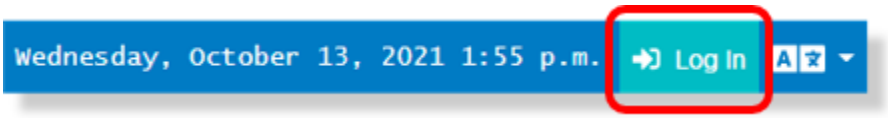
When you configure Users on the APU, create a Username and enter an email address. The system will generate and send an email with a unique password to that User. Users will be prompted to change password at first login. Forgotten credentials may be obtained with the reset password link on the login screen.

1.4. Logging In

As noted in the previous section, logging in to a DCM is not required and view-only browser access is unrestricted. However, using a Username / Password to log in to the PlantStar system through a DCM will enable full access to all functions. In addition, the system will log all actions and attribute them to the User who is logged in.

To Log In to a DCM:

1. Click on **Log In** in the toolbar at the top of the window.



2. Enter your Login credentials and click on the **Log In** button.

NOTE: To prevent unauthorized access, be certain that you LOG OUT from the DCM when you are finished.

2. Operator Check-in/Check-out

2.1 Overview

PlantStar provides a mechanism for Operator Check-In/Check-Out. Check-in/Check-out can provide labor tracking and accountability by ensuring that operators have reported in at the stations to which they are assigned.

Administrators can allow check-in via two different methods:

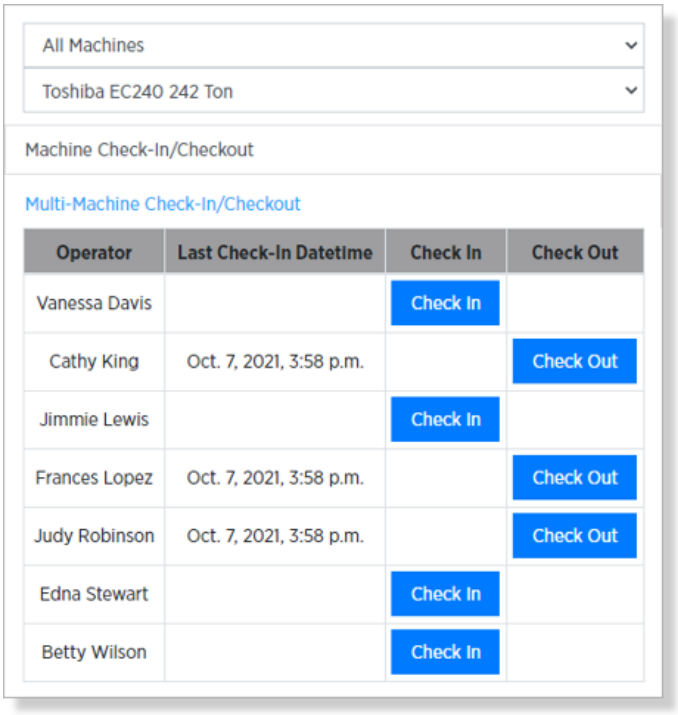
1. Open Check-in allows operators to check-in by simply selecting a machine and clicking on a button next to their name. Both Open and Access Code security can use this Check-in method.
2. Restricted Check-in requires each operator to provide some form of authentication before checking-in. The Restricted Check-in method supports both Employee ID and Username / Password security.

Note: There are no restrictions on checking someone else in or out if the Open security model is used. Customers should be aware that accountability is limited when using this model.

2.2 Open Access Check-In

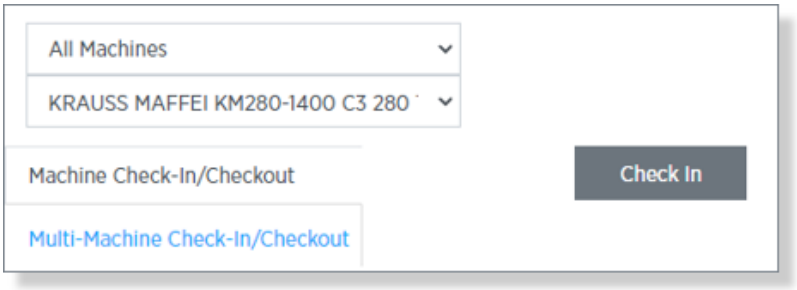
Check-in permissions are set to Open or Access Code, you will be able to see the names of others with Operator accounts and whether they are checked in or out of this Machine.

If permissions are set to Open and you are on the Check-in page for the Machine you are checked in to, you will be able to see the Last Check-in Datetime of any other Operators *on that machine.* If you're on the Check-in page for a different machine, you'll only see operators and datetime information for that machine.

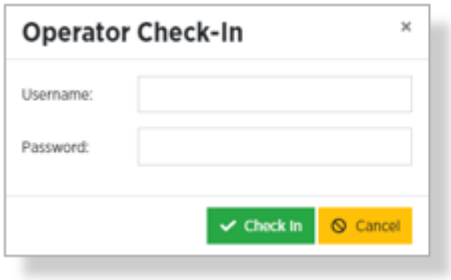


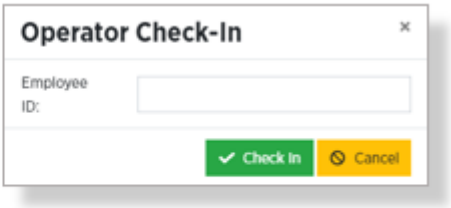
2.3 Restricted Access Check-In

If Check-in permissions are set to Employee Login ID or Username/Password clicking on the Operator Check-In/Checkout tab brings up the following dialog, where the operator must select a **Machine**, then click the **Check In** button to enter an Employee ID.



This then opens a box where the operator can enter a Username/Password or Employee ID:



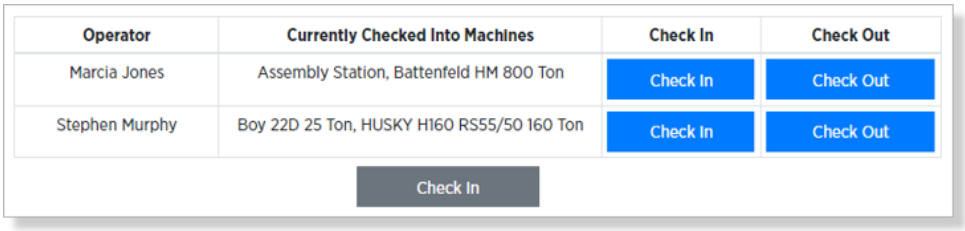


At the end of each shift, Machine Check-out will automatically be done for Operators by the system, provided that the Machine was configured with auto-checkout enabled.

2.4 Multi-Machine Check-In/Check-out

Multi-Machine Check-in/Check-out can be used to quickly check in to or out of multiple Machines at once.

When you access the panel, the first thing you will see is a list of all users currently checked into machines.



If your name appears in this list, click on either the **Check In** or **Check Out** button in the table. If not, click on the black **Check In** button at the bottom of the page. This will open the Machine Selection panel.

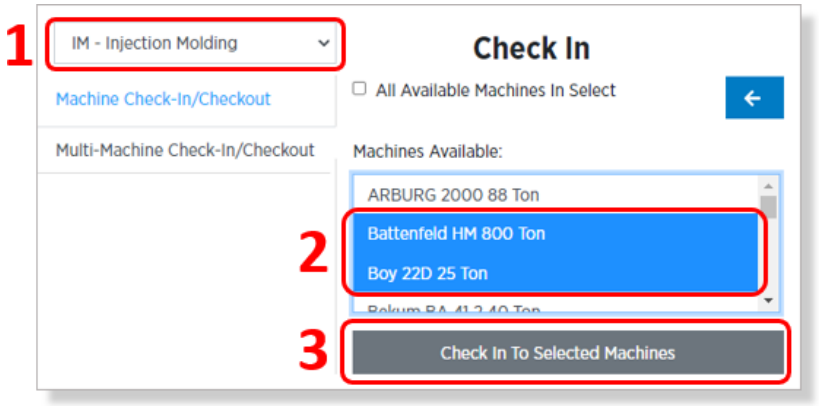
Take the following steps to check in to multiple machines:

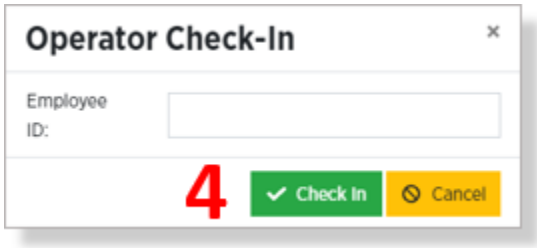
1. Choose a particular Machine Group or "All Available Machines**"** from the **Machine Group** drop-down.

2. Select the individual **Machines** to check-in to. To select all listed machines, click on **All Available Machines in Select.**

3. Click on the **Check in To Selected Machines** button.

4. Enter your **Username/Password** or **Employee** ID (if required on your system).





Note: The blue back arrow button takes you back to the Multi-Machine Check-in page without your selections being saved.

Your name will now appear in the list of checked-in operators.

Operator	Currently Checked Into Machines	Check In	Check Out
Eddie Allen	Battenfeld HM 800 Ton, Boy 22D 25 Ton	Check In	Check Out
Marcia Jones	Assembly Station, Battenfeld HM 800 Ton	Check In	Check Out
Stephen Murphy	Boy 22D 25 Ton, HUSKY H160 RS55/50 160 Ton	Check In	Check Out

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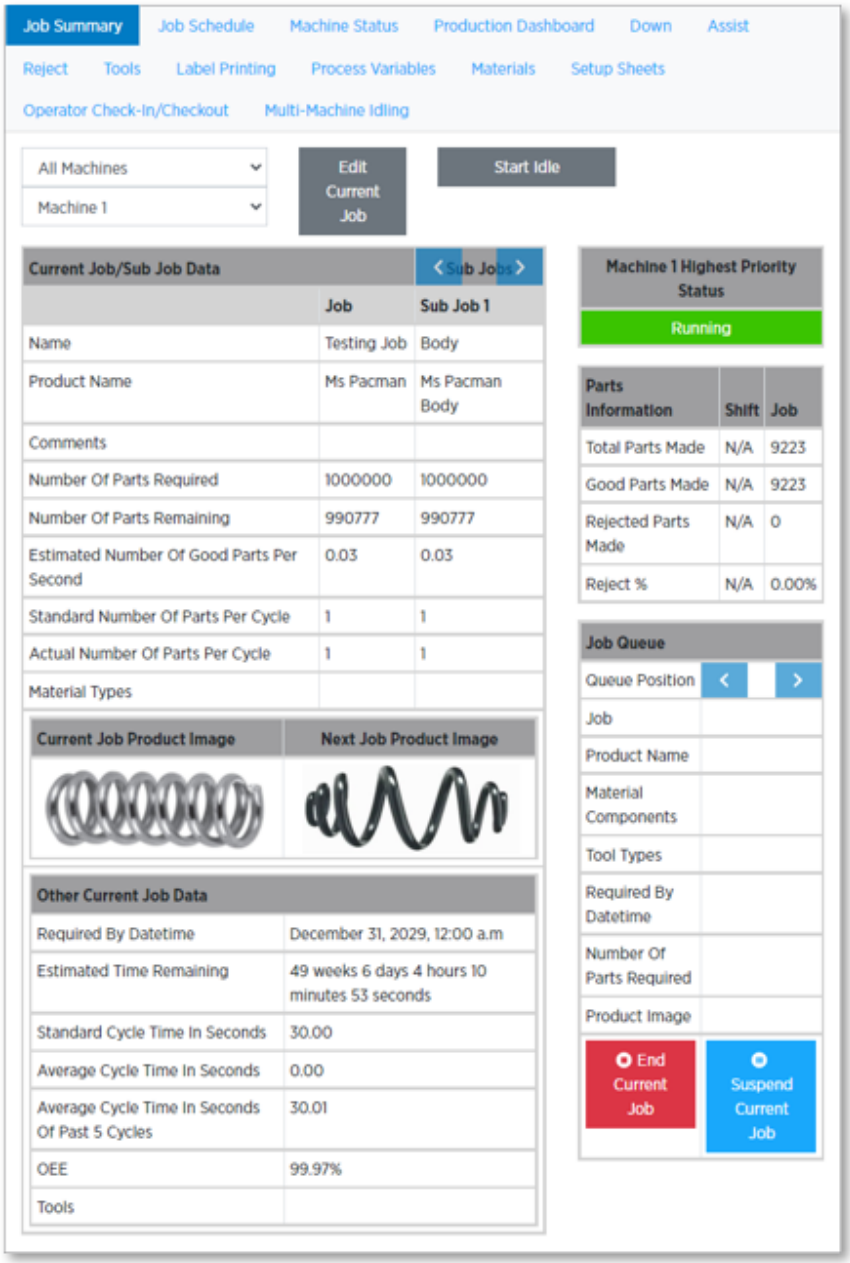
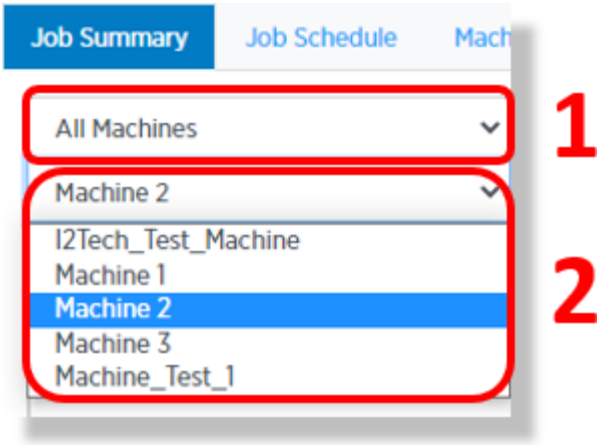
3. Job Summary

3.1 The Job Summary Screen

Click on the **Job Summary** tab to view the Job Summary Screen. This screen lets you view and control what is happening on any PlantStar-connected machine in your plant. You can even view machines not connected to this DCM.



3.2 Selecting Machines



There are two dropdowns in the upper-left corner of the Job Summary Screen:

1. The top dropdown lets you narrow the machine list down by specifying a particular **Machine Group**. The default value is "All Machines".
2. The bottom drop-down is a list of all **Machines** in the Machine Group selected in the top drop-down.

All the information on the screen corresponds to the Machine you have selected from the second drop-down list.

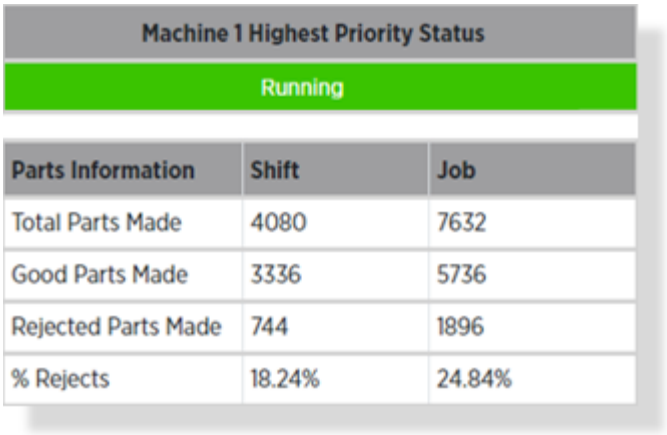
3.3 Current Job/Sub Job Data

This section of the screen displays current run data for the associated job and any sub-jobs it may include. If there are multiple sub-jobs, use the arrow buttons surrounding the **Sub Jobs** column header to page through them.

Current Job/Sub Job Data		< Sub Jobs >
	Job	**Sub Job 1**
Name	Testing Job	Body
Product Name	Ms Pacman	Ms Pacman Body
Comments		
Number Of Parts Required	9058	9058
Number Of Parts Remaining	8764	8764
Estimated Number Of Good Parts Per Second	0.03	0.03
Standard Number Of Parts Per Cycle	1	1
Actual Number Of Parts Per Cycle	1	1
Material Types		

3.4 Machine Priority Status

This line gives you the current machine status at a glance.



3.5 Parts Information

This table shows a quick progress summary of the current job, both overall and during the current shift.

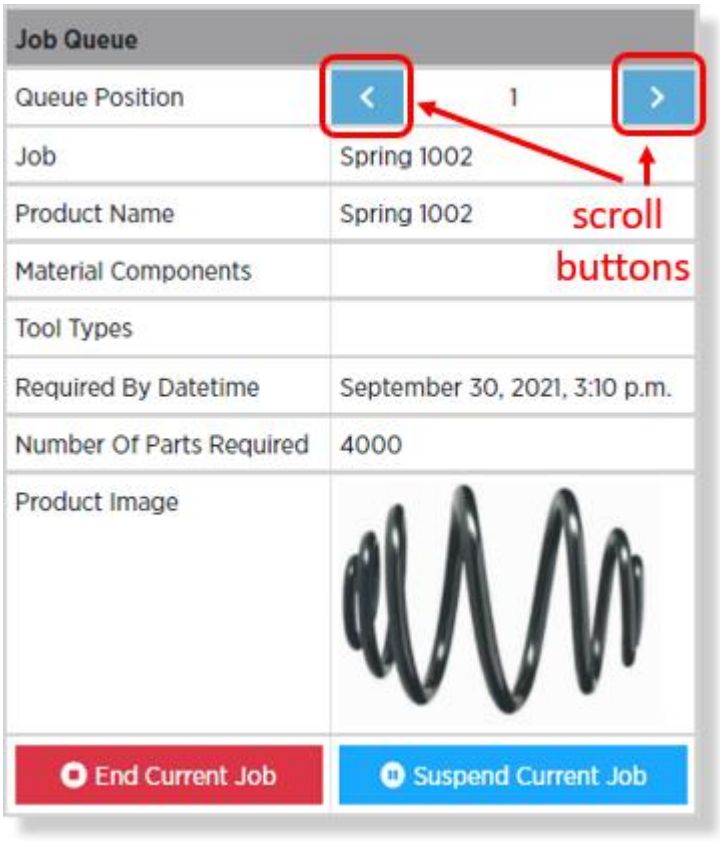
Parts Information	Shift	Job
Total Parts Made	4080	7632
Good Parts Made	3336	5736
Rejected Parts Made	744	1896
% Rejects	18.24%	24.84%

Note: If Parts Must Be Confirmed has been selected at Job configuration, then Unconfirmed Parts Made will display on the Parts Information table.

3.6 Job Queue

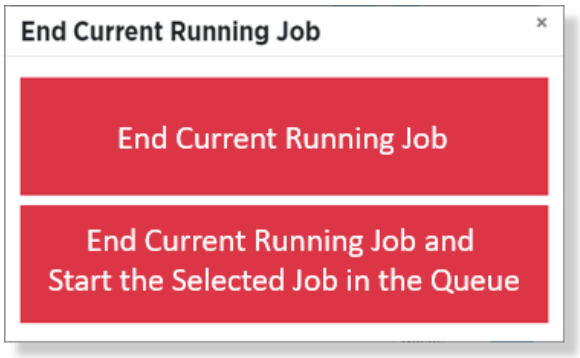
The Job Queue section shows all jobs scheduled for the current machine. Use the blue **scroll buttons** to scroll through all jobs.

You can end or pause the current job using the **End Current Job** or **Suspend Current Job buttons**.

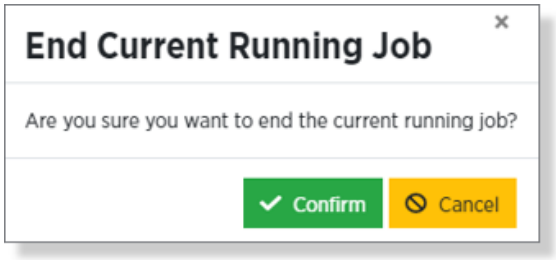


3.7 End Current Job

Choosing **End Current Job** will bring up a prompt for additional detail:



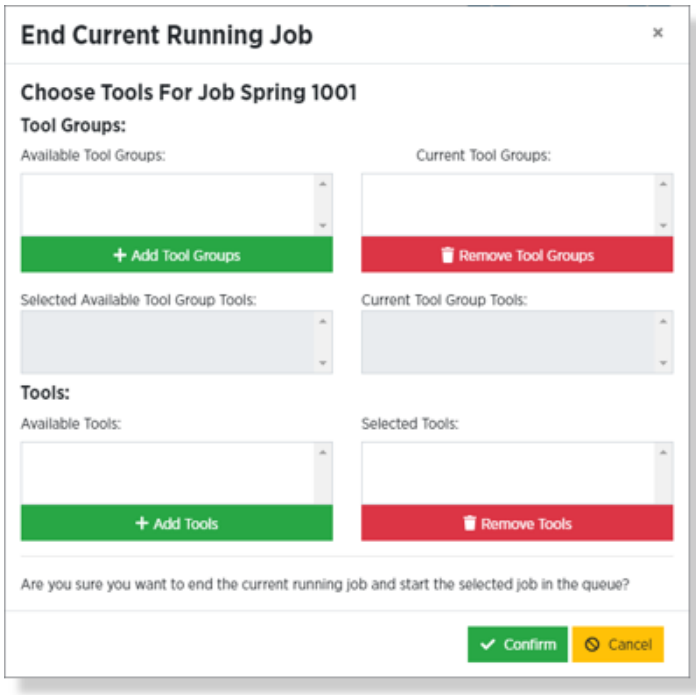
Click on the **End Current Running Job** button to end the current job ***without*** starting another one. This will then bring up a confirmation prompt.



Note: Ending a job will terminate the job and clear it from the schedule. If the job has not finished, you will have to go into the Jobs Manager on the APU and create a new Job.

Click on **End Current Running Job and Start the Selected Job in Queue** to both end the current job ***and*** immediately start the next selected one. The "next" job is whichever you have scrolled to in the **Job Queue** panel.

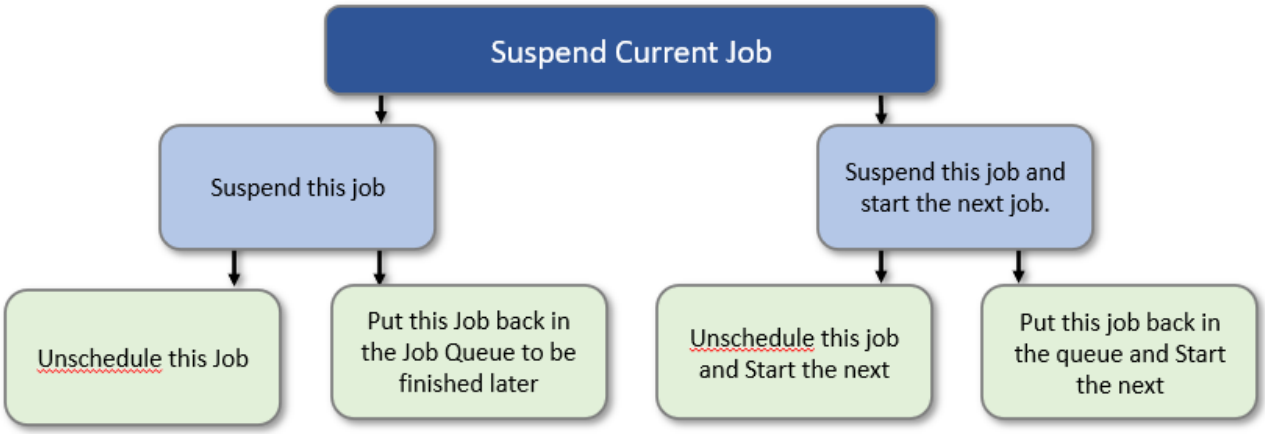
When starting a new job, you may add Tools and/or Tool Groups to the new job. Starting a job from the queue ahead of schedule may create a tool collision or some other problem; use this dialog box to adjust as necessary, then click **Confirm** to start the new job.



Note: For more detail on the Tools dialog, see 8.3 Tool Change Overview.

3.8 Suspend a Running Job

If you Suspend a job, PlantStar needs to know what to do *with* that job, and what to do *after* that job has been dealt with. This requires you to answer some additional questions.



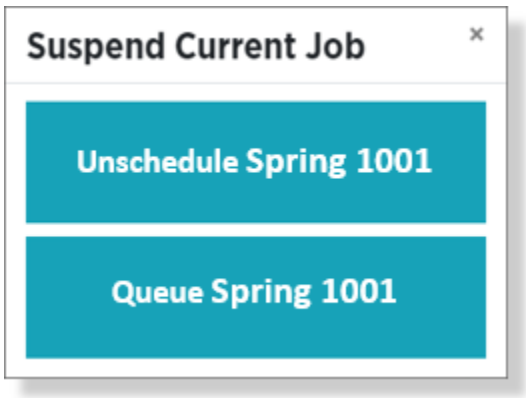
3.9 Suspend Current Job

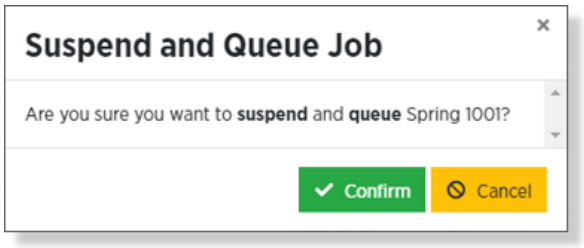
When you click on **Suspend Current Job** from the Job Queue, you will be prompted to select one of two options:

1. **Suspend** pauses the current job.
2. **Suspend And Start** pauses the current job and loads the next job.

If you clicked on **Suspend**, you will be asked what should be done with the current job. You have two options:

1. **Unschedule [Current Job Name]** will remove the current job from the job queue. This means the job will need to be manually placed back in the queue be finished.
2. **Queue [Current Job Name]** will put the job back in the queue to be finished later.





If you are suspending and not starting the next job, the final step is to **Confirm** your choice.

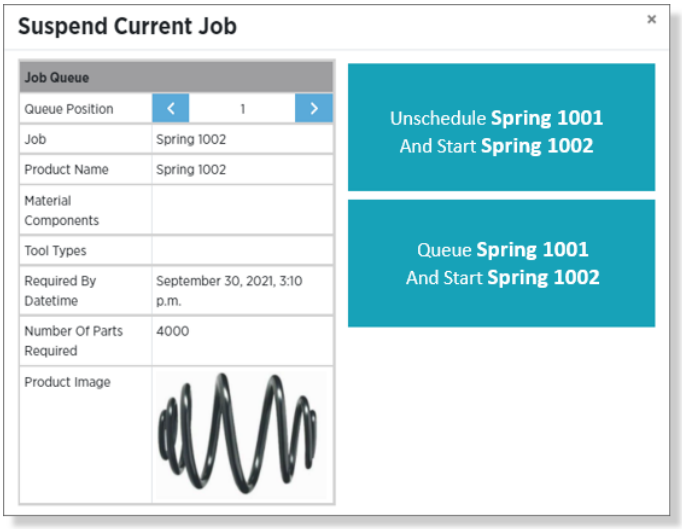
3.10 Suspend and Start

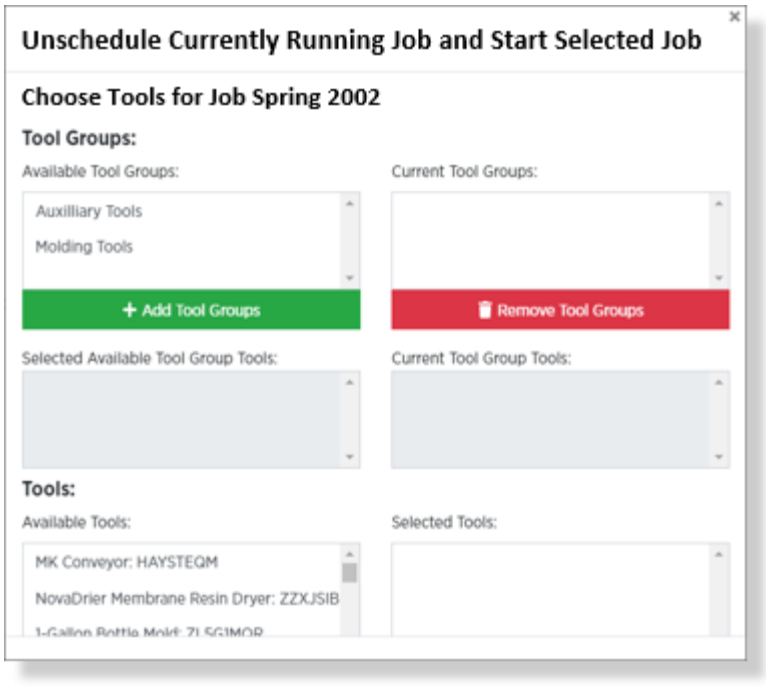
Clicking on **Suspend and Start** brings up a dialog box where you may:

1. Choose which job to start next, and
2. Specify what to do with the job that you are suspending.

Use the blue scroll arrows in the Job Queue panel to select the next job.

Click on one of the buttons on the right side to specify what to do with the old job.

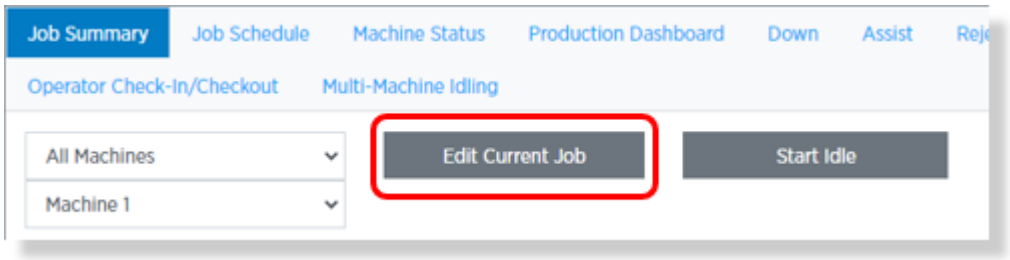




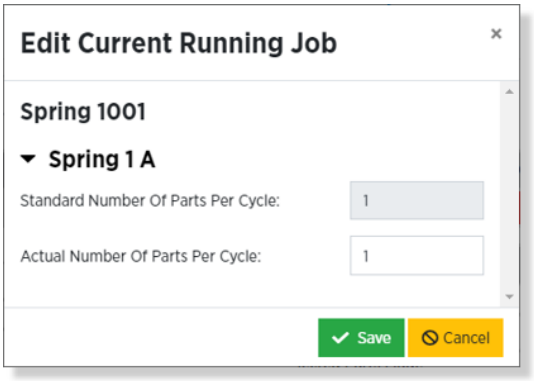
When starting a new job, you may add Tools and/or Tool Groups to the new job. Starting a job from the queue ahead of schedule may create a tool collision or some other problem; use this dialog box to adjust as necessary, then click **Confirm** to start the new job.

Note: For more detail on the Tools dialog, see 8.3 Tool Change Overview

3.11 Edit Current Job

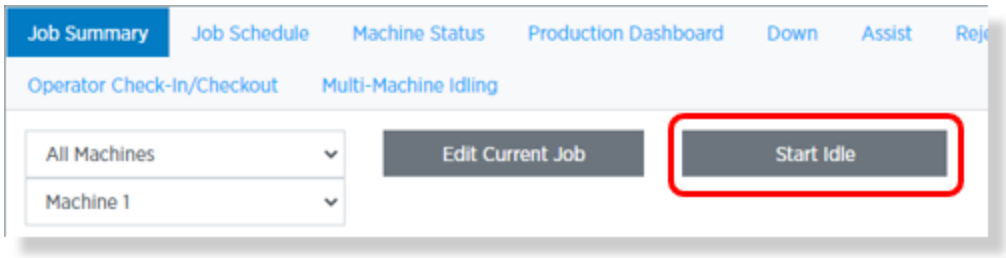


You can make edits to the currently running Job on any machine by clicking the gray **Edit Current Job** button near the top of the Job Summary screen.



You can change the cycle weight, part weight, and/or the actual number of parts per cycle on any of the Sub Jobs. Please note that the unit of measure cannot be edited unless you go back to the configuration page for the Job on the APU.

3.12 Start Idle



Click on the gray **Start Idle** button to put the Machine into Idle status.

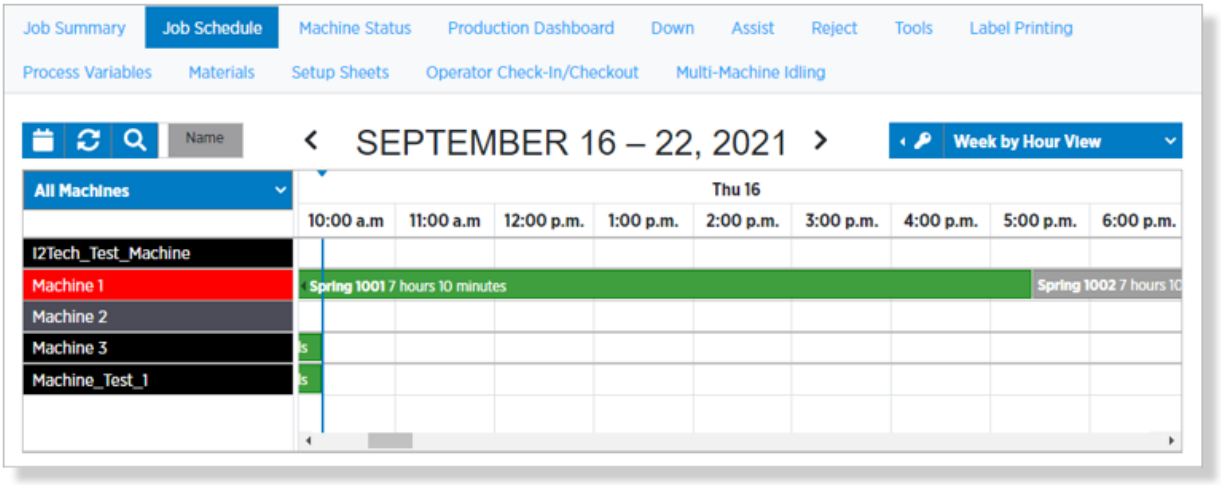
The status of this Machine will be changed to Idle and this will be reflected on the Machine Status page.

When the machine is put into Idle status, the **Start Idle** button changes to an **End Idle** button. Click this to resume normal operation on the machine.

4. Job Schedule

4.1 Overview

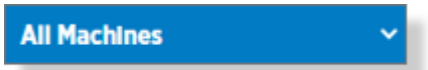
The Job Schedule tab displays the current and upcoming production schedule. The Job Schedule page is read-only. Changes to the schedule must be made by logging in to the APU and bringing up the Job Scheduler on the Jobs Manager.



4.2 Job Schedule Controls

The Job Schedule tab includes several controls that allow you to determine to what parts of the schedule are displayed and how they are displayed.

1. The **Machine Group** drop-down determines ***which machines*** are shown on each of the schedule table's row. You can either select a specific Machine Group or show All Machines (the default).



2. Use the **Date Scroll Buttons** to move chronologically through the schedule.

3. The **View** drop-down list lets you specify ***how*** time is displayed in the table.

4. To return to the current date and time after scrolling, click the **Today** button.

5. Click the **Reset** button to reload the table with current information from the database.

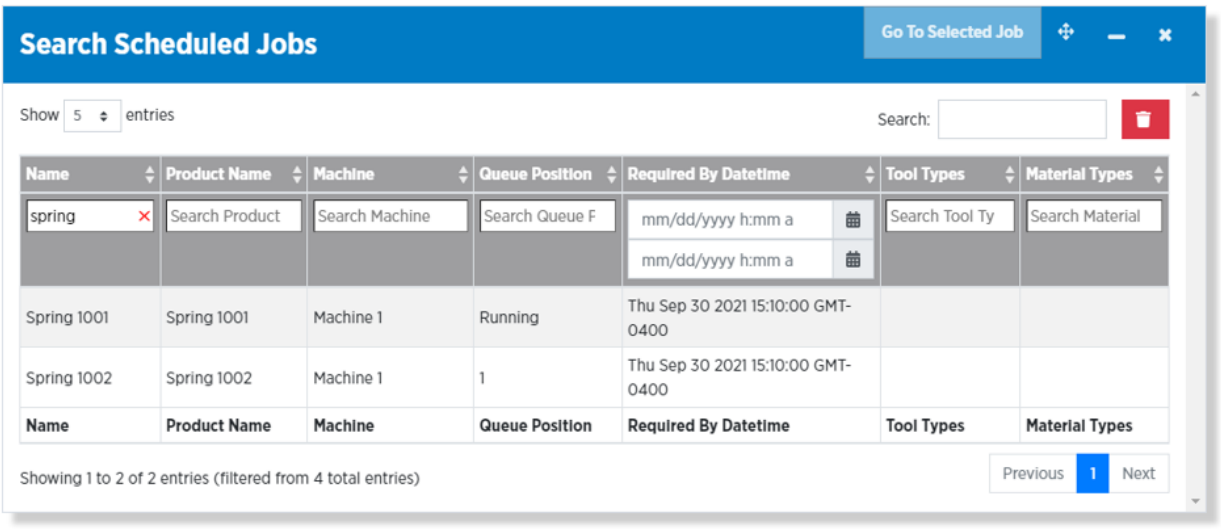
6. The **Search** button opens the Search dialog (see below).

7. Click on the **Name/Product** toggle to swtich between Job names and Product names displaying on the schedule.

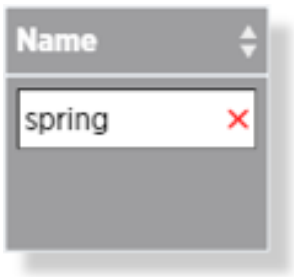
8. The key-shaped **Legend** shows a legend of colors used on the jobs in the table.

4.3 Job Schedule Search

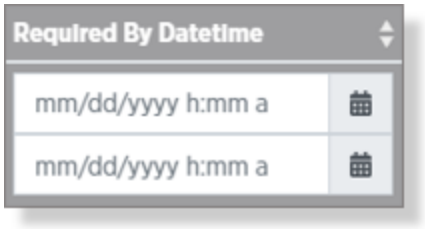
The **Search** button opens the Search Scheduled Jobs dialog box, which gives you several different ways to find jobs within you job queues. There are several controls available in the Job Search dialog:



1. The **Column Search** boxes let you search on any value for the field contained in the columns. In the example shown here, any job containing the word “spring” will be selected. Text searches are case insensitive.



2. The **Required By Datetime** fields let you specify a range of dates within the Required By field must fall.



3. Clicking on any column's title will **sort** the table by that column in ascending order. Clicking a second time will change the sort into descending order.

4. The **Quick Search** box does a text search of all fields at once. If the text you key in matches what appears any field, that field's job will be selected.

5. Use the **Clear Search** button to reset all search fields.

6. The **Go To Select Job** and Move Window buttons are not currently functional.

5. Downs

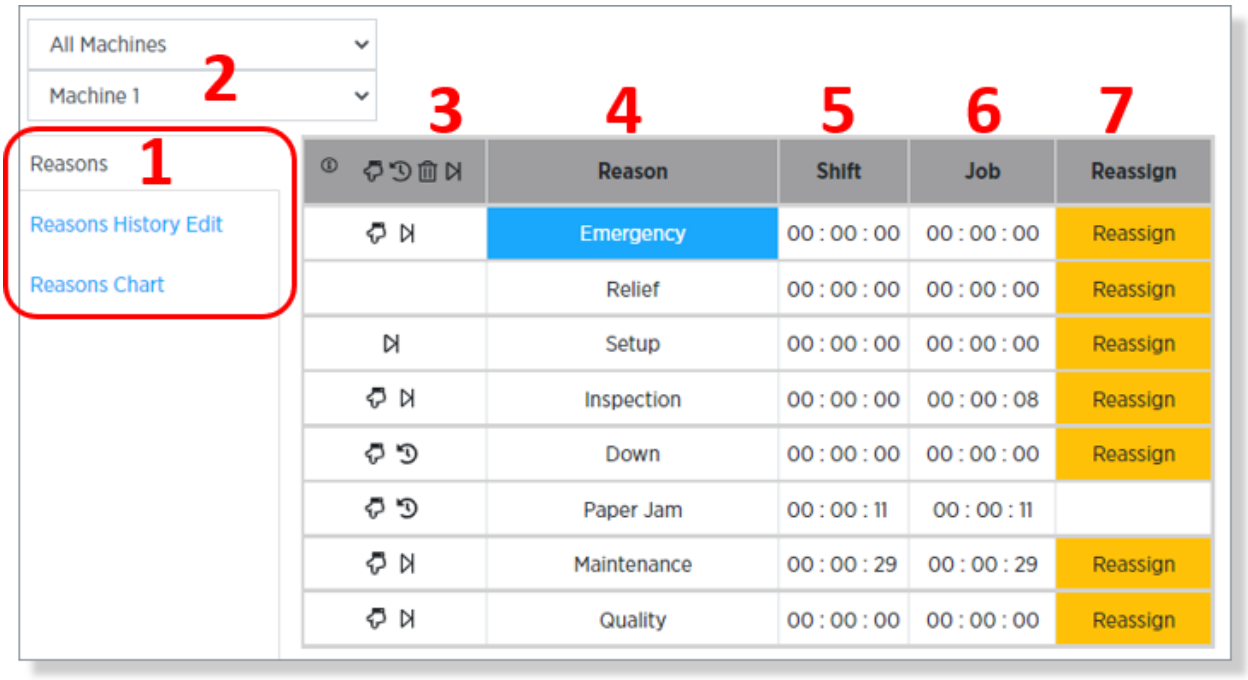
5.1 Overview

The **Down** screen shows the cumulative amount of downtime for each Down Reason on the current running job. It can also be used to preselect a Down Reason to be triggered if a Down Threshold is exceeded (machine interruption), or to put a job in a Down status using a Force Down.

The Down Screen consists of three tabs: **Reasons**, **Reason History Edit**, and **Reasons Chart**.

5.2 The Reasons tab

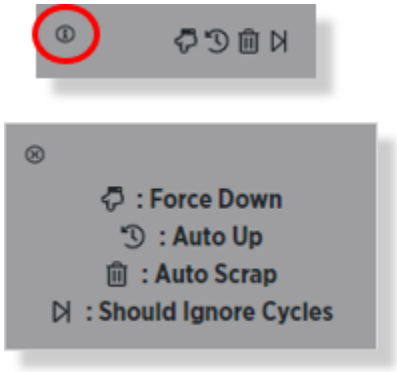
The Reasons tab shows the cumulative amount of downtime for each Down Reason on the current job running on the selected machine.



The Reasons tab consists of the following components:

1. The **Machine Group** and **Machine** dropdowns let you specify which Machine's job to look at.
2. Use the column on the left to select which tab to access.

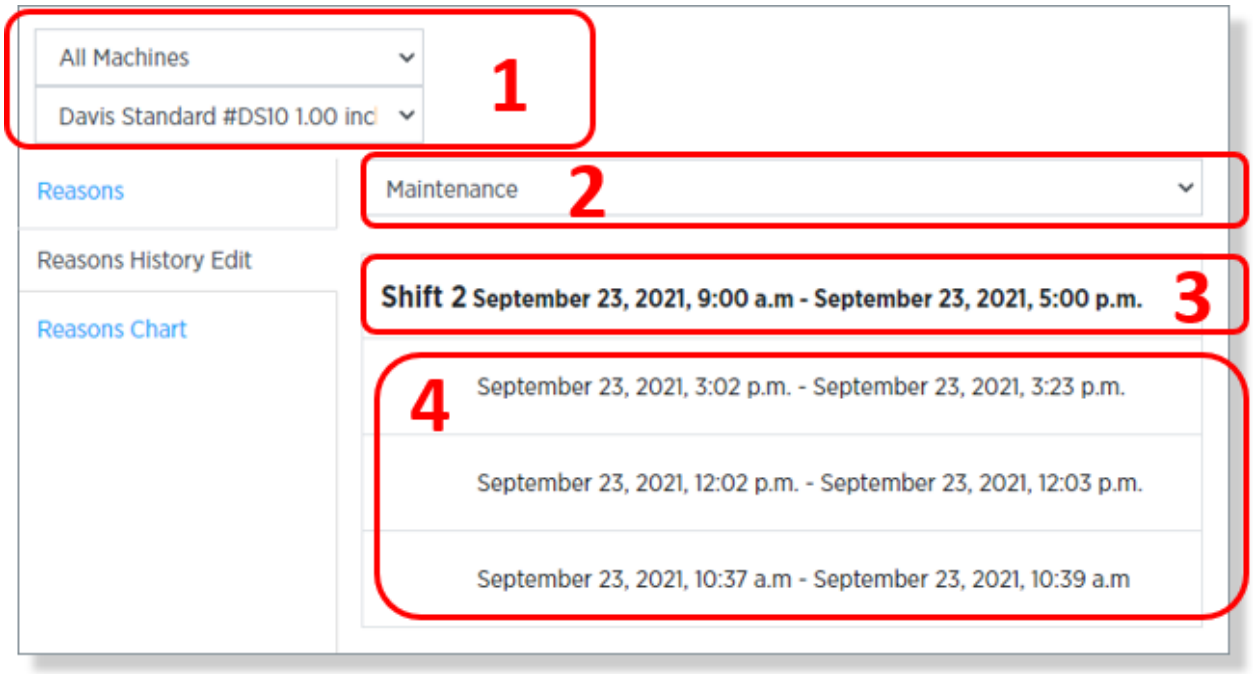
3. The **Options** column in the table gives details about the Down Reason contained on each row. Each Down Reason has options for Force Down, Auto Up, Auto Scrap, and/or Should Ignore Cycles. Click on the information button in the column header to see a legend showing what each symbol means.



4. The **Reason** column shows the Down Reason name. One of the Down Reasons can be preselected to be triggered if the Down Threshold is exceeded due to a machine interruption event.
5. The **Shift** column shows the cumulative downtime for each Down Reason during only the current shift.
6. The **Job** column shows the cumulative downtime for each Down Reason over the course of the entire job.
7. If the selected Machine has recently experienced a Down Reason within the Instant Reassign Down Time Limit window, the **Instant Reassign** buttons will appear. These allow the Operator to easily reassign downtime from one reason to another.

5.3 The Reason History Edit tab

For more comprehensive editing of downtime history, the Reason History Edit tab allows you to view and edit any/all downtime history events.

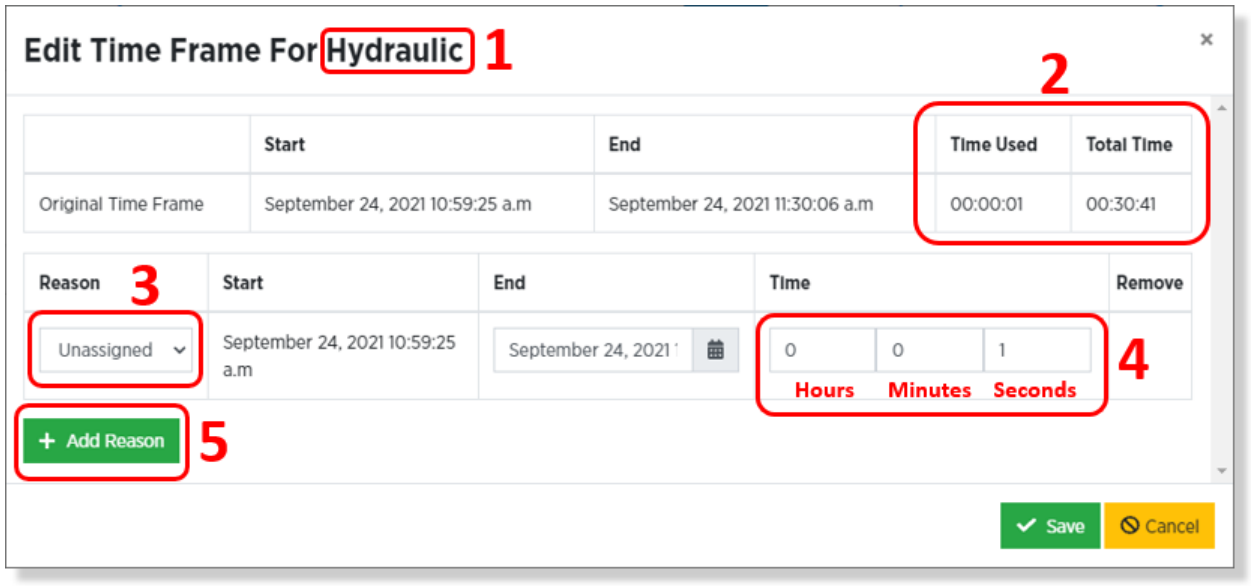


The Reasons History Edit tab has four components

1. **Machine Group** and **Machine** drop-boxes for selecting a Machine.
2. A dropdown for selecting a **Down Reason**. This will display all past down events for this job attributed to this reason.
3. A view-only field show the start and end of the current **Shift**.
4. A historical list of **Down Events** having this reason during this shift (in this example there are three).

5.4 Editing a Down Event

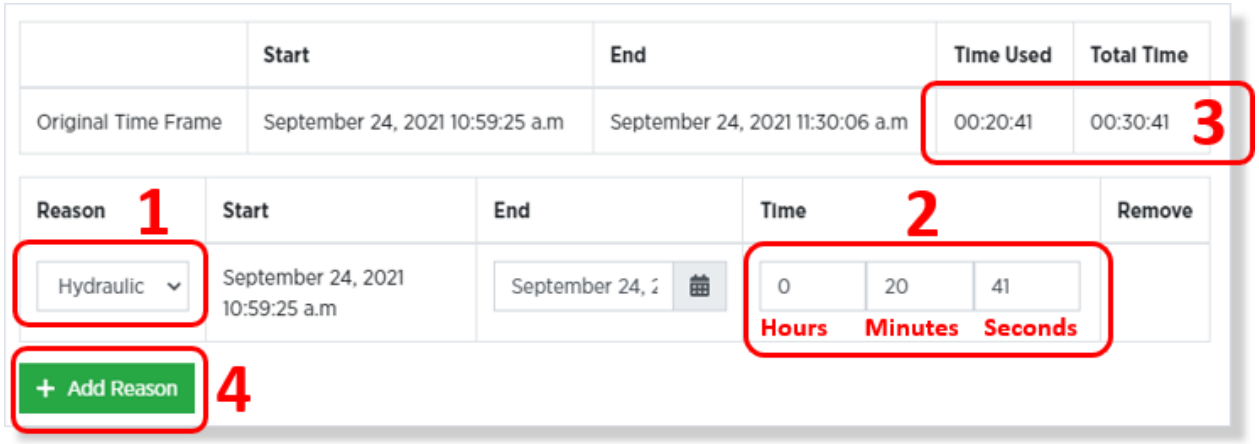
Once you have the down events listed, click on any of them to open the **Edit Time Frame for [DOWN REASON]** dialog.



When this dialog initially opens, the current **Down Reason** is included in the window title (1) and the downtime shows in the **Total Time** field (2). The lower half of the dialog allows you to either modify the original down reason or distribute the total time among multiple down reasons.

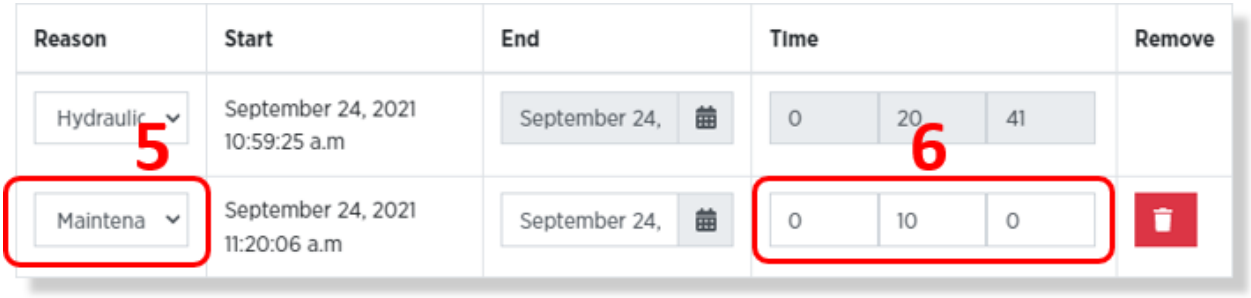
As an example, let's say that rather than 30:41 minutes of **Hydraulic** downtime (1), the machine was initially taken down due to a hydraulic issue, which took 20:41 to fix. Then, since the machine was already down, ten extra minutes were spent on routine maintenance before

restarting. To accurately track downtime, we need to distribute the time correctly across two down reasons.



Here are the steps to do this:

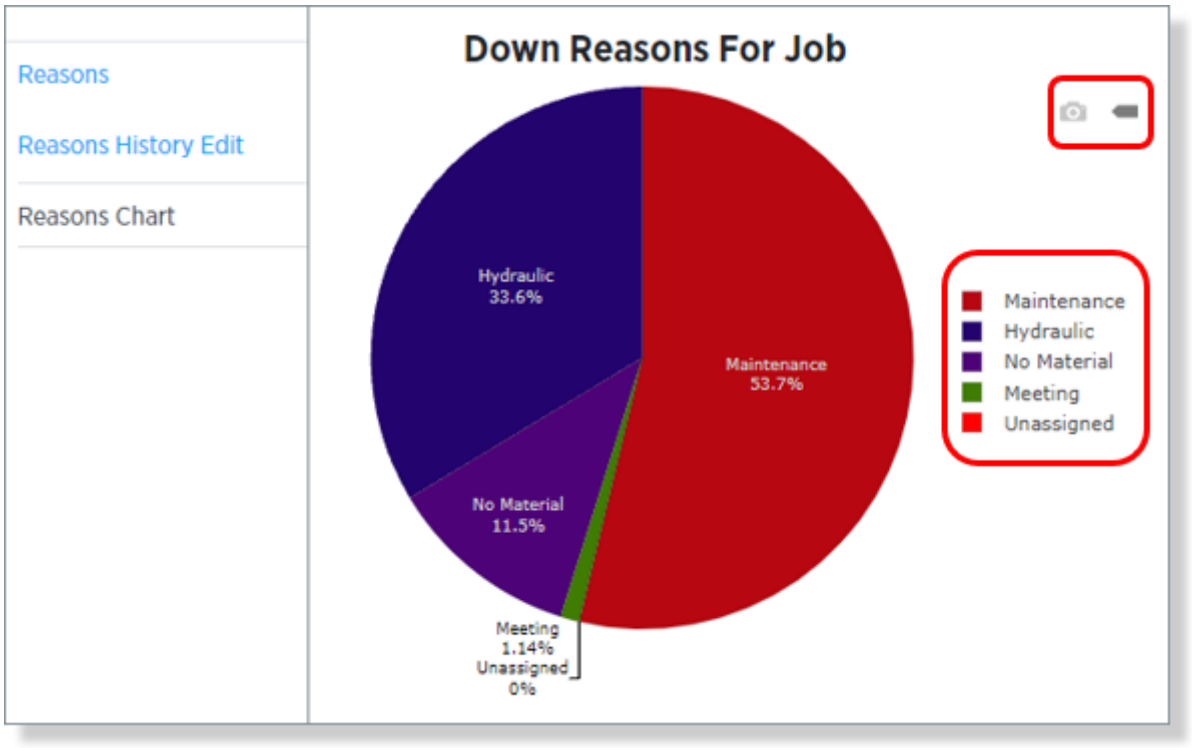
1. Change the first new Down Reason from ***Unassigned*** to ***Hydraulic***.
2. Use the time boxes to modify the amount of downtime to be assigned to Hydraulic.
3. Check your work by looking at the **Time Used** and **Total Time** fields.
4. Click on the **Add Reason** button.



5. When the second row appears in the table, choose ***Maintenance*** as the Down Reason.
6. Enter ten minutes into the downtime boxes.
7. Click on the **Save** button.

5.5 Reasons Chart

The Reasons Chart tab shows two simple pie charts showing the downtime reasons of the current job. The top chart shows all downtime for the length of the entire job. The bottom chart only shows the downtime on the job during the current shift.



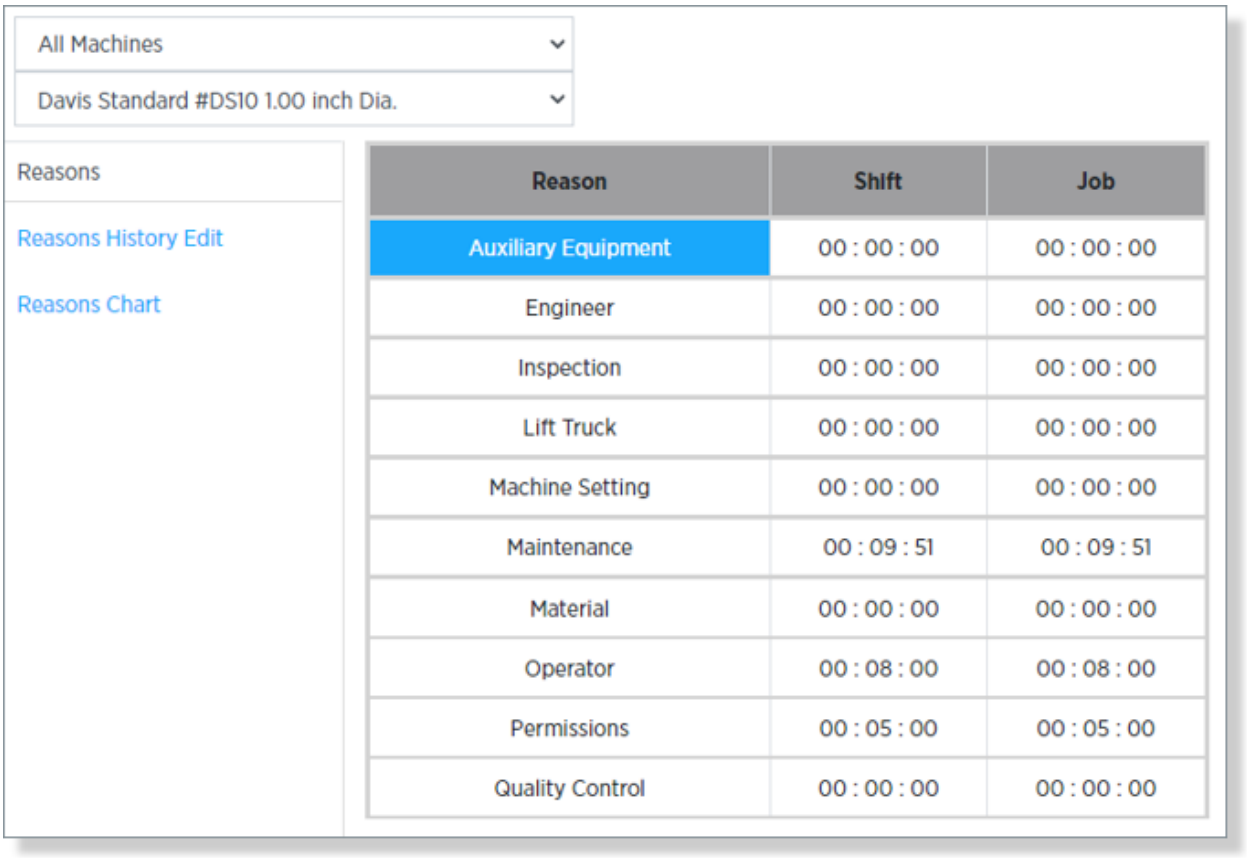
There are some noteworthy controls on this tab:

1. The Camera button will save a copy of the chart, as currently displayed, to your computer or network in PNG format. Note that this feature is only available from computer browser and not from a dedicated HMI.
2. The Label button toggles whether hovering over areas of the chart with your mouse pointer will show additional data or not.
3. You can click on any of the down reasons in the Legend to toggle that reason on or off in the display.

6. Assists

6.1 Overview

In the PlantStar system, an Assist is an operator-created request for help of some kind. An assist can trigger any of several different actions by the system. For example, and assist could trigger the sending of a text to the department supervisor, sending an email to a mechanic, or trigger an prerecorded audio announcement over your plant's public address system, etc.



Reason	Shift	Job
Auxiliary Equipment	00 : 00 : 00	00 : 00 : 00
Engineer	00 : 00 : 00	00 : 00 : 00
Inspection	00 : 00 : 00	00 : 00 : 00
Lift Truck	00 : 00 : 00	00 : 00 : 00
Machine Setting	00 : 00 : 00	00 : 00 : 00
Maintenance	00 : 09 : 51	00 : 09 : 51
Material	00 : 00 : 00	00 : 00 : 00
Operator	00 : 08 : 00	00 : 08 : 00
Permissions	00 : 05 : 00	00 : 05 : 00
Quality Control	00 : 00 : 00	00 : 00 : 00

PlantStar stores and lets you maintain Assists Statuses and amount of time in Assist Status exactly like it does Downtime Reasons and Downtimes. Each of the features in chapter 5. Downs are applicable to Assists as well.

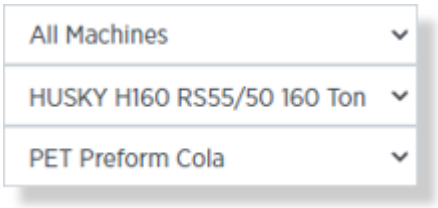
7. Rejects

7.1 Overview

The **Reject** tab allows you to view and add rejected part counts.

7.2 The Rejects table

The Rejects table shows the up-to-date number of rejected parts for the current job. The table shows both total rejects and reject from the current shift. It also shows the number of rejected parts per Sub Job.



The drop-down lists at the top left let you select which machine and sub-job to display.

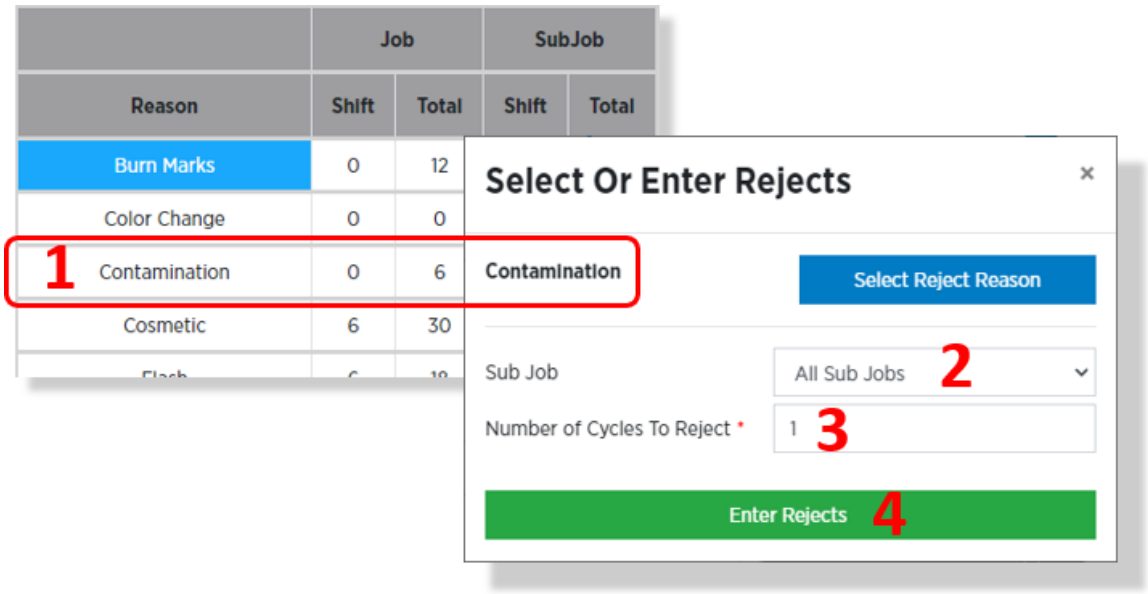
Each row in the table represents a Reject Reason. If you have more reject reasons than fit on the screen, use the **Scroll** and **Page Select** buttons at the bottom of the chart to navigate through the pages.

	Job		SubJob	
Reason	Shift	Total	Shift	Total
Burn Marks	6	6	6	6
Color Change	18	18	18	18
Contamination	24	24	24	24
Cosmetic	18	18	18	18
Flash	24	24	24	24
Flow Lines	12	12	12	12
Jetting	24	24	24	24
Leaks	6	6	6	6
Oil	0	0	0	0
Quality Control	0	0	0	0

« ‹ 1 2 Page 1 / 2 › » 10 Items Per Page

7.3 Adding Rejects

To enter new Rejects into the system:



1. Open the Reasons panel and click on the appropriate Reject Reason. This will open the Select or Enter Rejects dialog. Note that the selected reject reason ("Contamination" in this case) appears near the top of the dialog.
2. Select either a single Sub-Job or All Sub Jobs (which is the default value)
3. If All Sub Jobs is selected, Enter the Number of Cycles to Reject. In the example shown, only one cycle is being rejected.
4. If a single Sub-Job is selected, Enter the Number of Parts to Reject.
5. Click on the Enter Rejects button to save the new defects to the database and close the dialog box.

The resulting row in the Defects table now shows six "Contamination" defects for the current shift.

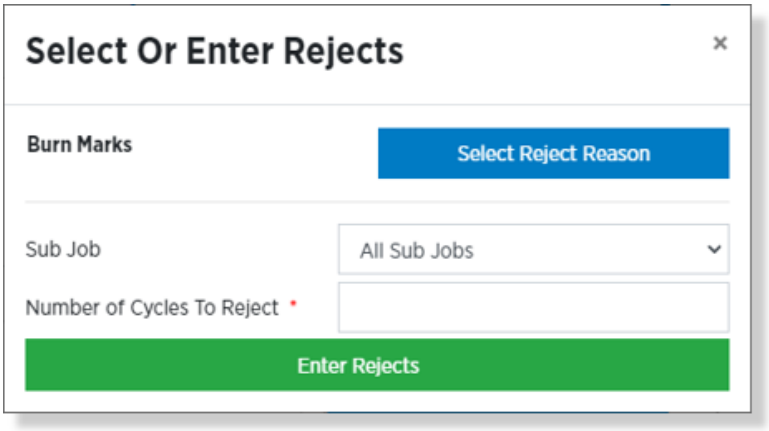
	Job		SubJob	
Reason	Shift	Total	Shift	Total
Contamination	6	12	6	12

Why six defects? Because we rejected one *cycle*. The *Standard Parts per Cycle* for this part is six.

7.4 The Select/Deselect Reason Button

The Select or Enter Rejects dialog can also be used to preselect the Reject Reason for Rejects that are triggered via a Signal Input Function with an Unassigned Reject Reason.

To preselect a Reject Reason, choose the desired Reason from the Rejects table and hit the blue **Select Reject Reason** button.

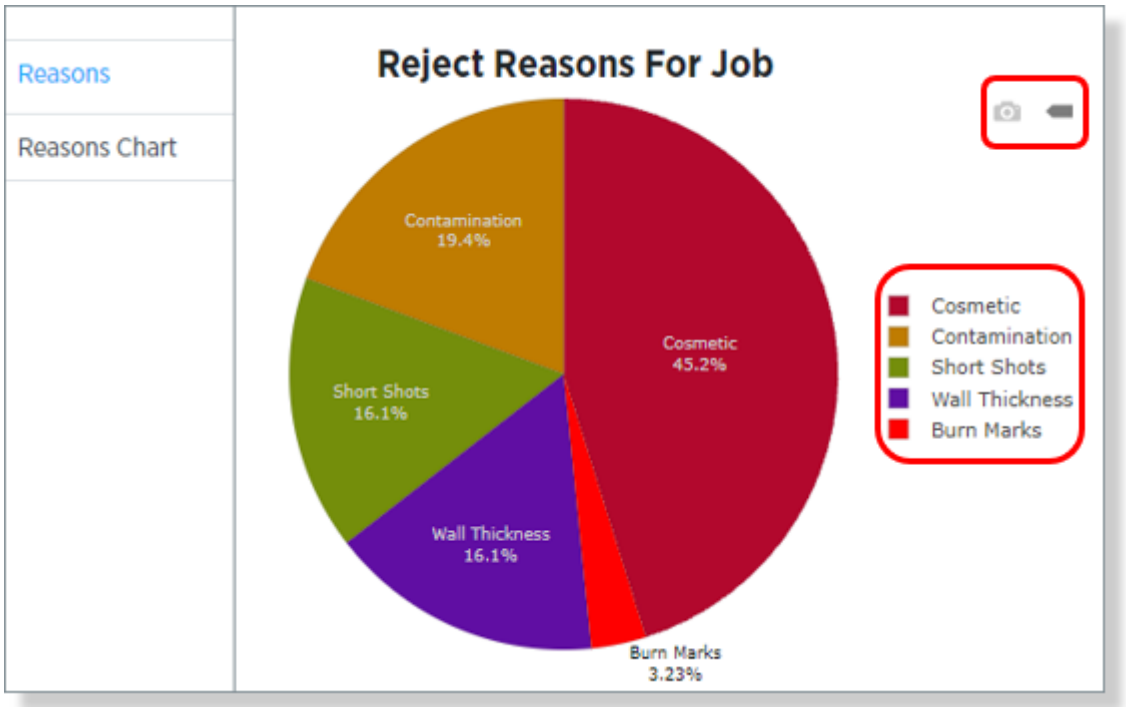


With this feature, a Signal Input Function can be defined to automatically count scrap and the Reject Reasons can still be manually preselected.

You may also clear the currently selected reason by choosing the currently selected Reject Reason and clicking the Deselect Reject Reason button. This will cause the Reject Reason selection to revert to the 1st reason in the table, which is generally left as Unassigned.

7.4 Reject Reasons Chart

The **Reasons** Chart tab shows two simple pie charts showing the reject reasons of the current job. The top chart shows all rejects for the length of the entire job. The bottom chart only shows the rejects on the job during the current shift.



There are some noteworthy controls on this tab:

1. If you are on a device (computer, laptop) where you can access the file system, clicking on the **Camera button** saves a copy of the current chart to a .png file in your computer's **Downloads** folder.
2. The **Label button** toggles whether hovering over areas of the chart with your mouse pointer will show additional data or not.
3. You can click on any of the reject reasons in the **Legend** to toggle that reason on or off in the display.

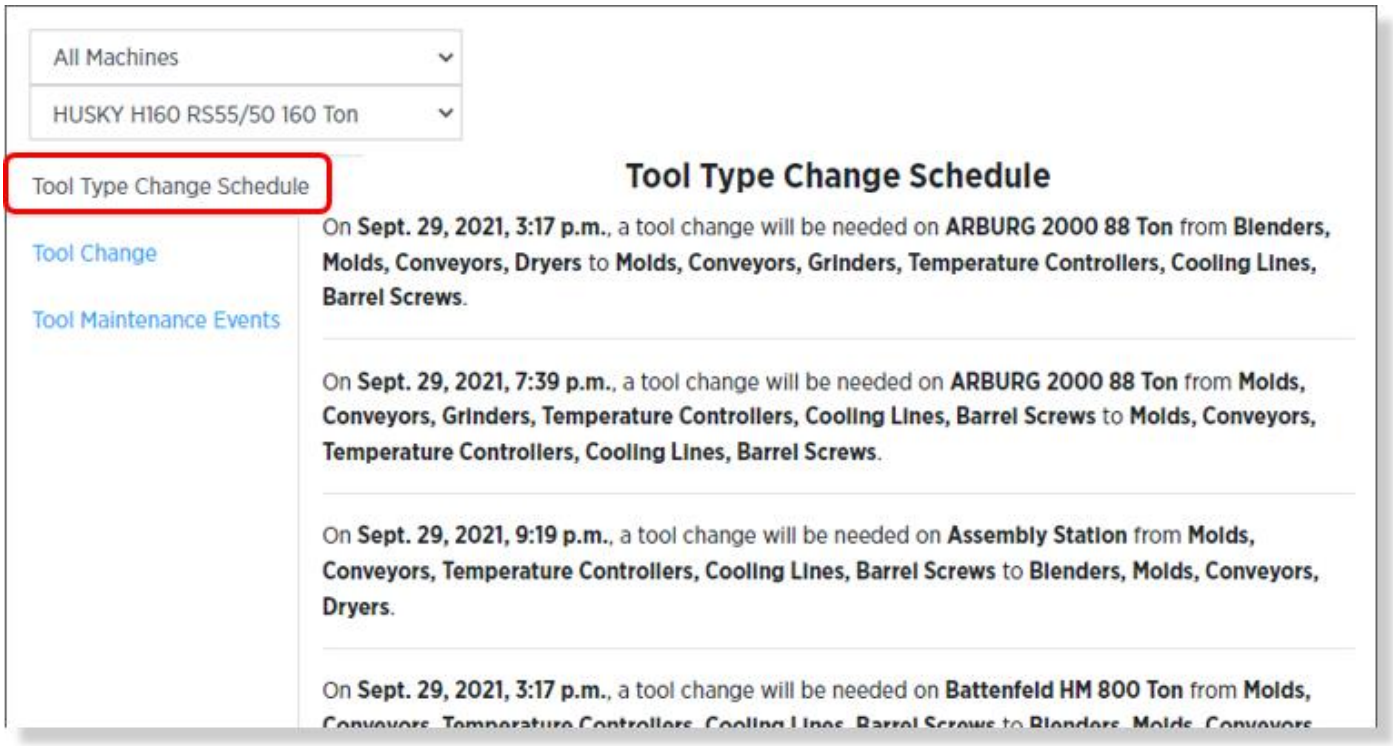
8. Tools

8.1 Overview

The **Tools** tab give you the ability to view and modify all upcoming scheduled tool changes for all machines connected to your DCM.

8.2 Tool Type Change Schedule

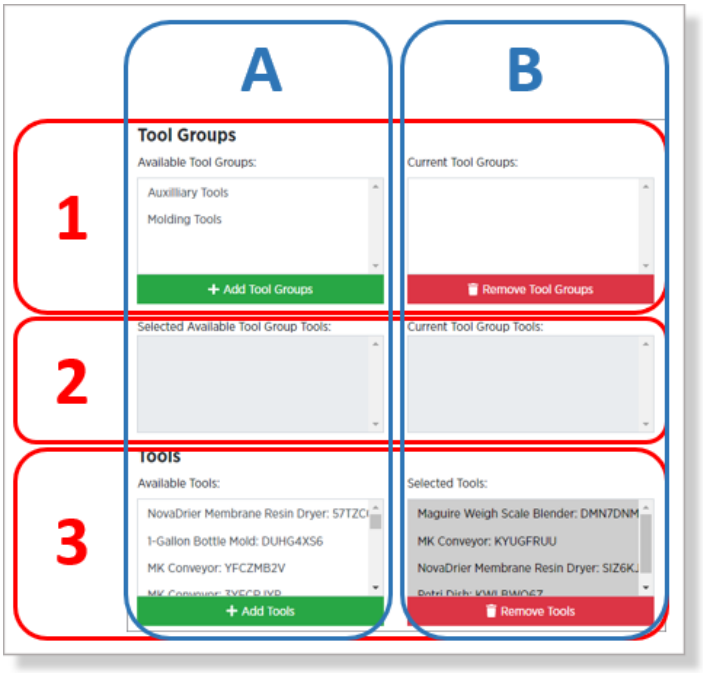
This is a list of all the upcoming Tool changes for each of the Machines connected to this DCM. They are arranged in ascending order by the Machine (according to when the Machine was created) and then in chronological order by time.



8.3 Tool Change Overview

Use the **Tool Change** panel to view and change tools for a currently running job. You can add or remove tools individually or via Tool Groups.

8.4 The Tool Change screen



This screen is quite simple if you break it down into columns and rows, as shown to the right.

The columns are:

A. Tools ***not*** assigned to the current job.
B. Tools that ***are*** assigned to the current job.

The rows are:

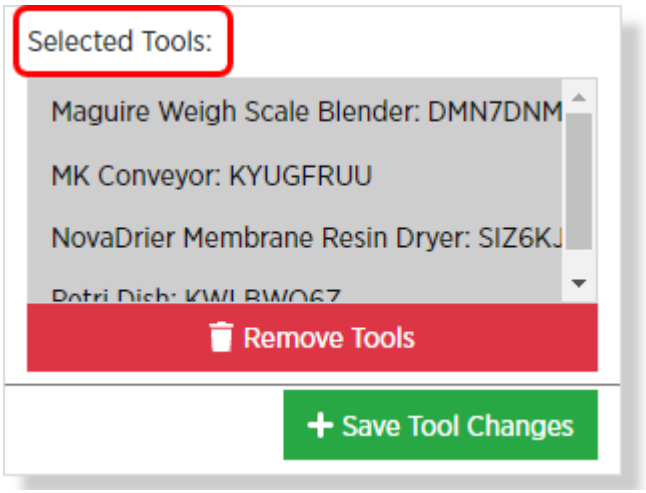
1. Tool Groups
2. All Tools within all ***selected*** Tool Groups.
3. Individual Tools.

Use the upper dropdown list to select between All Machines or a particular Machine Group. Use the lower dropdown list to select a particular Machine.

Any item in either column can be moved to the opposite column by selecting the item and clicking on the **Add** and/or **Remove** buttons.

Adjust the configuration until the correct tools for the job are shown in the **Selected Tools** pane in the lower-right corner of the screen.

Once the correct tools for the job are in this pane, click on the **Save Tool Changes** button.



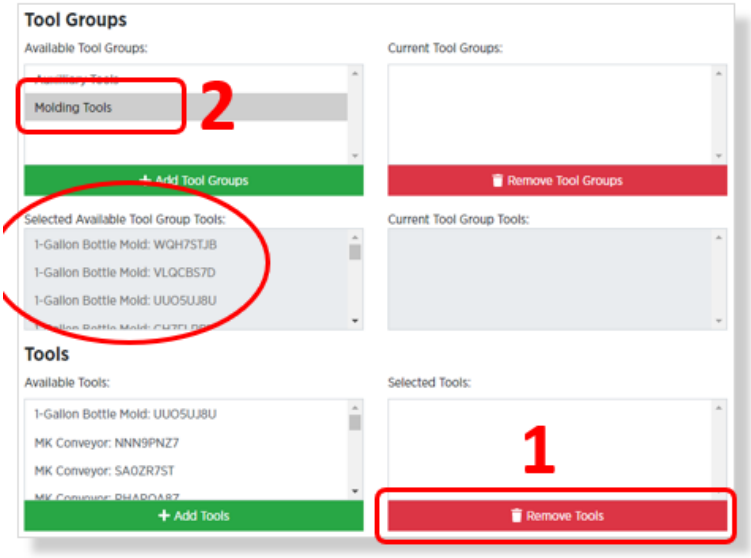
8.5 Tool Change Example

As an example, let's say we want to change the current tools to the following:

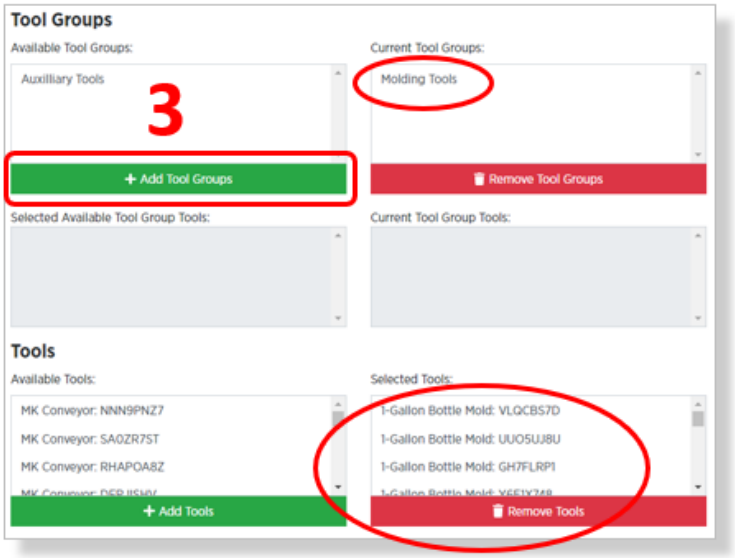
1. All tools in the Molding Tools tool group (yes, this is entirely unrealistic!)
2. The "MK Conveyor: RHAP0A8Z" tool.

To do this we will take the following steps:

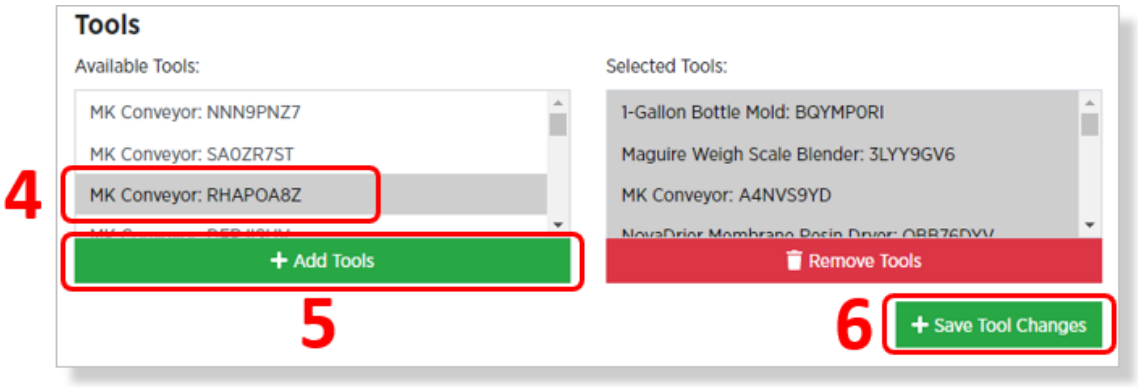
1. To make things simple, let's start by Deselecting all tools currently assigned to the current job. This is done by clicking on the **Remove Tools** button at the bottom of the **Selected Tools** pane. Note how the pane is now empty.
2. Click on "Molding Tools" in the Available **Tool Groups pane**. Note how all tools in this tool group now appear in the Selected Available Tool Groups pane.



3. Now click on the **Add Tool Groups** button. Notice how the "Molding Tools" group has moved to the **Current Tool Groups** pane and all the tools within the "Molding Tools" group now appear in the **Selected Tools** Pane.

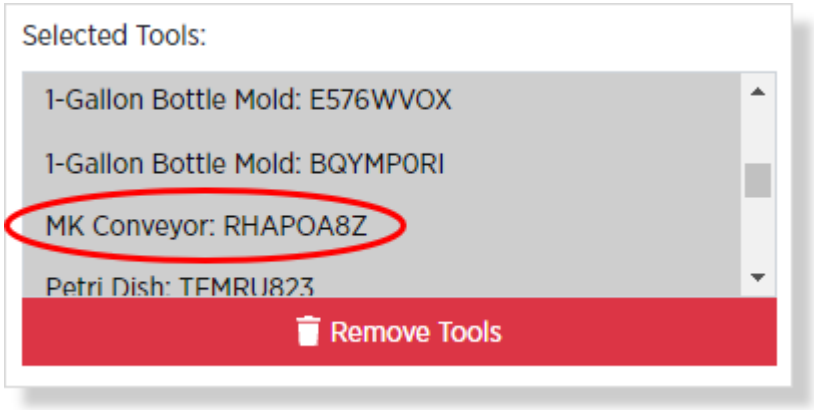


4. Now we need to add the single part to the job, we start by clicking on the desired tool ("MK Conveyor: RHAP0A8Z") in the **Available Tools** pane.



5. We then click on the **Add Tools** button.
6. And to complete the change, we click on the **Save Tool Changes** button.

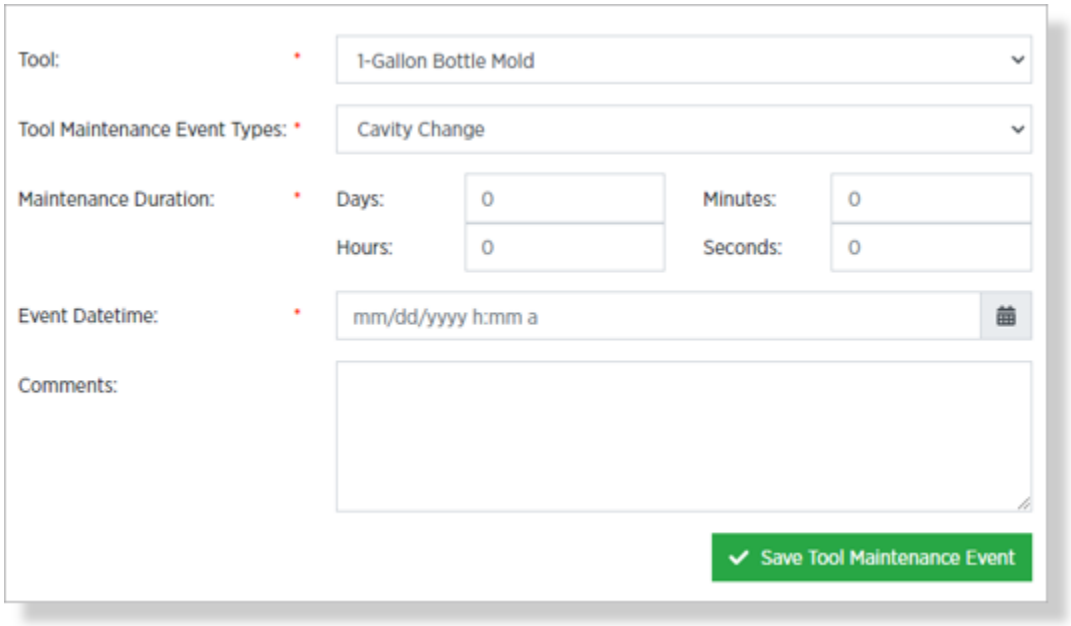
Assuming we did everything correctly, the **Selected Tools** pane should show the individual part, as well as all tools in the "Molding Tools" tool group.



8.5 Tool Maintenance Events

PlantStar lets you keep a log of **Tool Maintenance Events** to your database.

If Tool Maintenance Event Types have been named from the APU, you will be able to log them here.



Use the drop-down lists to select from available **Tools** and **Tool Maintenance Event Types**.

Use the **Days**, **Hours**, **Minutes** and **Seconds** field to the define the define *how long* the maintenance took in the **Maintenance Duration** section.

Enter the Event Datetime to define *when* the work was done, then click the **Save Tool Maintenance Event** button to save the log entry to the database.

Note: This information is typically logged *after* a Tool Maintenance Event has been completed. The system can then use the duration information to trigger Alerts prior to the next Tool Maintenance Event of the same type.

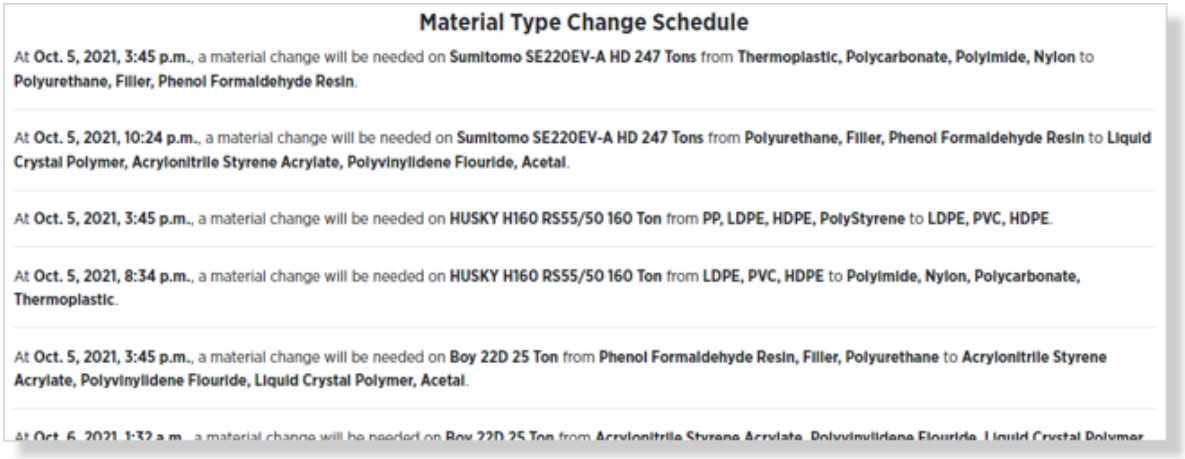
9. Materials

9.1 Overview

The Materials tab gives operators an overview of when materials changes will be needed, as well as a summary of the type and quantity of materials already used for each job.

9.2 Material Type Change Schedule

This is a display-only list of all the upcoming Materials Type changes for each of the Machines connected to this DCM. They are arranged chronologically and grouped by the Machine which will require the change.



Material Type Change Schedule

At **Oct. 5, 2021, 3:45 p.m.**, a material change will be needed on **Sumitomo SE220EV-A HD 247 Tons** from **Thermoplastic, Polycarbonate, Polyimide, Nylon** to **Polyurethane, Filler, Phenol Formaldehyde Resin**.

At **Oct. 5, 2021, 10:24 p.m.**, a material change will be needed on **Sumitomo SE220EV-A HD 247 Tons** from **Polyurethane, Filler, Phenol Formaldehyde Resin** to **Liquid Crystal Polymer, Acrylonitrile Styrene Acrylate, Polyvinylidene Flouride, Acetal**.

At **Oct. 5, 2021, 3:45 p.m.**, a material change will be needed on **HUSKY H160 RS55/50 160 Ton** from **PP, LDPE, HDPE, PolyStyrene** to **LDPE, PVC, HDPE**.

At **Oct. 5, 2021, 8:34 p.m.**, a material change will be needed on **HUSKY H160 RS55/50 160 Ton** from **LDPE, PVC, HDPE** to **Polyimide, Nylon, Polycarbonate, Thermoplastic**.

At **Oct. 5, 2021, 3:45 p.m.**, a material change will be needed on **Boy 22D 25 Ton** from **Phenol Formaldehyde Resin, Filler, Polyurethane** to **Acrylonitrile Styrene Acrylate, Polyvinylidene Flouride, Liquid Crystal Polymer, Acetal**.

At **Oct. 6, 2021, 1:32 a.m.**, a material change will be needed on **Boy 22D 25 Ton** from **Acrylonitrile Styrene Acrylate, Polyvinylidene Flouride, Liquid Crystal Polymer**

9.3 Material Usage

This is a break-down of Material Types and weights for the current Job on the selected Machine.

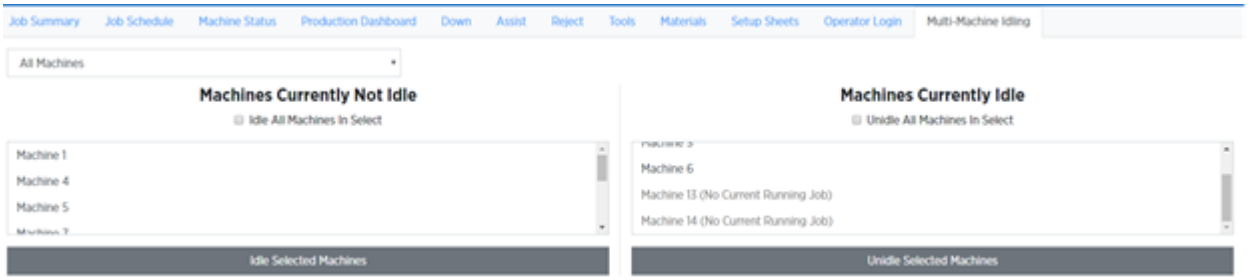
Material Type Usage (Water Bottle Cap, 1.2 Grams, 96-Cavity)

Material Type	Runner Weight	Good Parts Weight	Unconfirmed Parts Weight	Reject Parts Weight	Total Weight
Thermoplastic	0.0 Pounds	21096.0 Pounds	0.0 Pounds	408.0 Pounds	21504.0 Pounds
Nylon	0.0 Pounds	31644.0 Pounds	0.0 Pounds	612.0 Pounds	32256.0 Pounds
Polycarbonate	0.0 Pounds	26370.0 Pounds	0.0 Pounds	510.0 Pounds	26880.0 Pounds
Polyimide	0.0 Pounds	36918.0 Pounds	0.0 Pounds	714.0 Pounds	37632.0 Pounds

10. Multi-Machine Idling

10.1 Overview

Use this tab to quickly set multiple Machines to idle or bring multiple Machines up out of idle.



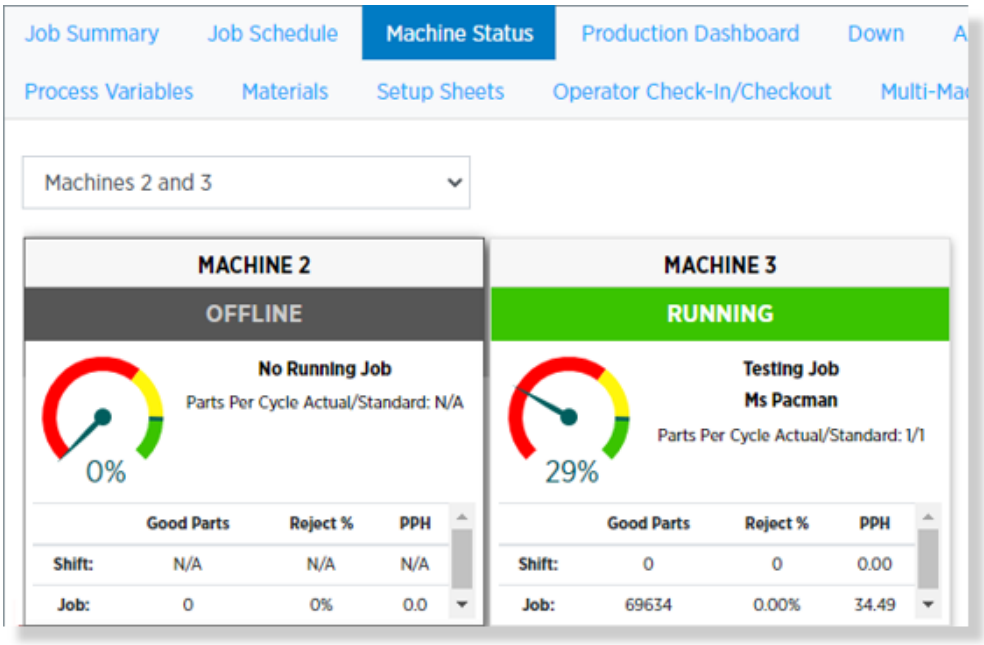
Select All Machines or one Machine Group from the drop-down list. You can then choose individual Machines by clicking on them, or all Machines by clicking the check box. Click the gray buttons at the bottom for your changes to take effect.

SYSCON PLANTSTAR

11. Machine Status

11.1 Overview

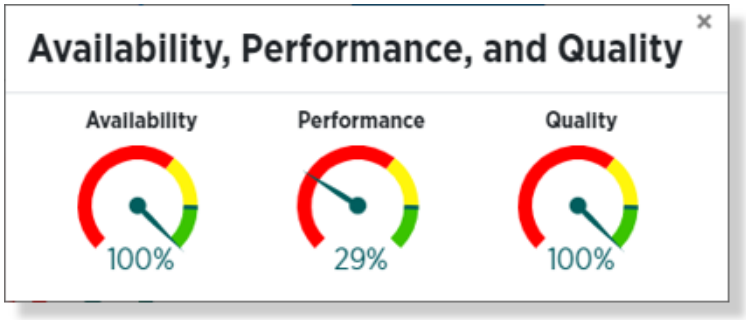
The Machine Status page shows you an up-to-date status of whatever Machines you have selected in the drop-down list. Choose All Machines or one of the Machine Groups.



11.2 Navigating the Machine Status tab

Click on the OEE gauge of any machine to see the up-to-date Availability, Performance, and Quality, metrics from the current Job on any Machine.

Click anywhere else on any machine's panel to navigate directly to that machine's Job Summary tab.

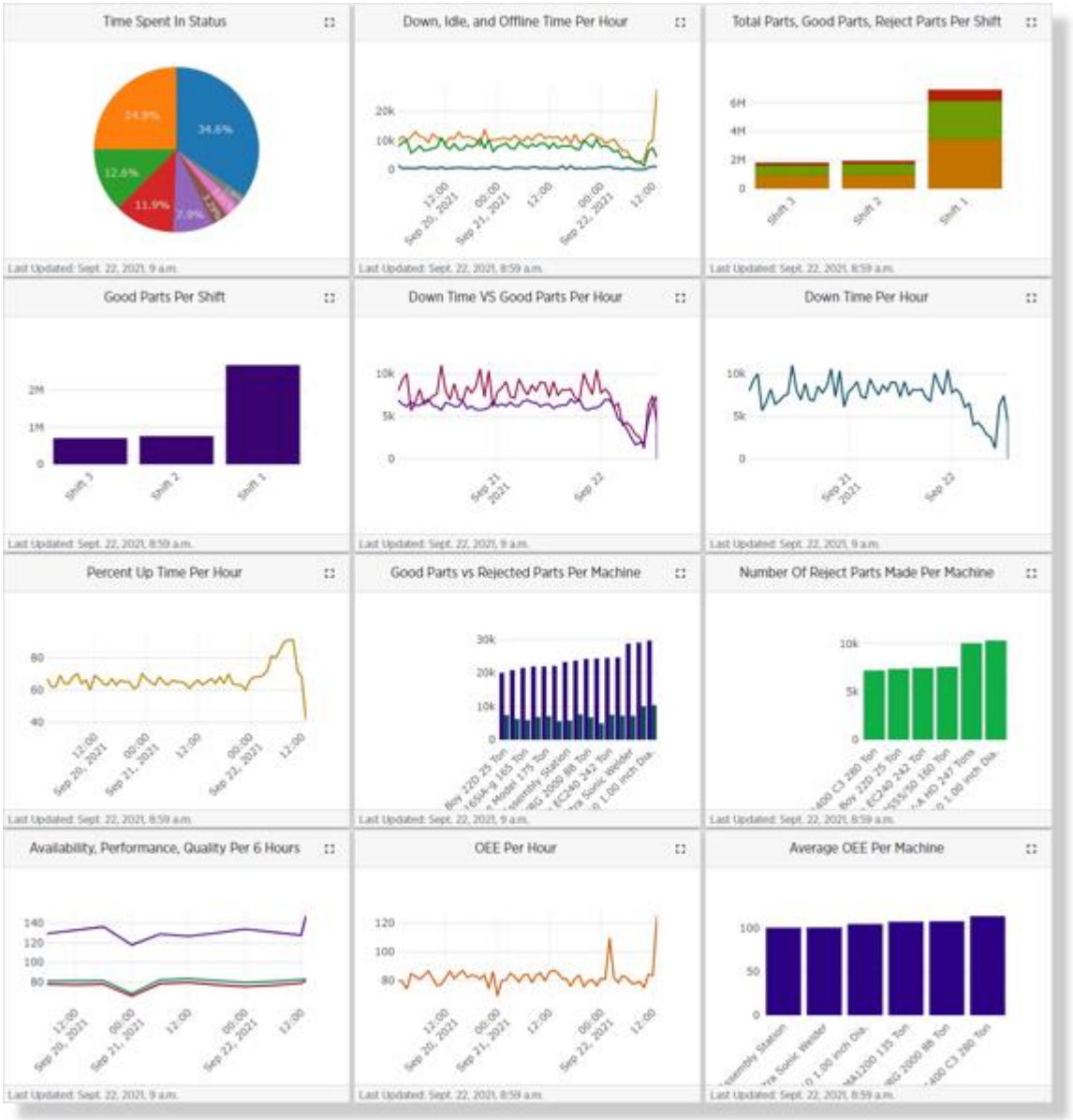


SYSCON PLANTSTAR

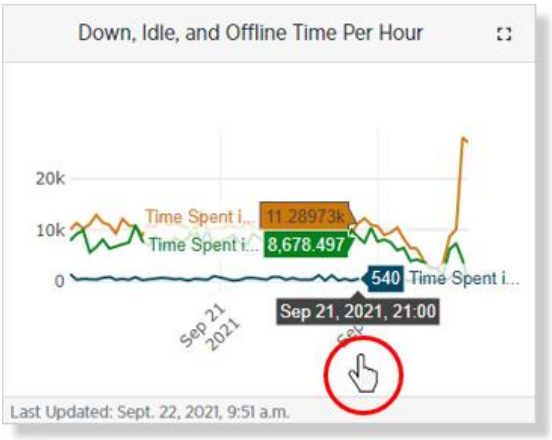
12. Production Dashboard

12.1 Overview

The Production Dashboard gives you at-a-glance, up-to-date comparisons of data about different machines, periods of time, productivity and process, shifts, and statuses.



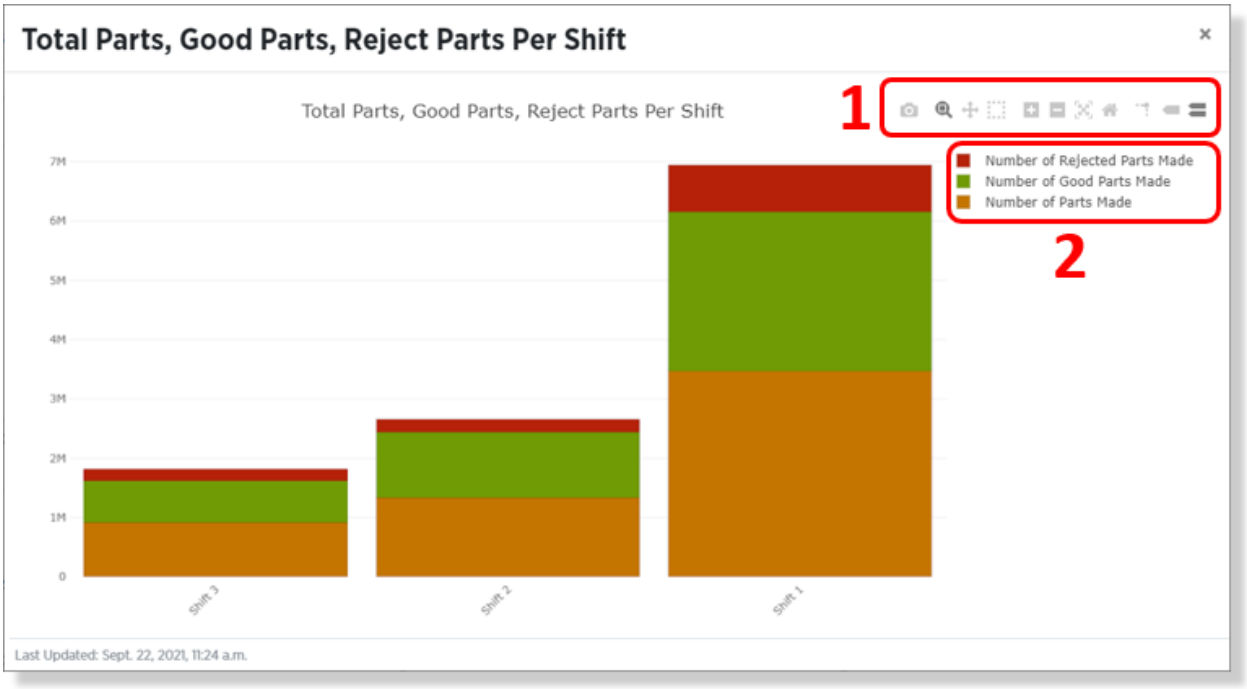
12.2 Dashboard View



The charts on the dashboard are interactive. Move your cursor around over the charts to get more detail about the data plotted on the charts.

Each chart on the dashboard includes an Expand button. Clicking on any of these will open a larger view of the chart, which will contain more controls.

12.3 Expanded Charts



Expanded charts are larger interactive versions of the dashboard chart with a couple of additional features:

1. Chart Control Buttons. These buttons are different for different chart types.
2. A legend showing what each color on the chart means.

12.4 Chart Controls

The expanded charts have several controls, which help to enhance your chart-viewing experience:

1. The **Download Plot as PNG** button saves the current chart, *as it currently appears*, to your computer's Downloads folder in .png format.

2. The **Zoom** button allows you to select a specific area of the chart to zoom-in and resize.

3. Use the **Pan** button to move the entire chart around in the chart window. This is particularly useful after the chart has been zoomed up.

4. Use the **Box Select** button to highlight a specific box or boxes on a stacked bar chart. This works well with the Dowload Plot a PNG button when trying to convey an issue.

5. The **Zoom In** and **Zoom Out** buttons make the *entire* chart larger and smaller.

6. Use the **Auto Scale** button to make the chart as big as will fit in the chart window.

7. **Reset Axes** simply undoes any display changes and shows the chart as appeared when you first expanded it.

8. If you click on point on a scatter chart while the scatter lines feature is turned on, dotted lines along that point's X and Y axes will be displayed. Use the **Toggle Spike Lines** button to turn this feature on or off.

9. The **Show Closest Data on Hover** and **Compare Data on Hover** buttons determine what data is displayed when you move your cursor over a chart or graph.