

STOCK AMERICA LLC.

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Sterilization Systems

# ICON<sup>SMS</sup> User Guide



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# STOCK AMERICA

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## ICON<sup>SMS</sup> User Guide

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## ICON<sup>SMS</sup> Application

ICON<sup>SMS</sup> is an intranet application that provides users the ability to develop, edit, and download recipes to STOCK retorts. The application also generates recipe reports, batch reports and process trend reports.

## Home Page

The home page displays the current status of the retorts. The information is populated from the database which is automatically updated every 6 seconds. Alternatively, the user can refresh the web page by using the refresh button. All information is grouped by pages and each page displays one or two retorts, depending on total number of retorts. The page toolbar is used to navigate between the pages (See figure 1).

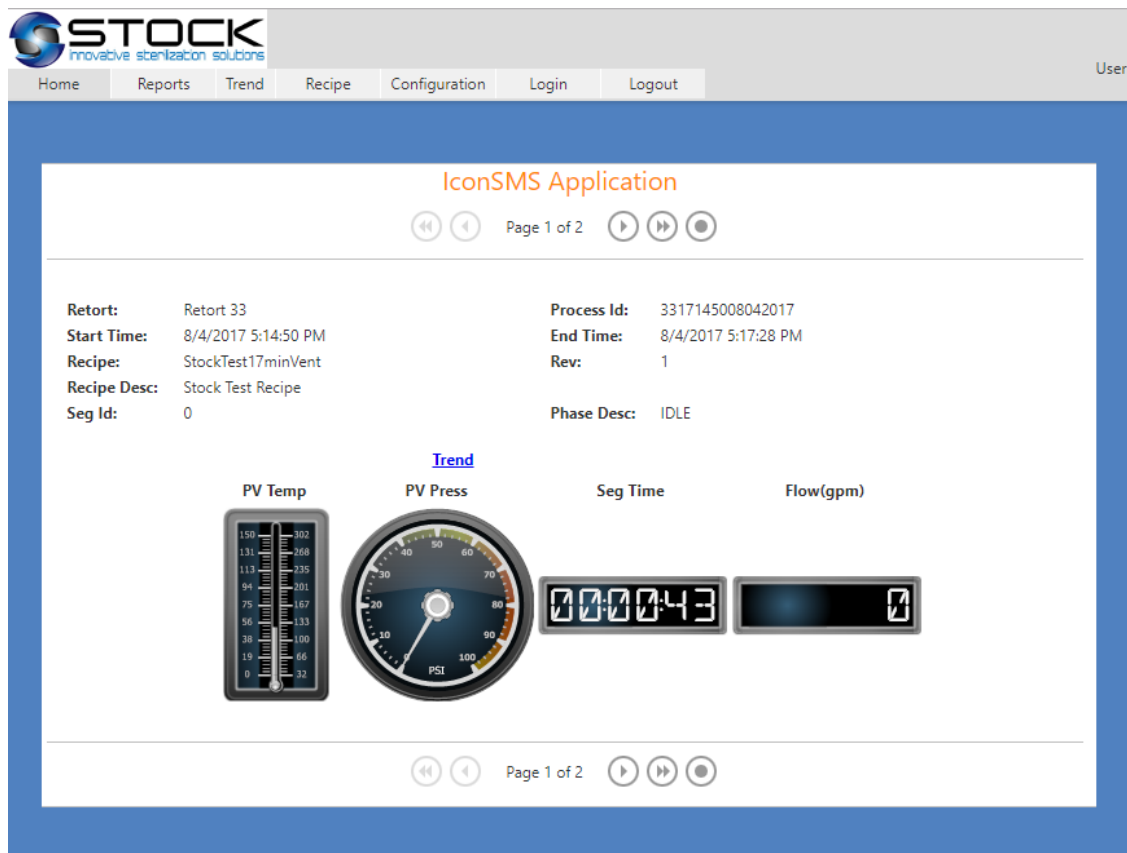


Figure 1 – Home Page

## Home Page Fields

|                    |  |
|--------------------|--|
| <b>Process Id:</b> | Batch Identification. RRHHMISSMMDDYYYY<br><br>RR – Retort number<br><br>HH – Hour of start of batch<br><br>MI – Minute of start of batch<br><br>SS – Second of start of batch<br><br>MM – Month of start of batch<br><br>DD – Day of start of batch<br><br>YYYY – Year of start of batch |
| <b>Retort:</b>     | Description of the retort  |
| <b>Start Time:</b> | Start time of the batch  |
| <b>End Time:</b>   | End time of the batch. If no value is shown the batch is in process and has not completed all programmed steps.  |
| <b>Recipe:</b>     | Name of the recipe   |
| <b>Rev:</b>        | Recipe revision  |
| <b>Prod Desc:</b>  | Description of the recipe revision   |
| <b>Seg Id:</b>     | Segment Id   |
| <b>Phase Desc:</b> | Phase description  |
| <b>PV Temp:</b>    | Temperature gauge displays the process vessel (PV) temperature ( tooltip available)  |
| <b>PV Press:</b>   | Pressure gauge displays the process vessel (PV) pressure (tooltip available)   |
| <b>Seg Time:</b>   | Digital numeric gauge displays the current segment time. (HH:MM:SS)  |
| <b>Flow</b>        | Process Vessel Circulation Flow.   |
| <b>Trend:</b>      | The trend link displays a process trend in a new window with an image displaying a ‘real time’ chart of the process (see Figure 2). See the section on Trend for more information.   |

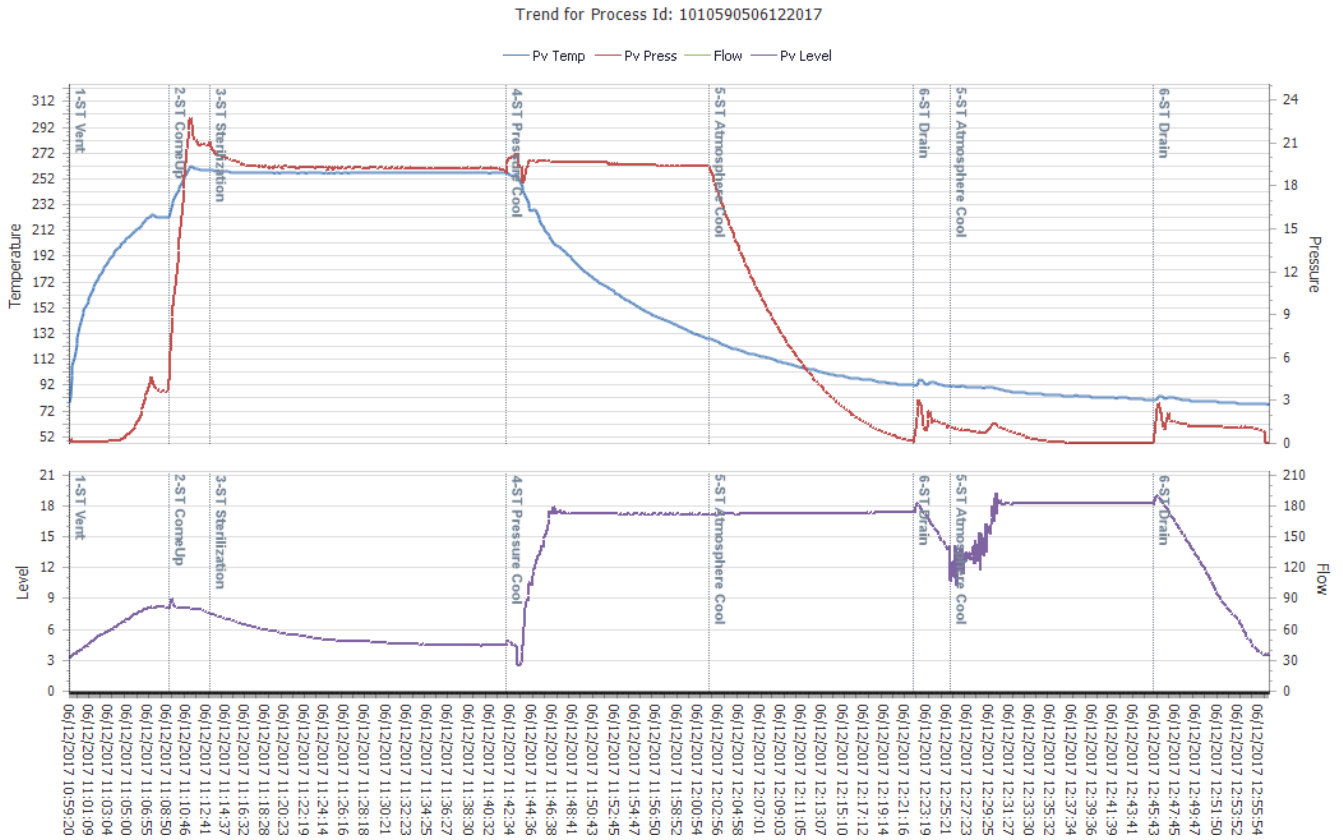


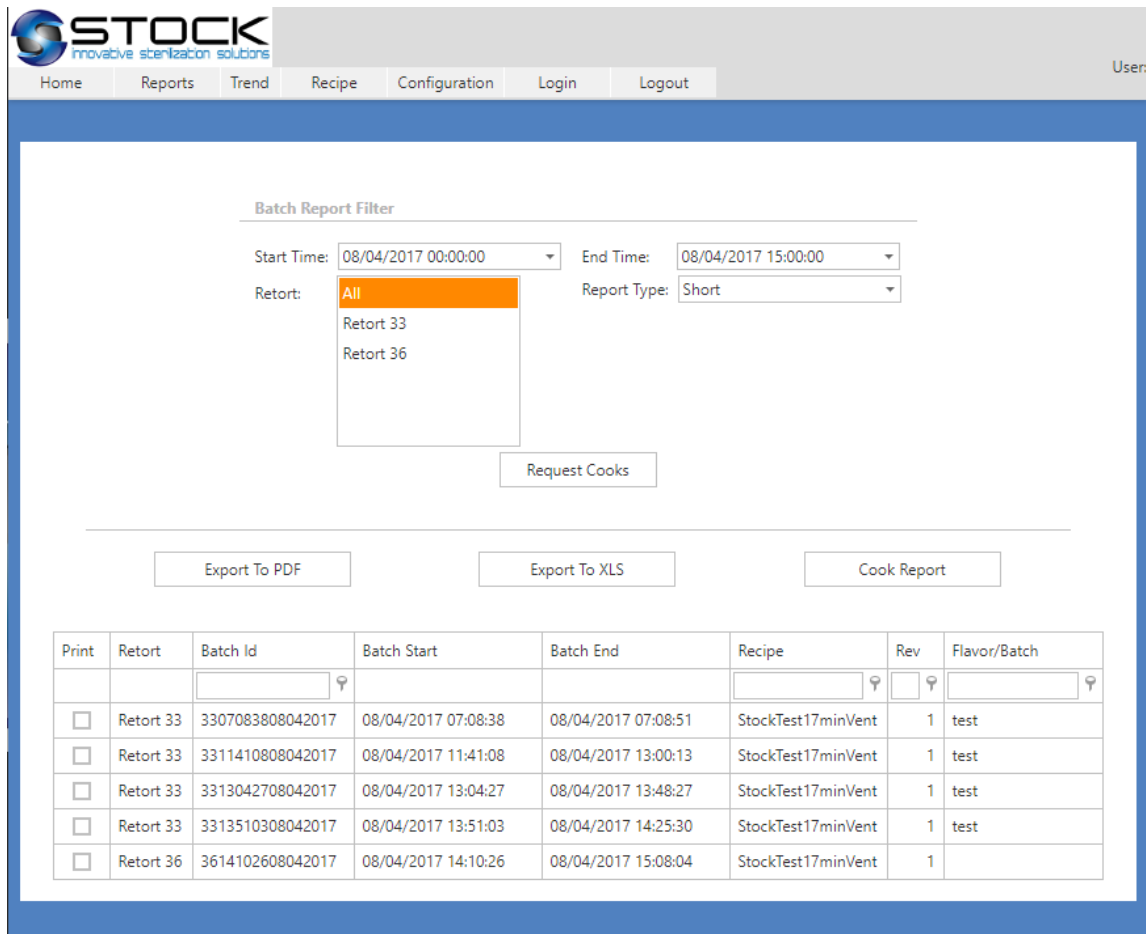
Figure 2 – Trend

## Reports

The reports menu allows the user to select from Batch Reports, Production Report, Alarm, Recipe, Recipe Download Status.

## Icon Report

This page allows the user to filter the search of batches based on the following fields: (see figure 3)



| Print                    | Retort    | Batch Id         | Batch Start         | Batch End           | Recipe             | Rev | Flavor/Batch |
|--------------------------|-----------|------------------|---------------------|---------------------|--------------------|-----|--------------|
| <input type="checkbox"/> | Retort 33 | 3307083808042017 | 08/04/2017 07:08:38 | 08/04/2017 07:08:51 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/> | Retort 33 | 3311410808042017 | 08/04/2017 11:41:08 | 08/04/2017 13:00:13 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/> | Retort 33 | 3313042708042017 | 08/04/2017 13:04:27 | 08/04/2017 13:48:27 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/> | Retort 33 | 3313510308042017 | 08/04/2017 13:51:03 | 08/04/2017 14:25:30 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/> | Retort 36 | 3614102608042017 | 08/04/2017 14:10:26 | 08/04/2017 15:08:04 | StockTest17minVent | 1   |              |

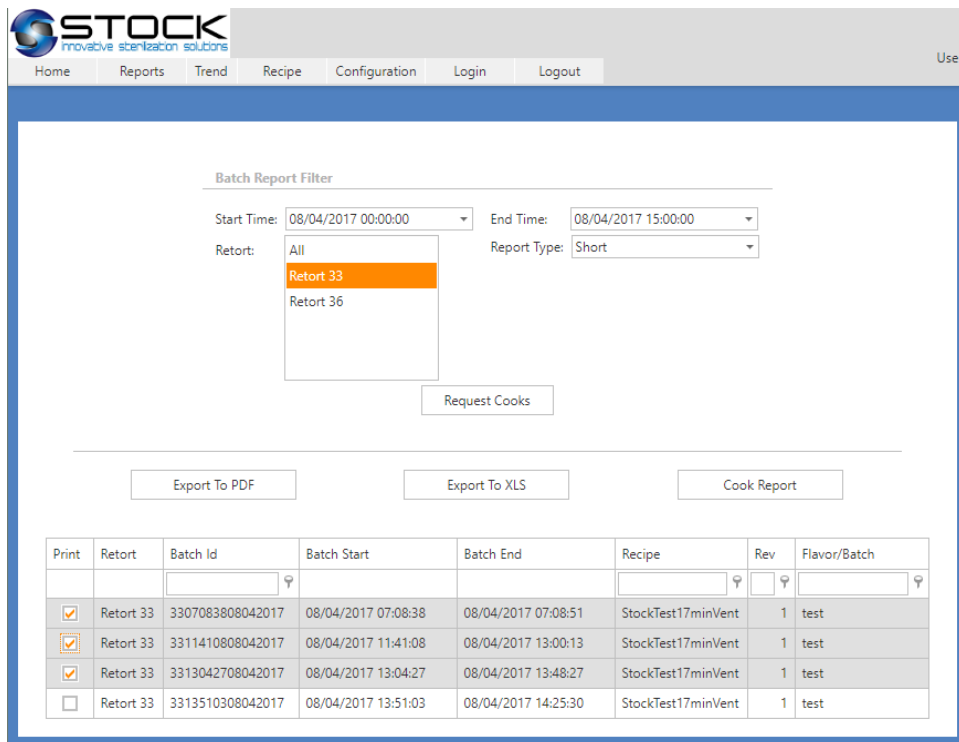
Figure 3 Batch Report Filter

### Batch Report Filter Fields

|                            |   |
|----------------------------|---|
| <b>Start Time:</b>         | Start time range of the search filter. Start time of the batch.   |
| <b>End Time:</b>           | End time Range of the search filter. End time of the batch.   |
| <b>Retort:</b>             | Filters the search by the selected retorts. To select multiple retorts, hold the control key (Ctrl) while selecting the retorts.                                    |
| <b>Report Type</b>         | Request the desired report format Long or Short. Long report displays all the batch phases. The short format hides the HSV and Drain Steps.                         |
| <b>Request Cooks:</b>      | Starts the batch search based upon the selected fields. When loaded, the system displays the batches for the current day for all retorts.                           |
| <b>Cook Report:</b>        | Requests selected reports. To select the desired batches, click the checkbox next to the batch of interest (see figure 4). The report will be render in pdf format. |
| <b>Export List to PDF:</b> | Exports the list of batches to a PDF file.  |
| <b>Export List to XLS:</b> | Exports the list of batches to an Excel file format.  |

The search results of the grid can be filter by the following fields Batch is, Recipe, Rev, Flavor or Batch. This option will allow you to further filter the search. The filter fields are located on the first record of the grid, by default the filter criteria is Containts but user

can change it by pressing the key icon next to the filter box the options are Begins with, Contains, Doesn't contain, Ends with, Equals and Doesn't equal. See figure 5



Batch Report Filter

Start Time: 08/04/2017 00:00:00 End Time: 08/04/2017 15:00:00

Retort: All (Selected) Retort 33 (Highlighted) Retort 36

Report Type: Short

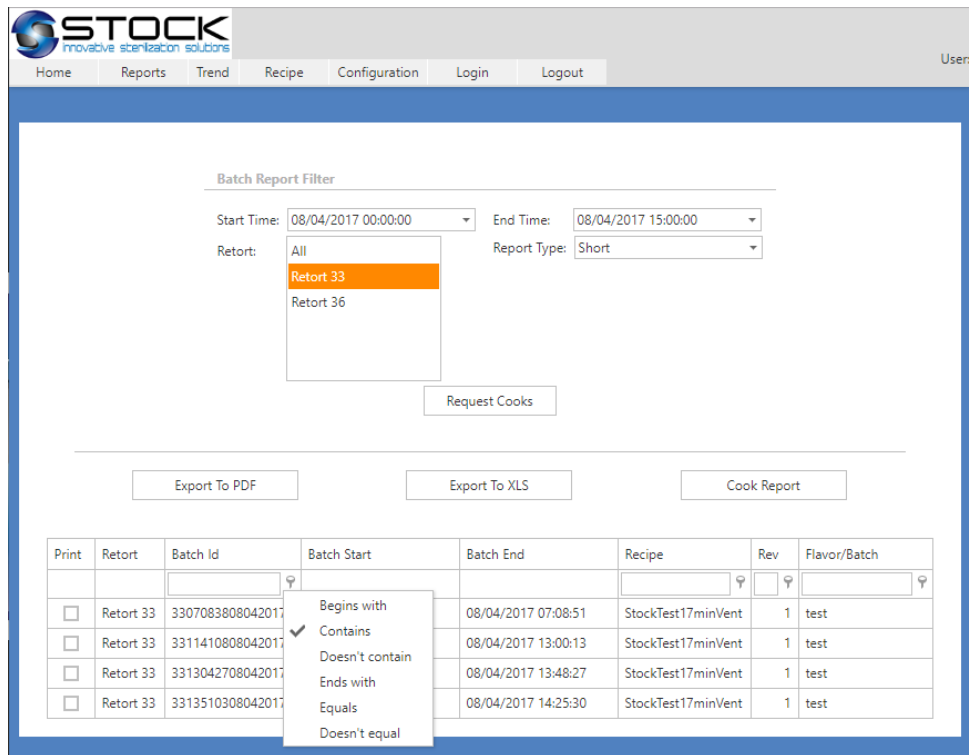
Request Cooks

Export To PDF Export To XLS Cook Report

| Print                               | Retort    | Batch Id         | Batch Start         | Batch End           | Recipe             | Rev | Flavor/Batch |
|-------------------------------------|-----------|------------------|---------------------|---------------------|--------------------|-----|--------------|
| <input checked="" type="checkbox"/> | Retort 33 | 3307083808042017 | 08/04/2017 07:08:38 | 08/04/2017 07:08:51 | StockTest17minVent | 1   | test         |
| <input checked="" type="checkbox"/> | Retort 33 | 3311410808042017 | 08/04/2017 11:41:08 | 08/04/2017 13:00:13 | StockTest17minVent | 1   | test         |
| <input checked="" type="checkbox"/> | Retort 33 | 3313042708042017 | 08/04/2017 13:04:27 | 08/04/2017 13:48:27 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/>            | Retort 33 | 3313510308042017 | 08/04/2017 13:51:03 | 08/04/2017 14:25:30 | StockTest17minVent | 1   | test         |

Figure 4 Batch Checkboxes





Batch Report Filter

Start Time: 08/04/2017 00:00:00 End Time: 08/04/2017 15:00:00

Retort: All Report Type: Short

Retort 33 (selected)

Retort 36

Request Cooks

Export To PDF Export To XLS Cook Report

| Print                    | Retort    | Batch Id         | Batch Start         | Batch End           | Recipe             | Rev | Flavor/Batch |
|--------------------------|-----------|------------------|---------------------|---------------------|--------------------|-----|--------------|
| <input type="checkbox"/> | Retort 33 | 3307083808042017 | 08/04/2017 07:08:51 | 08/04/2017 07:08:51 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/> | Retort 33 | 3311410808042017 | 08/04/2017 13:00:13 | 08/04/2017 13:00:13 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/> | Retort 33 | 3313042708042017 | 08/04/2017 13:48:27 | 08/04/2017 13:48:27 | StockTest17minVent | 1   | test         |
| <input type="checkbox"/> | Retort 33 | 3313510308042017 | 08/04/2017 14:25:30 | 08/04/2017 14:25:30 | StockTest17minVent | 1   | test         |

Figure 5 Grid Filter Options

The batch report is displayed in a new page as a PDF document (See figure 5). The standard Adobe Acrobat reader toolbar is displayed based on your web browser configuration. Beware since the report will be display on a new page make sure your browser is not block the new page request. By utilizing the toolbar, one is able to interact with the report (See figure 6).

| ICON SMS Batch Report       |                     | B&M Foods                     |  | Cook Cycle:         |                  |
|-----------------------------|---------------------|-------------------------------|--|---------------------|------------------|
| <b>Retort:</b>              | 33                  | <b>Batch:</b>                 | 3313042708042017   | <b>Cook Id:</b>     | test             |
| <b>Recipe:</b>              | StockTest17minVent  | <b>Description:</b>           | Stock Test Recipe  | <b>Rev:</b>         | 1 - Experimental |
| <b>Start Time:</b>          | 08/04/2017 13:04:27 | <b>End Time:</b>              | 08/04/2017 13:48:27  | <b>Duration:</b>    | 00:44:00         |
| <b>Container:</b>           | Cans - 12           | <b>Cont Qty:</b>              | 1234   |                     |                  |
| <b>Seg #:</b>               | <b>1</b>            | <b>ST Vent - 1</b>            | <b>PV Temp °F</b>  | <b>Sys Pres psi</b> |                  |
|                             |                     | 08/04/2017 13:04:27           | 174.8  | 0.0                 |                  |
|                             |                     | 08/04/2017 13:21:51           | 246.3  | 14.9                |                  |
| <b>Time In Seg:</b>         | 00:17:24            |                               |  |                     |                  |
| <b>Seg #:</b>               | <b>2</b>            | <b>ST ComeUp - 1</b>          | <b>PV Temp °F</b>  | <b>Sys Pres psi</b> |                  |
|                             |                     | 08/04/2017 13:21:51           | 246.3  | 14.9                |                  |
|                             |                     | 08/04/2017 13:24:51           | 248.1  | 13.7                |                  |
| <b>Time In Seg:</b>         | 00:03:00            |                               |  |                     |                  |
| <b>Seg #:</b>               | <b>3</b>            | <b>ST Sterilization - 1</b>   | <b>PV Temp °F</b>  | <b>Sys Pres psi</b> |                  |
|                             |                     | 08/04/2017 13:24:51           | 248.1  | 13.7                |                  |
|                             |                     | 08/04/2017 13:29:51           | 247.5  | 13.4                |                  |
| <b>Time In Seg:</b>         | 00:05:00            |                               |  |                     |                  |
| <b>Seg #:</b>               | <b>4</b>            | <b>ST Atmosphere Cool - 1</b> | <b>PV Temp °F</b>  | <b>Sys Pres psi</b> |                  |
|                             |                     | 08/04/2017 13:29:51           | 247.5  | 13.4                |                  |
|                             |                     | 08/04/2017 13:47:14           | 97.3   | 0.0                 |                  |
| <b>Time In Seg:</b>         | 00:17:23            |                               |  |                     |                  |
| <b>Total Come up time:</b>  | 00:20:24            |                               | <b>Total Cook Time:</b>  | 00:05:00            |                  |
| <b>User Actions Summary</b> |                     |                               |  |                     |                  |
| <b>Date / Time</b>          | <b>Seg</b>          | <b>Phase</b>                  | <b>Description</b>   | <b>Username</b>     |                  |
| 08/04/2017 13:04:27         | 1                   | ST Vent                       | Process Start  | op1                 |                  |
| 08/04/2017 13:04:27         | 1                   | ST Vent                       | Initial Temperature Entry: 90.0 °F   | op1                 |                  |
| 08/04/2017 13:26:25         | 3                   | ST Sterilization              | User Input First Entry - Ref. Temp: 248.3 °F - Chart Temp: 247.7 °F - Top/Bottom Bleeders: CHECKED | op1                 |                  |
| 08/04/2017 13:47:14         | 4                   | ST Atmosphere Cool            | Force Step Complete  | op1                 |                  |
| 08/04/2017 13:48:27         | 0                   | IDLE                          | Process Complete   | op1                 |                  |

Figure 6 – Report

### Batch Report Header

Each batch report displays a report header on the top of each page. The header contains information pertaining to the cook or batch. (See figure 7)

|                    |                     |                     |                     |                  |                  |
|--------------------|---------------------|---------------------|---------------------|------------------|------------------|
| <b>Retort:</b>     | 33                  | <b>Batch:</b>       | 3313042708042017    | <b>Cook Id:</b>  | test             |
| <b>Recipe:</b>     | StockTest17minVent  | <b>Description:</b> | Stock Test Recipe   | <b>Rev:</b>      | 1 - Experimental |
| <b>Start Time:</b> | 08/04/2017 13:04:27 | <b>End Time:</b>    | 08/04/2017 13:48:27 | <b>Duration:</b> | 00:44:00         |
| <b>Container:</b>  | Cans - 12           | <b>Cont Qty:</b>    | 1234                |                  |                  |

Figure 7 – Report Header

## Batch Report Header Fields

|                       |   |
|-----------------------|---|
| <b>Retort</b>         | Retort Id (numerical)   |
| <b>Batch</b>          | Batch Id is an automatically generated and unique identification used to identify the cook. The number is assigned at the beginning of each cook. The number represents: RRHHMISSMMDDYYYY<br>RR – Retort number<br>HH – Hour of start of batch<br>MI – Minutes of start of batch<br>SS – Seconds of start of batch<br>MM – Month of start of batch<br>DD – Day of start of batch<br>YYYY – Year of start of batch |
| <b>Flavor / Batch</b> | User entry at the start of the cook. The alphanumeric value can contain a maximum of 15 characters.   |
| <b>Recipe</b>         | Recipe Name   |
| <b>Description</b>    | Description of the recipe   |
| <b>Rev</b>            | Recipe revision number  |
| <b>Start Time</b>     | Start Time of the batch.  |
| <b>End Time</b>       | Completion time of the bath   |
| <b>Duration</b>       | Total duration of the batch   |
| <b>Container</b>      | Container type and size, information from recipe  |
| <b>Cont Qty</b>       | Total number of containers in a cook, information from recipe   |

## Batch Report Segment Data

The Segment Data Report displays information in relation to the process segment (See figure 8). The system captures the process information at the beginning of the segment start, at the end of the segment and at every step or segment of the process. Additional process fields may be displayed depending on the process mode.

| Seg #:       | HSV                 | PV Temp<br>°F | PV Pres<br>psi | Rotor<br>cpm | PV Level<br>% |
|--------------|---------------------|---------------|----------------|--------------|---------------|
| 1            | 1                   |               |                |              |               |
| Seg Begin    | 04/28/2010 00:00:23 | 97.1          | 0.0            | 0.0          | 1.0           |
| Seg End      | 04/28/2010 00:04:38 | 92.5          | 0.0            | 0.0          | 1.0           |
| Time In Seg: | 00:04:15            |               |                |              |               |

Figure 8 – Report Segment Data

## Batch Report Segment Fields

|                              |   |
|------------------------------|---|
| <b>Seg Begin and Seg End</b> | Time Stamp of the start and end of the segment  |
| <b>Phase - X</b>             | Phase Description follow by the Phase occurrence. (See Figure 8; it displays HSV – 1)   |
| <b>Process Fields</b>        | The report will show a series on columns displaying values of the process variables at the beginning and end of the step. The process variables will vary based on the retort type and they could be fields like PV Temperature, system pressure, pv level, Rotor RPM, ect. |
| <b>Time in Seg</b>           | Duration of the segment   |

## Batch Report Summary Time Data

The Summary Time Data Report displays the total process time for the following events: (See Figure 9)

|                              |                           |
|------------------------------|---------------------------|
| Total Come up time: 00:21:39 | Total Cook Time: 00:32:00 |
|------------------------------|---------------------------|

Figure 9 – Summary Time Data

## Batch Report Summary Time Data Fields

|                           |  |
|---------------------------|--|
| <b>Total Come Up Time</b> | Total time accumulated for the process phases considered in come up. |
| <b>Total Cook Time</b>    | Total time accumulated for the process cook phase.                   |

## Batch Report Alarm Summary

The Alarm Summary Report displays all the alarm information that occurred during a cook or batch. The following information is displayed. (See figure 10)

| Alarm Summary       |     |         |        |          |                     |               |             |          |           |
|---------------------|-----|---------|--------|----------|---------------------|---------------|-------------|----------|-----------|
| Date / Time         | Seg | Phase   | Status | Priority | Description         | Process Value | Alarm Limit | Duration | User name |
| 04/28/2010 00:06:28 | 4   | Come up | InAlm  | Alarm    | Alarm System PSI Hi | 30.7          | 20.0        |          | jcardenas |
| 04/28/2010 00:06:36 | 4   | Come up | Ack    | Alarm    | Alarm System PSI Hi | 30.8          | 20.7        | 00:00:08 | jcardenas |
| 04/28/2010 00:07:47 | 4   | Come up | OutAlm | Alarm    | Alarm System PSI Hi | 28.9          | 29.1        | 00:01:19 | jcardenas |

Figure 10 – Alarm Summary

## Batch Report Alarm Summary Fields

|                    |   |
|--------------------|---|
| <b>Date / Time</b> | Date/Time of the alarm status   |
| <b>Seg</b>         | Step or Segment in which an alarm occurred  |
| <b>Phase</b>       | Phase in which an alarm occurred  |
| <b>Status</b>      | InAlm – In Alarm when the condition goes into alarm<br>OutAlm – Out of Alarm when the condition goes out of alarm<br>Ack –Time the retort operator acknowledged the alarm event |
| <b>Priority</b>    | Deviation, Alarm, Warning   |
| <b>Description</b> | Description of the alarm condition  |



|                      |   |
|----------------------|---|
| <b>Process Value</b> | Process Value which triggers the alarm. For Digital or On/Off alarms the value will be one. |
| <b>Alarm Limit</b>   | Alarm Setpoint. For Digital or On/Off alarms the value will be 1                            |
| <b>Duration</b>      | Duration of the Status since the condition when in alarm                                    |
| <b>Username</b>      | Name of the user logged into the system at the time of the event                            |

## Batch Report User Actions Summary

The User Actions Summary Report reflects all the user events or actions performed during the batch or cook. The following information is displayed. (See figure 11)

### User Actions Summary

| Date / Time         | Seg | Phase         | Description   | Username  |
|---------------------|-----|---------------|---|-----------|
| 04/28/2010 00:00:23 | 1   | HSV           | Process Start   | jcardenas |
| 04/28/2010 00:04:38 | 1   | HSV           | Initial Temperature Entry: 152.0 °F                                 | jcardenas |
| 04/28/2010 00:25:54 | 5   | Sterilization | User Input First Entry - Ref. Temp: 251.0 °F - Chart Temp: 250.0 °F | jcardenas |
| 04/28/2010 00:56:50 | 0   | IDLE          | Process Complete  | jcardenas |

Figure 11 – Batch Report User Actions Summary

## Batch Report User Actions Summary Fields

|                    |  |
|--------------------|--|
| <b>Date / Time</b> | Date/ Time of the event  |
| <b>Seg</b>         | Segment in which the event occurred                              |
| <b>Phase</b>       | Phase description of the segment                                 |
| <b>Description</b> | Event Description  |
| <b>Username</b>    | Name of the user logged into the system at the time of the event |

## Batch Report Footer

Each batch report displays footer on the bottom of each page. The footer contains information pertaining to the cook or batch. (See figure 12)

Operator Review: \_\_\_\_\_ Printed Date: 08/07/2017 14:53:55 QA Review \_\_\_\_\_  
 Date: \_\_\_\_\_ Page: 1/1 Date: \_\_\_\_\_

Figure 12 – Report Footer

## Batch Report Footer Fields

|                        |   |
|------------------------|---|
| <b>Operator Review</b> | Field used by the operator who review of the report to write the date |
| <b>Date:</b>           | Field used by the operator reviewer of the report to write the date   |
| <b>Printed Date</b>    | Date / Time when the report was printed                               |
| <b>QA Review:</b>      | Field used by the QC reviewer of the report to sign                   |
| <b>Date</b>            | Field used by the QC reviewer of the report to write the date         |
| <b>Page x of y</b>     | Page number of total number of pages                                  |

## Batch Report Watermarks

The IconSMS batch report engine generates watermarks on the Icon Batch reports to provide means of identifying critical events or classification of the report. (See figure 13)

| Seg #   | Event                     | PV Temp °F      | PV Pres psi | Rotor cpm | PV Level % |
|---|---------------------------|-----------------|-------------|-----------|------------|
| Seg End 04/28/2010 00:04:38 92.5 0.0 0.0 1.0<br>Time In Seg: 00:04:15 |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Come up - Vent - 1</b> |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:04:38       | 92.5            | 0.0         | 0.0       | 1.0        |
| Seg End   | 04/28/2010 00:05:24       | 147.1           | 0.3         | 9.2       | 18.0       |
| Time In Seg: 00:00:46   |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Come up - Vent - 2</b> |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:05:24       | 147.1           | 0.3         | 9.2       | 18.0       |
| Seg End   | 04/28/2010 00:06:24       | 225.4           | 12.2        | 9.2       | 39.0       |
| Time In Seg: 00:01:00   |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Come up - 1</b>        |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:06:24       | 225.4           | 12.2        | 9.2       | 39.0       |
| Seg End   | 04/28/2010 00:17:44       | 251.1           | 27.4        | 19.5      | 94.0       |
| Time In Seg: 00:11:20   |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Sterilization - 1</b>  |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:17:44       | 251.1           | 27.4        | 19.5      | 94.0       |
| Seg End   | 04/28/2010 00:42:50       | 249.9           | 35.1        | 19.4      | 102.0      |
| Time In Seg: 00:25:06   |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Cooling 1 - 1</b>      |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:42:50       | 249.9           | 35.1        | 19.4      | 102.0      |
| Seg End   | 04/28/2010 00:45:40       | 177.9           | 35.6        | 19.4      | 85.0       |
| Time In Seg: 00:02:50   |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Cooling 2 - 1</b>      |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:45:40       | 177.9           | 35.6        | 19.4      | 85.0       |
| Seg End   | 04/28/2010 00:46:40       | 158.6           | 27.4        | 19.4      | 76.0       |
| Time In Seg: 00:01:00   |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Cooling 2 - 2</b>      |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:46:40       | 158.6           | 27.4        | 19.4      | 76.0       |
| Seg End   | 04/28/2010 00:54:40       | 93.6            | 12.3        | 19.5      | 75.0       |
| Time In Seg: 00:08:00   |                           |                 |             |           |            |
| <b>Seg #:</b>   | <b>Drain - 1</b>          |                 |             |           |            |
| Seg Begin   | 04/28/2010 00:54:40       | 93.6            | 12.3        | 19.5      | 75.0       |
| Seg End   | 04/28/2010 00:56:25       | 95.1            | 0.0         | 2.0       | 4.0        |
| Time In Seg: 00:01:45   |                           |                 |             |           |            |
| <b>Total Come up time:</b>  |                           | <b>00:13:05</b> |             |           |            |
| <b>Total Cook Time:</b>   |                           | <b>00:25:08</b> |             |           |            |

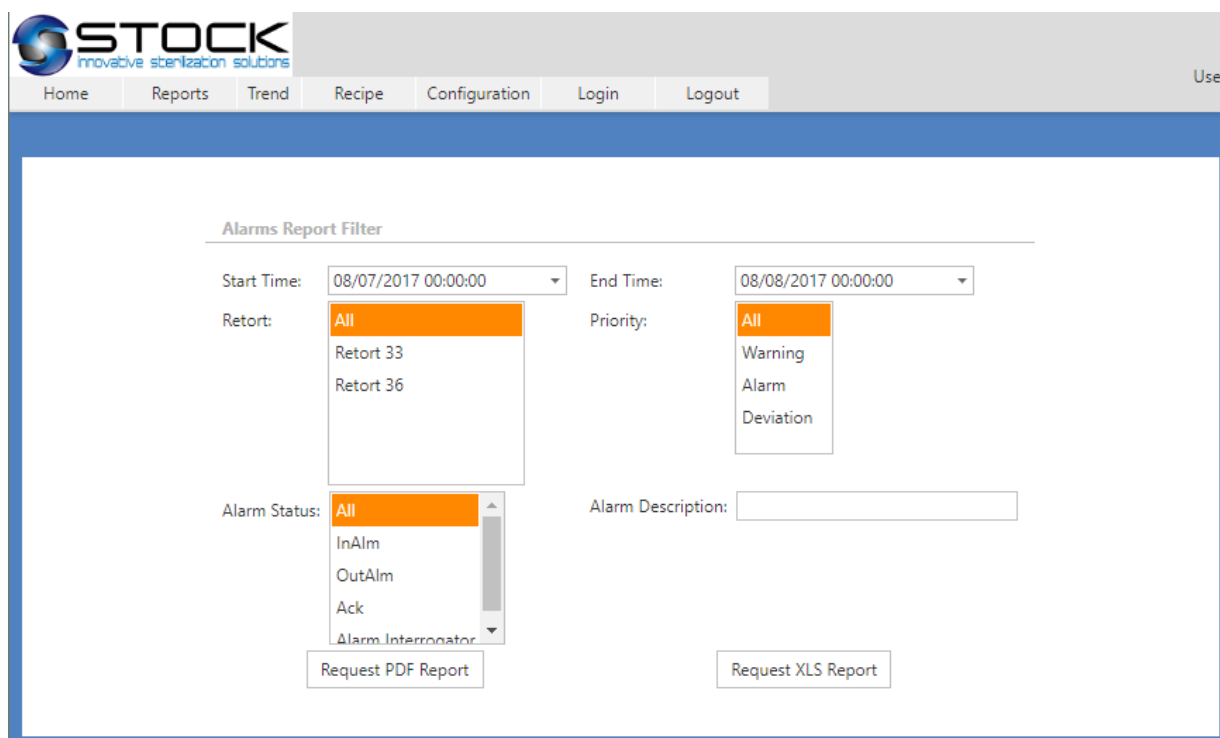
Figure 13 – Report Watermark

The possible watermarks on the reports are:

|  |   |
|--|---|
| <b>RE-PRINT NOT AN OFFICIAL RECORD</b>           | This watermark is printed when more than 24 hrs have elapsed since the cook or batch end date time.   |
| <b>DEVIATION –REVIEW REQUIRED:</b>               | Printed when the IconSMS system has detected a deviation condition.   |
| <b>ABORTED</b>                                   | Printed when a cook was aborted.  |
| <b>RE-PRINT ABORTED NOT AN OFFICIAL RECORD</b>   | Printed when the cook was aborted and more than 24 hrs have elapsed since the cook or batch end date time                                   |
| <b>RE-PRINT DEVIATION NOT AN OFFICIAL RECORD</b> | Printed when the IconSMS system has detected a deviation condition and more than 24 hrs have elapsed since the cook or batch end date time. |

## Alarm Report

The alarm report option from the menu enables the user to request a list of the alarms logged by the system by filtering the search based on the fields shown on figure 14. The report is grouped by retort and is sorted by retort and alarm date time.



The screenshot shows the 'Alarms Report Filter' interface within the STOCK application. The interface includes a navigation menu with 'Home', 'Reports', 'Trend', 'Recipe', 'Configuration', 'Login', and 'Logout'. The main content area contains the following fields and controls:

- Start Time:** 08/07/2017 00:00:00
- End Time:** 08/08/2017 00:00:00
- Retort:** A dropdown menu with 'All' selected, and options for 'Retort 33' and 'Retort 36'.
- Priority:** A dropdown menu with 'All' selected, and options for 'Warning', 'Alarm', and 'Deviation'.
- Alarm Status:** A dropdown menu with 'All' selected, and options for 'InAlm', 'OutAlm', 'Ack', and 'Alarm Interrogator'.
- Alarm Description:** An empty text input field.
- Request PDF Report** and **Request XLS Report** buttons.

Figure 14 – Alarm Report Filter

## Alarm Report Filter Fields

|                            |  |
|----------------------------|--|
| <b>Start Time:</b>         | Start time of the search. The time used for the filter is the start time of the alarms.  |
| <b>End Time:</b>           | End time of the search. The time used for the filter is the end time of the alarms.  |
| <b>Retort:</b>             | Filters the search by the selected retorts. To select multiple retorts, hold the control key (Ctrl) while selecting the retorts.   |
| <b>Priority:</b>           | Filters the search by the selected alarm priority. To select multiple priorities, hold the control key (Ctrl) while selecting the priority. Available options are: Deviation, Alarm and Warning      |
| <b>Alarm Description:</b>  | The system will filter the alarm description for the text typed on this field.   |
| <b>Alarm Status</b>        | Filters the search by the selected alarm status. To select multiple alarm status, hold the control key (Ctrl) while selecting the alarm status. The alarm status options are: InAlm, OutAlm and Ack. |
| <b>Request PDF Report:</b> | Requests the alarm report for the selected filters. The report will open as a pdf file (see figure 15a).   |
| <b>Request XLS Report:</b> | Requests the alarm report for the selected filters. The report will open as an Excel file (see figure 15a).  |



**ICON RMS Alarm Report**

Report Filter

Start Date / Time: 8/4/2017

End Date / Time: 8/8/2017

Retorts: All

Priority: All

Status: All

Desc:

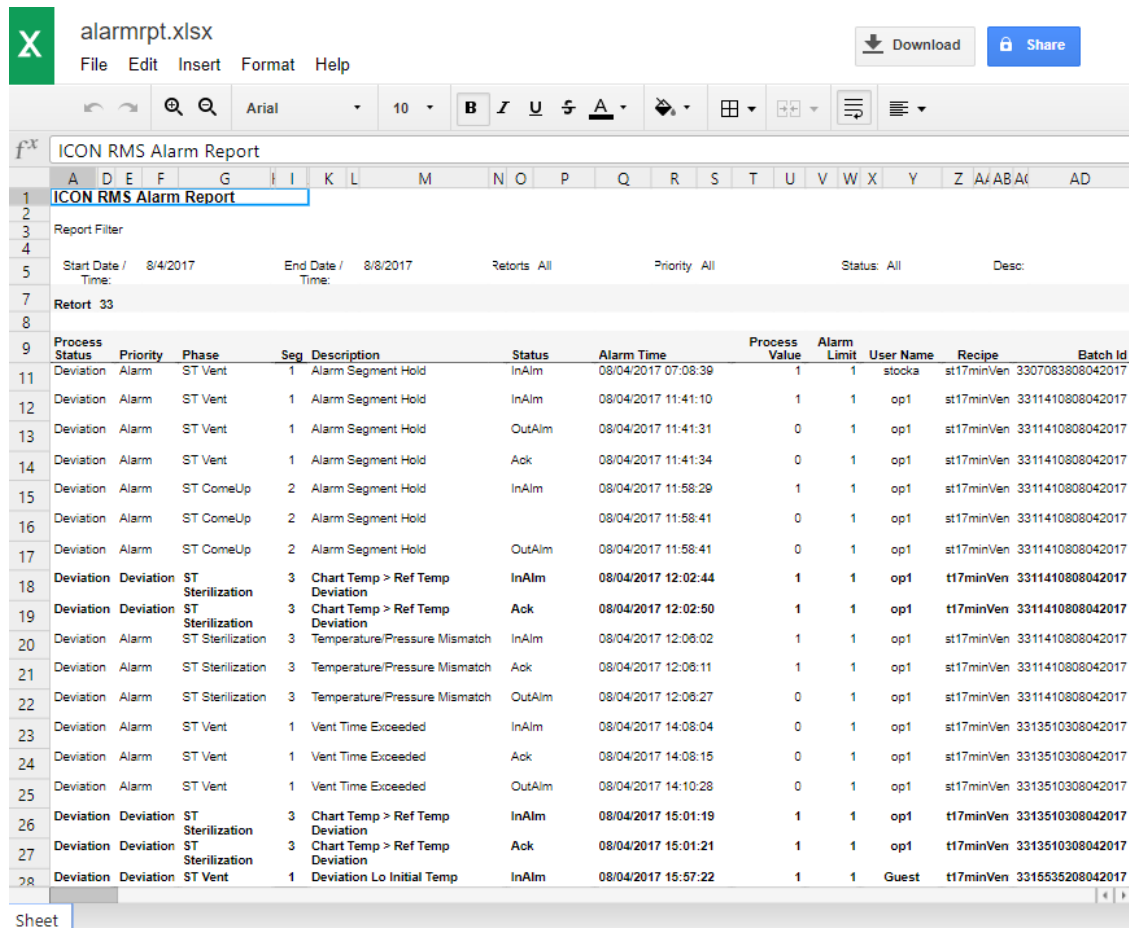
Retort: 33

| Process Status | Priority  | Phase            | Seg | Description                     | Status | Alarm Time          | Process Value | Alarm Limit | User Name | Recipe              | Batch Id         |
|----------------|-----------|------------------|-----|---------------------------------|--------|---------------------|---------------|-------------|-----------|---------------------|------------------|
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | InAlm  | 08/04/2017 07:08:39 | 1.00          | 1.00        | stocka    | StockTest17 minVent | 3307083808042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | InAlm  | 08/04/2017 11:41:10 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | OutAlm | 08/04/2017 11:41:31 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | Ack    | 08/04/2017 11:41:34 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST ComeUp        | 2   | Alarm Segment Hold              | InAlm  | 08/04/2017 11:58:29 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST ComeUp        | 2   | Alarm Segment Hold              | InAlm  | 08/04/2017 11:58:41 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST ComeUp        | 2   | Alarm Segment Hold              | OutAlm | 08/04/2017 11:58:41 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | InAlm  | 08/04/2017 12:02:44 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | Ack    | 08/04/2017 12:02:50 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST Sterilization | 3   | Temperature/Pressure Mismatch   | InAlm  | 08/04/2017 12:06:02 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST Sterilization | 3   | Temperature/Pressure Mismatch   | Ack    | 08/04/2017 12:06:11 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST Sterilization | 3   | Temperature/Pressure Mismatch   | OutAlm | 08/04/2017 12:06:27 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3311410808042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Vent Time Exceeded              | InAlm  | 08/04/2017 14:08:04 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3313510308042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Vent Time Exceeded              | Ack    | 08/04/2017 14:08:15 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3313510308042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Vent Time Exceeded              | OutAlm | 08/04/2017 14:10:28 | 0.00          | 1.00        | op1       | StockTest17 minVent | 3313510308042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | InAlm  | 08/04/2017 15:01:19 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3313510308042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | Ack    | 08/04/2017 15:01:21 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3313510308042017 |
| Deviation      | Deviation | ST Vent          | 1   | Deviation Lo Initial Temp       | InAlm  | 08/04/2017 15:57:22 | 1.00          | 1.00        | Guest     | StockTest17 minVent | 3315535208042017 |
| Deviation      | Deviation | ST Vent          | 1   | Deviation Lo Initial Temp       | Ack    | 08/04/2017 15:58:13 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3315535208042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Short CUT Segment Time          | InAlm  | 08/04/2017 16:01:37 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3315535208042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Short CUT Segment Time          | Ack    | 08/04/2017 16:01:42 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3315535208042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | InAlm  | 08/04/2017 16:02:27 | 1.00          | 1.00        | op1       | StockTest17 minVent | 3315535208042017 |

Printed: 08/07/2017 15:34:13

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Figure 15a – Alarm Report



| Process Status | Priority  | Phase            | Seg | Description                     | Status | Alarm Time          | Process Value | Alarm Limit | User Name | Recipe     | Batch Id         |
|----------------|-----------|------------------|-----|---------------------------------|--------|---------------------|---------------|-------------|-----------|------------|------------------|
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | InAlm  | 08/04/2017 07:08:39 | 1             | 1           | stocka    | st17minVen | 3307083308042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | InAlm  | 08/04/2017 11:41:10 | 1             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | OutAlm | 08/04/2017 11:41:31 | 0             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Alarm Segment Hold              | Ack    | 08/04/2017 11:41:34 | 0             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST ComeUp        | 2   | Alarm Segment Hold              | InAlm  | 08/04/2017 11:58:29 | 1             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST ComeUp        | 2   | Alarm Segment Hold              | InAlm  | 08/04/2017 11:58:41 | 0             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST ComeUp        | 2   | Alarm Segment Hold              | OutAlm | 08/04/2017 11:58:41 | 0             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | InAlm  | 08/04/2017 12:02:44 | 1             | 1           | op1       | t17minVen  | 3311410808042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | Ack    | 08/04/2017 12:02:50 | 1             | 1           | op1       | t17minVen  | 3311410808042017 |
| Deviation      | Alarm     | ST Sterilization | 3   | Temperature/Pressure Mismatch   | InAlm  | 08/04/2017 12:06:02 | 1             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST Sterilization | 3   | Temperature/Pressure Mismatch   | Ack    | 08/04/2017 12:06:11 | 1             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST Sterilization | 3   | Temperature/Pressure Mismatch   | OutAlm | 08/04/2017 12:06:27 | 0             | 1           | op1       | st17minVen | 3311410808042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Vent Time Exceeded              | InAlm  | 08/04/2017 14:08:04 | 0             | 1           | op1       | st17minVen | 3313510308042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Vent Time Exceeded              | Ack    | 08/04/2017 14:08:15 | 0             | 1           | op1       | st17minVen | 3313510308042017 |
| Deviation      | Alarm     | ST Vent          | 1   | Vent Time Exceeded              | OutAlm | 08/04/2017 14:10:28 | 0             | 1           | op1       | st17minVen | 3313510308042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | InAlm  | 08/04/2017 15:01:19 | 1             | 1           | op1       | t17minVen  | 3311410808042017 |
| Deviation      | Deviation | ST Sterilization | 3   | Chart Temp > Ref Temp Deviation | Ack    | 08/04/2017 15:01:21 | 1             | 1           | op1       | t17minVen  | 3313510308042017 |
| Deviation      | Deviation | ST Vent          | 1   | Deviation Lo Initial Temp       | InAlm  | 08/04/2017 15:57:22 | 1             | 1           | Guest     | t17minVen  | 3315535208042017 |

Figure 15b – Alarm Report

## Alarm Report Header

The alarm report header is displayed on every page and it contains the information that was used to filter the request. Each page header contains the following information. (See figure 16)

### ICON RMS Alarm Report

Report Filter

Start Date / Time: 4/27/2010 5:00:00 AM End Date / Time: 4/29/2010 1:40:00 PM Retorts: 2,4,6 Priority: Deviation,Alarm Status: InAlm,OutAlm Desc: Pause

Retort: 2

| Recipe | Batch Id         | Process Status | Alarm Time        | Duration | Seg | Phase   | Status | Priority  | Description             | Process Value | Alarm Limit | User Name |
|--------|------------------|----------------|-------------------|----------|-----|---------|--------|-----------|-------------------------|---------------|-------------|-----------|
| OP61   | 0205574704272010 | Deviation      | 04/27/10 06:09:41 |          | 1   | HSV     | InAlm  | Deviation | Deviation Process Pause | 1             | 1           | jcardenas |
| OP61   | 0205574704272010 | Deviation      | 04/27/10 06:09:41 |          | 1   | HSV     | InAlm  | Alarm     | Alarm Process Pause     | 1             | 1           | jcardenas |
| OP61   | 0205574704272010 | Deviation      | 04/27/10 06:09:49 | 00:00:08 | 1   | HSV     | OutAlm | Alarm     | Alarm Process Pause     | 0             | 1           | jcardenas |
| OP61   | 0205574704272010 | Deviation      | 04/27/10 06:09:49 | 00:00:08 | 1   | HSV     | OutAlm | Deviation | Deviation Process Pause | 0             | 1           | jcardenas |
| OP41   | 0217370004282010 | Deviation      | 04/28/10 18:13:44 |          | 4   | Come up | InAlm  | Deviation | Deviation Process Pause | 1             | 1           | jcardenas |

Figure 16 – Alarm Report Header

## Alarm Report Header Fields

|                        |   |
|------------------------|---|
| <b>Start Date/Time</b> | Start Date/Time of the search. The date/time used for the filter is the start time of the alarms. |
| <b>End Date/Time</b>   | End Date/Time of the search. The date/ time used for the filter is the end time of the alarms.    |
| <b>Retorts</b>         | Selected retorts for the search.  |
| <b>Priority</b>        | Selected alarm priority for the search. Priority options are: Deviation, Alarm and Warning.       |
| <b>Status</b>          | Selected alarm status for the search. The alarm status options are: InAlm, OutAlm and Ack.        |
| <b>Desc</b>            | Alarm description used to filter.   |

## Alarm Report

The Alarm Report displays all the alarm information that occurred for the search criteria. The report is group by Retort and sorted by Retort and the alarm date/time. The report also highlights any deviation alarms by displaying the text in bold. (See figure 16)

## Alarm Report Alarm Fields

|                       |   |
|-----------------------|---|
| <b>Retort</b>         | Retort Id   |
| <b>Recipe</b>         | Recipe Name   |
| <b>Batch Id</b>       | Batch Id in which the alarm occurred  |
| <b>Process Status</b> | Status of the process, if process completed, aborted, or Deviation  |
| <b>Alarm Time</b>     | Date/Time of the alarm status   |
| <b>Seg</b>            | Step or Segment in which an alarm occurred  |
| <b>Phase</b>          | Phase in which an alarm occurred  |
| <b>Status</b>         | InAlm – In Alarm when the condition goes into alarm<br>OutAlm – Out of Alarm when the condition goes out of alarm<br>Ack –Time the retort operator acknowledged the alarm event |
| <b>Priority</b>       | Deviation<br>Alarm<br>Warning   |
| <b>Description</b>    | Description of the alarm condition  |
| <b>Process Value</b>  | Process Value which triggered the alarm. For Digital or On/Off alarms the value will be one.  |
| <b>Alarm Limit</b>    | Alarm Setpoint. For Digital or On/Off alarms the value will be 1  |
| <b>Username</b>       | Name of the user logged into the system at the time of the event  |

## Summary Batch Report

### Summary Batch Report Filter

The summary batch report provides a filter to search the batches based on the following fields: (See figure 28)

|                          |   |
|--------------------------|---|
| <b>Batch Start Time:</b> | Start time of the filtered date range search. |
| <b>Batch End Time:</b>   | End time of the filtered date range search.   |

|                       |  |
|-----------------------|--|
| <b>Retort:</b>        | Filters the search by the selected retorts. To select multiple retorts, hold the shift key while selecting the retorts.  |
| <b>Request Cooks:</b> | Begins the search based on the selected fields. When the page is initially loaded, the system will display the information on all retorts for the current day. |

Summary Batch Report

Start Time: 08/08/2017 00:00:00      End Time: 08/09/2017 00:00:00      Recipe: All

Retort: All      Review Status: All      Batch Status: All

Retort 1  
Retort 2  
Retort 3  
Retort 4  
Retort 5

Request Cooks

Figure 28 – Summary Batch Report Filter

## Summary Batch Report

The request cooks populate the grid information shown below on the grid. The grid data can be exported to excel or pdf. The summary batch report displays the summary information for all the cooks for the filter criteria. The status field will show if a cook was completed, aborted or deviation; then the status of a cook is aborted or deviated the record or row will be show red. The report is grouped by Product Code or Recipe Name, Recipe Revision and by Flavor/Batch. (See figure 29). The purpose of the report is to summarize all the cooks by displaying the most important critical factors.

Summary Batch Report

Start Time:  End Time:  Recipe:

Retort:  Review Status:  Batch Status:

- Retort 1
- Retort 2
- Retort 3
- Retort 4
- Retort 5

Request Cooks

Export To PDF

Export To XLS

Summary Batch Report

| Batch #                  | Status               | Rotomat Batch Id                 | R#                   | Start Time          | Total CUT | Cook Time | PV Temp (F) | R. Temp (F) | Chart | Press (psi) | PV Lvl (%) | RPM  |
|--------------------------|----------------------|----------------------------------|----------------------|---------------------|-----------|-----------|-------------|-------------|-------|-------------|------------|------|
| <input type="checkbox"/> | <input type="text"/> | <input type="text"/>             | <input type="text"/> |                     |           |           |             |             |       |             |            |      |
|                          | Deviation            | <a href="#">0309040609252017</a> | 3                    | 09/25/2017 09:04:52 | 00:13:27  | 00:11:36  | 250.4       | 251.7       | 250.5 | 33          | 72         | 19.2 |
|                          | Deviation            | <a href="#">0810451909252017</a> | 8                    | 09/25/2017 10:46:49 | 00:13:47  | 00:25:19  | 250.3       | 251.4       | 250   | 34.1        | 74.8       | 19.3 |
|                          | Completed            | <a href="#">0113365209252017</a> | 1                    | 09/25/2017 13:37:47 | 00:13:20  | 00:43:45  | 250.2       | 251.3       | 250   | 34.1        | 75.5       | 19.3 |
|                          | Completed            | <a href="#">0213550009252017</a> | 2                    | 09/25/2017 13:56:20 | 00:13:55  | 00:42:32  | 250.2       | 251.1       | 250   | 34.8        | 75.2       | 19.4 |
|                          | Aborted              | <a href="#">0314035009252017</a> | 3                    |                     |           |           |             |             |       |             |            |      |
|                          | Completed            | <a href="#">0514115109252017</a> | 5                    | 09/25/2017 14:28:01 | 00:13:29  | 00:42:32  | 250.2       | 251.3       | 250   | 35.6        | 75.3       | 19.3 |
|                          | Aborted              | <a href="#">0314193409252017</a> | 3                    |                     |           |           |             |             |       |             |            |      |



**Summary Batch Report**

Report Filters:  
 Start Time: 09/25/2017 00:00 End Time: 09/27/2017 00:00 Recipe: All Retorts: All Review Status: All Batch Status: All

Recipe: **OP 83** Revision: **1** Flavor:

| Item | Status    | Rotomat Batch Id | R# | IT Temp (F) | Start Time        | Total Cut (hh:mm:ss) | Cook Time (hh:mm:ss) | PV Temp (F) | TID Temp (F) | Chart (F) | Press (psi) | PV Lvl (%) | RPM  |
|------|-----------|------------------|----|-------------|-------------------|----------------------|----------------------|-------------|--------------|-----------|-------------|------------|------|
| 1    | Deviation | 0810451909252017 | 8  | 130         | 09/25/17 10:46:49 | 00:13:47             | 00:25:19             | 250.3       | 251.4        | 250.0     | 34.1        | 74.8       | 19.3 |
| 2    | Completed | 0113365209252017 | 1  | 147         | 09/25/17 13:37:47 | 00:13:20             | 00:43:45             | 250.2       | 251.3        | 250.0     | 34.1        | 75.5       | 19.3 |
| 3    | Completed | 0213550009252017 | 2  | 153         | 09/25/17 13:56:20 | 00:13:55             | 00:42:32             | 250.2       | 251.1        | 250.0     | 34.8        | 75.2       | 19.4 |
| 4    | Aborted   | 0314035009252017 | 3  |             |                   |                      |                      |             |              |           |             |            |      |
| 5    | Completed | 0514115109252017 | 5  | 157         | 09/25/17 14:28:01 | 00:13:29             | 00:42:32             | 250.2       | 251.3        | 250.0     | 35.6        | 75.3       | 19.3 |
| 6    | Aborted   | 0314193409252017 | 3  |             |                   |                      |                      |             |              |           |             |            |      |
| 7    | Deviation | 0314265109252017 | 3  |             | 09/25/17 14:27:46 | 00:13:18             |                      |             |              |           |             |            |      |
| 8    | Completed | 0614300609252017 | 6  | 157         | 09/25/17 14:31:17 | 00:13:40             | 00:42:32             | 250.1       | 251.5        | 250.0     | 35.2        | 74.8       | 19.4 |
| 9    | Completed | 0714371709252017 | 7  | 154         | 09/25/17 14:38:22 | 00:13:20             | 00:42:32             | 250.2       | 251.4        | 250.0     | 34.3        | 74.9       | 19.3 |
| 10   | Completed | 0815534709252017 | 8  | 135         | 09/25/17 15:55:24 | 00:13:15             | 00:44:45             | 250.2       | 251.2        | 250.0     | 34.3        | 74.4       | 19.3 |
| 11   | Completed | 0116042809252017 | 1  | 151         | 09/25/17 16:06:35 | 00:13:09             | 00:42:32             | 250.1       | 251.3        | 250.0     | 33.8        | 74.4       | 19.3 |
| 12   | Deviation | 0216165109252017 | 2  | 152         | 09/25/17 16:21:05 | 00:13:49             | 00:42:32             | 250.1       | 251.3        | 254.0     | 34.0        | 74.9       | 19.3 |
| 13   | Completed | 0316214809252017 | 3  | 120         | 09/25/17 16:34:00 | 00:13:16             | 00:45:30             | 250.2       | 251.3        | 250.0     | 35.1        | 75.7       | 19.2 |
| 14   | Completed | 0516265209252017 | 5  | 160         | 09/25/17 16:27:46 | 00:13:20             | 00:42:32             | 250.2       | 251.3        | 250.0     | 34.6        | 75.6       | 19.2 |
| 15   | Completed | 0616404709252017 | 6  | 154         | 09/25/17 16:42:28 | 00:13:15             | 00:42:32             | 250.1       | 251.4        | 250.0     | 35.1        | 75.6       | 19.4 |
| 16   | Completed | 0716573309252017 | 7  | 155         | 09/25/17 16:59:12 | 00:13:09             | 00:42:32             | 250.2       | 251.4        | 250.0     | 33.8        | 75.6       | 19.3 |
| 17   | Completed | 0817151009252017 | 8  | 150         | 09/25/17 17:21:38 | 00:13:28             | 00:42:32             | 250.2       | 251.2        | 250.0     | 36.0        | 75.6       | 19.3 |
| 18   | Completed | 0117220509252017 | 1  | 153         | 09/25/17 17:25:19 | 00:13:14             | 00:42:32             | 250.2       | 251.3        | 250.0     | 36.0        | 75.6       | 19.3 |
| 19   | Completed | 0218030509252017 | 2  | 150         | 09/25/17 18:09:08 | 00:13:43             | 00:42:32             | 250.1       | 251.2        | 250.0     | 34.0        | 75.7       | 19.4 |
| 20   | Completed | 0319132909252017 | 3  | 146         | 09/25/17 19:15:12 | 00:13:19             | 00:43:45             | 250.1       | 251.4        | 250.0     | 34.6        | 75.5       | 19.2 |
| 21   | Completed | 0519165009252017 | 5  | 154         | 09/25/17 19:18:04 | 00:13:35             | 00:42:32             | 250.2       | 251.3        | 250.0     | 34.6        | 75.7       | 19.3 |
| 22   | Completed | 0619243609252017 | 6  | 157         | 09/25/17 19:25:55 | 00:13:10             | 00:42:32             | 250.2       | 251.5        | 250.0     | 33.9        | 75.3       | 19.3 |
| 23   | Completed | 0719373509252017 | 7  | 159         | 09/25/17 19:39:25 | 00:13:14             | 00:42:32             | 250.2       | 251.4        | 250.0     | 34.2        | 75.7       | 19.3 |
| 24   | Completed | 0819484009252017 | 8  | 158         | 09/25/17 19:51:39 | 00:13:29             | 00:42:32             | 250.2       | 251.2        | 250.0     | 34.0        | 75.1       | 19.3 |
| 25   | Completed | 0120004609252017 | 1  | 154         | 09/25/17 20:03:21 | 00:13:14             | 00:42:32             | 250.2       | 251.3        | 250.0     | 33.9        | 74.5       | 19.4 |
| 26   | Completed | 0220104909252017 | 2  | 158         | 09/25/17 20:11:46 | 00:13:34             | 00:42:32             | 250.2       | 251.3        | 250.0     | 33.6        | 75.2       | 19.4 |
| 27   | Completed | 0520324709252017 | 5  | 156         | 09/25/17 20:38:17 | 00:13:33             | 00:42:32             | 250.2       | 251.3        | 250.0     | 33.7        | 75.2       | 19.3 |
| 28   | Completed | 0320500709252017 | 3  | 158         | 09/25/17 20:52:51 | 00:13:14             | 00:42:32             | 250.1       | 251.3        | 250.0     | 34.4        | 75.9       | 19.2 |
| 29   | Completed | 0621033109252017 | 6  | 155         | 09/25/17 21:05:16 | 00:13:10             | 00:42:32             | 250.2       | 251.4        | 250.0     | 34.2        | 74.4       | 19.3 |
| 30   | Completed | 0721161809252017 | 7  | 154         | 09/25/17 21:21:37 | 00:13:13             | 00:42:32             | 250.2       | 251.4        | 250.0     | 35.3        | 74         | 19.3 |
| 31   | Completed | 0822322609252017 | 8  | 144         | 09/25/17 22:33:59 | 00:13:16             | 00:43:45             | 250.2       | 251.2        | 250.0     | 34.4        | 73.7       | 19.3 |

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Figure 29 – Summary Batch Report

### Summary Batch Report Fields

The summary batch report contains the following fields.

|                       |  |
|-----------------------|--|
| <b>Product Code</b>   | Recipe Name  |
| <b>Revision</b>       | Recipe revision number   |
| <b>Flavor / Batch</b> | User entry at the start of the cook. The alphanumeric value can contain a maximum of 15 characters.  |
| <b>Item</b>           | Auto Increment Number, it provides a line number for the report group. The report group fields are Prod Code, Revision and Flavor/Batch. When there is a change on any of the report group fields the item number will start from 1 again. |
| <b>Status</b>         | Shows if the cook was completed, aborted or is there was any deviation alarm. If record was aborted or deviated the text will be displayed red   |
| <b>Batch</b>          | Batch Id is an automatically generated and unique identification used to identify the cook. The number is assigned at the beginning of each cook.  |

|                     |   |
|---------------------|---|
|                     | The number represents: RRHHMISSMMDDYYYY<br>RR – Retort number<br>HH – Hour of start of batch<br>MI – Minutes of start of batch<br>SS – Seconds of start of batch<br>MM – Month of start of batch<br>DD – Day of start of batch<br>YYYY – Year of start of batch |
| <b>Retort</b>       | Retort Id (numerical)   |
| <b>IT Temp (F)</b>  | Initial Temperature entered by the user.  |
| <b>Start Time</b>   | Cook Start time   |
| <b>Total CUT</b>    | Sum of the total CUT times for the cook (hh:mm:ss)  |
| <b>Cook Time</b>    | Time of the sterilization step (hh:mm:ss)   |
| <b>PV Temp (F)t</b> | Retort Temperature at the time of the user inputs   |
| <b>TID Temp (F)</b> | Temperature Indicating Device user Input  |
| <b>Chart (F)</b>    | Chart Temperature user Input  |
| <b>Press (psi)</b>  | PV Pressure at the time of the user inputs  |
| <b>PV Lvl</b>       | PV water level at the time of the user inputs   |
| <b>RPM</b>          | Rotor Speed at the time of the user inputs  |

## Recipe Report

The selection of this option from the menu will display a list of recipes. The list is grouped by process mode. It is sorted by process mode, recipe type, recipe name and revision. In order to select the desired recipe(s), the user must click the checkbox(es) next to the recipe(s) of interest (see figure 23). The recipe list selection can be filter by using the filter fields which are on the first row of the grid the filter criteria is contains. If desired, the user may also filter the alarm configuration of the report by checking the option “Hide Alarm Parameters”. After the desired recipe(s) are selected, press the “Request Report” button. This action displays a new web page which contains the requested report in PDF format. (See figure 24).



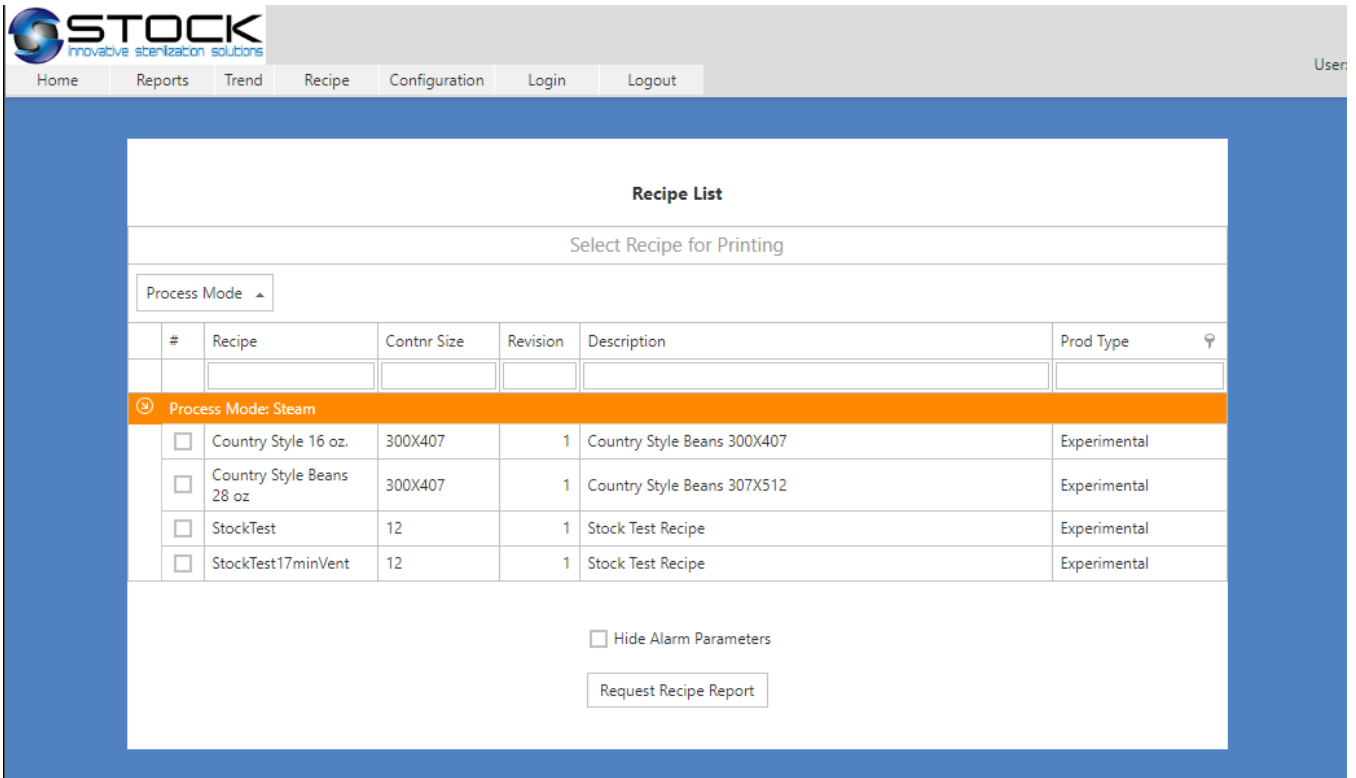


Figure 23 – Recipe Select

**ICONSMS Recipe Report**

Recipe: Baseline Recipe    Rev: 0    Created Date: 7/11/2016 4:12:45 PM    By: Margo Duckson    Type: Development  
 Description: Baseline Recipe 3. Changes to Initial TD  
 Comments: Removed Ramp completely from CU1 step.

Procs Mode: Water Immersion    Container: Glass 15.5oz    Qty: 3780    Motion: Rotation

User Inputs    Interval 1%: 30    Interval 2%: N/A    Interval 3%: N/A    Min IT (F): 0     Process Table     Energy Mode

| Segment Parameters |       |                |           |           |           |                                     |                   |       |       |           |           |           |                          |
|--------------------|-------|----------------|-----------|-----------|-----------|-------------------------------------|-------------------|-------|-------|-----------|-----------|-----------|--------------------------|
| Seg # 1            |       | HSV            |           |           |           |                                     |                   |       |       |           |           |           |                          |
| Parameter          | Value | Units          | Upper Tol | Lower Tol | Delay Sec | Alarm Enabled                       | Parameter         | Value | Units | Upper Tol | Lower Tol | Delay Sec | Alarm Enabled            |
| SV Temperature     | 270.0 | F              | 6.0       | 6.0       | 20        | <input checked="" type="checkbox"/> | SV Level          | 85    | %     | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| System Press       | 35.0  | PSI            | 7.0       | 10.0      | 10        | <input checked="" type="checkbox"/> | Rotor Speed       | 0.0   | RPM   | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| Segment Hold       | 1     |                | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | PG #1             | 0     |       | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| PG #2              | 0     |                | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | PG #3             | 0     |       | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| Seg # 2            |       | Come Up - Vent |           |           |           |                                     |                   |       |       |           |           |           |                          |
| Parameter          | Value | Units          | Upper Tol | Lower Tol | Delay Sec | Alarm Enabled                       | Parameter         | Value | Units | Upper Tol | Lower Tol | Delay Sec | Alarm Enabled            |
| PV Temperature     | 0.0   | F              | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | PV Temp Ramp      | 0.0   | FPM   | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| System Press       | 30.0  | PSI            | 7.0       | 6.0       | 2         | <input checked="" type="checkbox"/> | System Press Ramp | 0.0   | PPM   | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| PV Level           | 80    | %              | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | PV Conn Valve Pos | 100   | %     | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| Rotor Speed        | 9.0   | RPM            | 1.0       | 1.0       | 15        | <input checked="" type="checkbox"/> | Segment Minutes   | 2     | MIN   | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| Segment Seconds    | 45    | SEC            | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | PG #1             | 0     |       | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| PG #2              | 0     |                | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | PG #3             | 0     |       | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| Seg # 3            |       | Come Up        |           |           |           |                                     |                   |       |       |           |           |           |                          |



Figure 24– Recipe Report

## Recipe Report Header

Each recipe report contains a report header (See figure 24). Headers are displayed on every page with the following information pertaining to the recipe revision.

## Recipe Report Fields

|                             |  |
|-----------------------------|--|
| <b>Recipe</b>               | Recipe name  |
| <b>Revision</b>             | Recipe revision number   |
| <b>Created Date</b>         | Recipe created date  |
| <b>By</b>                   | User that created the recipe   |
| <b>Type:</b>                | Type of recipe; Developmental, Experimental or Production                                      |
| <b>Description</b>          | Recipe revision description  |
| <b>Comments:</b>            | Recipe revision comments   |
| <b>Procs Mode</b>           | Process mode   |
| <b>Container</b>            | Container type and size  |
| <b>Qty</b>                  | Container quantity   |
| <b>Motion</b>               | Type of agitation (rotation, oscillation, static) used in recipe                               |
| <b>User Inputs</b>          | User inputs required   |
| <b>User Input Intervals</b> | Percentage of time within the cook segment that the user will be prompted to enter user inputs |
| <b>Process Table</b>        | Indicates if process tables are used in the recipe (may not be applicable)                     |
| <b>Min IT</b>               | Minimum IT value allow, any value below this entry will cause an alarm and system deviation.   |
| <b>Energy Mode</b>          | Indicates if energy saving mode is enabled   |

## Recipe Report Segment Parameters

The Segment Parameters section of the report displays information about the segments of the recipe. It displays the segment number, phase description, parameters with their setpoint values and their alarm tolerances, alarm delays and enabled checkbox. (See figure 25)

| Segment Parameters |           |       |           |           |           |                                     |                 |       |       |           |           |           |                          |
|--------------------|-----------|-------|-----------|-----------|-----------|-------------------------------------|-----------------|-------|-------|-----------|-----------|-----------|--------------------------|
| Seg #              | 1 ST Vent |       |           |           |           |                                     |                 |       |       |           |           |           |                          |
| Parameter          | Value     | Units | Upper Tol | Lower Tol | Delay Sec | Alarm Enabled                       | Parameter       | Value | Units | Upper Tol | Lower Tol | Delay Sec | Alarm Enabled            |
| PV Temperature     | 218.0     | F     | 30.0      | 0.0       | 5         | <input checked="" type="checkbox"/> | Segment Minutes | 6     | MIN   | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| Segment Seconds    | 0         | SEC   | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | Segment Hold    | 0     |       | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| PG #1              | 0         |       | 0.0       | 0.0       | 0         | <input type="checkbox"/>            | PG #2           | 0     |       | 0.0       | 0.0       | 0         | <input type="checkbox"/> |
| PG #3              | 0         |       | 0.0       | 0.0       | 0         | <input type="checkbox"/>            |                 |       |       |           |           |           |                          |

Figure 25 – Recipe Report Alarm Parameters

## Recipe Report Process Table

The Process Table section can display two different options the free form table or the Ball method matrix. Figure 26a shows the free form which is a 5 X 5 matrix of the process table configured in the recipe. The top row displays the retort temperature and the first column displays the initial temperature. The segment time is displayed in Minutes : Seconds.

Figure 26b shows the process table for the ball method which shows a section for the heating factors and the 10 X 10 Matrix.

**Table Temperature Range (F)**

|        |        |        |        |        |        |     |     |     |     |     |
|--------|--------|--------|--------|--------|--------|-----|-----|-----|-----|-----|
|        | 245.00 | 247.00 | 247.00 | 247.00 | 247.00 | .00 | .00 | .00 | .00 | .00 |
| 120.00 | 115.00 | 115.00 | 115.00 | 115.00 | 115.00 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| 140.00 | 110.00 | 110.00 | 110.00 | 110.00 | 110.00 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| 160.00 | 105.00 | 105.00 | 105.00 | 105.00 | 105.00 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| 170.00 | 105.00 | 105.00 | 105.00 | 105.00 | 105.00 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| 170.00 | 105.00 | 105.00 | 105.00 | 105.00 | 105.00 | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| .00    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| .00    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| .00    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| .00    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |
| .00    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0    | 0:0 | 0:0 | 0:0 | 0:0 | 0:0 |

Segment Time in Minutes : Seconds

Figure 26a – Recipe Report Process Tables Free Form

**Process Table**

|                |                                |            |               |                          |
|----------------|--------------------------------|------------|---------------|--------------------------|
| z-Value: 18.00 | Ref Temp: 250.00               | m+: 180.00 | F-Value: 6.00 | fh: 20.58                |
| jh: 0.94       | xbh: 31.09                     | f2: 45.13  | fc: 20.58     | Procs Correction %: 0.00 |
|                |                                | Min        | Max           |                          |
|                | Retort Temperature Range (F):  | 245.00     | 255.00        |                          |
|                | Initial Temperature Range (F): | 70.00      | 160.00        |                          |

**Table Temperature Range (F)**

|        |        |        |        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|        | 245.00 | 246.10 | 247.20 | 248.30 | 249.40 | 250.50 | 251.60 | 252.70 | 253.80 | 255.00 |
| 70.00  | 41:57  | 39:49  | 37:53  | 36:09  | 34:36  | 33:11  | 31:56  | 30:58  | 29:59  | 29:00  |
| 80.00  | 41:15  | 39:09  | 37:15  | 35:32  | 34:00  | 32:37  | 31:22  | 30:28  | 29:29  | 28:30  |
| 90.00  | 40:33  | 38:27  | 36:34  | 34:53  | 33:22  | 32:00  | 30:59  | 29:56  | 28:57  | 27:58  |
| 100.00 | 39:48  | 37:44  | 35:52  | 34:12  | 32:43  | 31:23  | 30:25  | 29:22  | 28:23  | 27:25  |
| 110.00 | 39:00  | 36:58  | 35:08  | 33:30  | 32:02  | 30:57  | 29:48  | 28:45  | 27:47  | 26:49  |
| 120.00 | 38:11  | 36:10  | 34:22  | 32:45  | 31:19  | 30:17  | 29:09  | 28:06  | 27:09  | 26:11  |
| 130.00 | 37:18  | 35:19  | 33:32  | 31:58  | 30:49  | 29:35  | 28:27  | 27:24  | 26:27  | 25:30  |
| 140.00 | 36:21  | 34:24  | 32:40  | 31:07  | 30:02  | 28:48  | 27:41  | 26:39  | 25:42  | 24:45  |
| 150.00 | 35:20  | 33:26  | 31:44  | 30:31  | 29:10  | 27:57  | 26:50  | 25:49  | 24:53  | 23:56  |
| 160.00 | 34:14  | 32:22  | 31:00  | 29:33  | 28:14  | 27:01  | 25:55  | 24:54  | 23:58  | 23:02  |

Segment Time in Minutes : Seconds

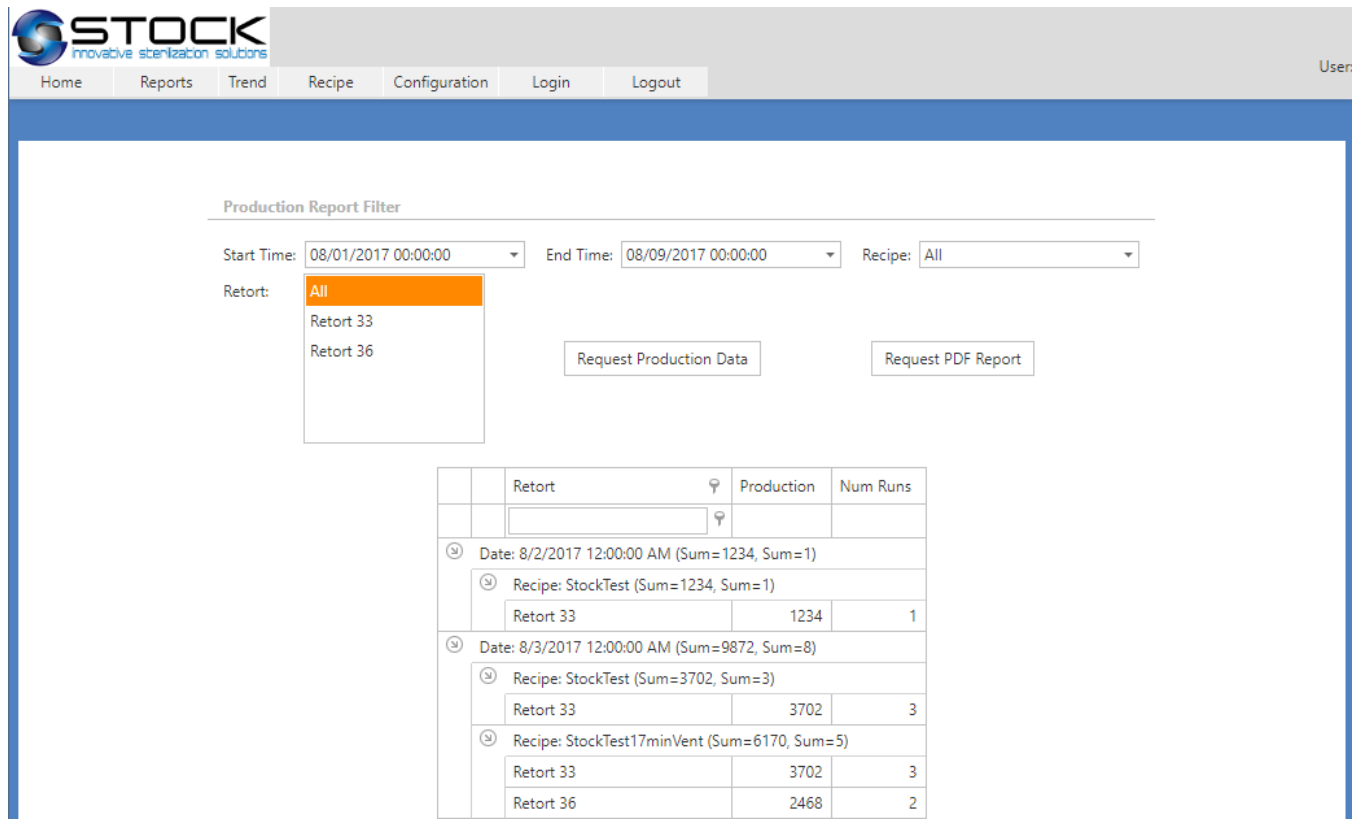
Figure 26b – Recipe Report Process Tables Ball Method

## Production Report

The production reports show number of containers and total number of runs for the retorts. By default, the page will display the information for the actual production day but the user can change the time frame if desired. The information is Group or Summarize by Production Date, Recipe and Retorts. See image below.

The following filters are provided to search for the production

|                                 |   |
|---------------------------------|---|
| <b>Start Time:</b>              | Start time of the filtered date range search.   |
| <b>End Time:</b>                | End time of the filtered date range search.   |
| <b>Retort:</b>                  | Filters the search by the selected retorts. To select multiple retorts, hold the shift key while selecting the retorts. |
| <b>Recipe:</b>                  | Pull down list of the available recipes   |
| <b>Request Production Data:</b> | Populate the grid this of information   |
| <b>Request PDF Report:</b>      | Production report is render as PDF,   |



The screenshot shows the 'Production Report Filter' interface. It includes a navigation bar with 'Home', 'Reports', 'Trend', 'Recipe', 'Configuration', 'Login', and 'Logout'. The filter section contains three dropdown menus: 'Start Time' (08/01/2017 00:00:00), 'End Time' (08/09/2017 00:00:00), and 'Recipe' (All). A 'Retort' dropdown menu is open, showing 'All', 'Retort 33', and 'Retort 36'. Below the filters are two buttons: 'Request Production Data' and 'Request PDF Report'. The main data table is as follows:

|   | Retort                                       | Production | Num Runs |
|---|--|------------|----------|
| ⊖ | Date: 8/2/2017 12:00:00 AM (Sum=1234, Sum=1) |            |          |
| ⊖ | Recipe: StockTest (Sum=1234, Sum=1)          |            |          |
|   | Retort 33                                    | 1234       | 1        |
| ⊖ | Date: 8/3/2017 12:00:00 AM (Sum=9872, Sum=8) |            |          |
| ⊖ | Recipe: StockTest (Sum=3702, Sum=3)          |            |          |
|   | Retort 33                                    | 3702       | 3        |
| ⊖ | Recipe: StockTest17minVent (Sum=6170, Sum=5) |            |          |
|   | Retort 33                                    | 3702       | 3        |
|   | Retort 36                                    | 2468       | 2        |

### Grid Production Report

The production report can also be requested has a PDF report by pressing the button Request PDF Report which presents the same information but on a formatted pdf report. See image below for an example.

| <b>Production Report</b>        |                             |                               |
|---------------------------------|-----------------------------|-------------------------------|
| Report Filter                   |                             |                               |
| Start Time: 09/30/2013 00:00:00 | End Time: 10/02/13 00:00:00 | Recipe: All      Retorts: All |
| Production For: 09/30/2013      |                             |                               |
| <b>Recipe:1060</b>              |                             |                               |
| <b>Retort</b>                   | <b>Prod Count</b>           | <b>Total Runs</b>             |
| Retort 1                        | 14,400                      | 6                             |
| Retort 2                        | 16,800                      | 7                             |
| Retort 3                        | 16,800                      | 7                             |
| Retort 4                        | 16,800                      | 7                             |
| Retort 5                        | 26,400                      | 11                            |
| Retort 6                        | 14,400                      | 6                             |
| Retort 7                        | 14,400                      | 6                             |
| Retort 8                        | 14,400                      | 6                             |
| Total For:1060                  | 134,400                     | 56                            |
| <b>Recipe:1068</b>              |                             |                               |
| <b>Retort</b>                   | <b>Prod Count</b>           | <b>Total Runs</b>             |
| Retort 1                        | 2,400                       | 1                             |
| Retort 2                        | 2,400                       | 1                             |
| Retort 3                        | 2,400                       | 1                             |
| Retort 4                        | 2,400                       | 1                             |
| Retort 5                        | 2,400                       | 1                             |
| Retort 6                        | 2,400                       | 1                             |
| Retort 7                        | 2,400                       | 1                             |
| Retort 8                        | 2,400                       | 1                             |
| Total For:1068                  | 19,200                      | 8                             |
| Total For: 09/30/2013           | 153,600                     | 64                            |
| Production For: 10/01/2013      |                             |                               |
| <b>Recipe:1068</b>              |                             |                               |
| <b>Retort</b>                   | <b>Prod Count</b>           | <b>Total Runs</b>             |
| Retort 1                        | 40,800                      | 17                            |
| Retort 2                        | 38,400                      | 16                            |
| Retort 3                        | 36,000                      | 15                            |
| Retort 4                        | 19,200                      | 8                             |
| Retort 5                        | 40,800                      | 17                            |
| Retort 6                        | 38,400                      | 16                            |
| Retort 7                        | 38,400                      | 16                            |
| Retort 8                        | 40,800                      | 17                            |
| Total For:1068                  | 292,800                     | 122                           |
| Total For: 10/01/2013           | 292,800                     | 122                           |

Printed On: 10/07/2013 16:22:44 Page 1 of 1

PDF Production Report

## Recipe Download Status

### Recipe Download Status Report Filter

The Recipe Download Status provides a filter to search recipe downloads based on the following fields: (See figure 27)

|                           |  |
|---------------------------|--|
| <b>Start Time:</b>        | Start time of the filtered date range search.  |
| <b>End Time:</b>          | End time of the filtered date range search.  |
| <b>Retort:</b>            | Filters the search by the selected retorts. To select multiple retorts, hold the shift key while selecting the retorts.  |
| <b>Request Downloads:</b> | Begins the search based on the selected fields. When the page is initially loaded, the system will display the information on all retorts for the current day. |
| <b>Export to PDF:</b>     | Exports the recipe download status list to a PDF file.   |
| <b>Export to XLS:</b>     | Exports the recipe download status list to an Excel File format.   |

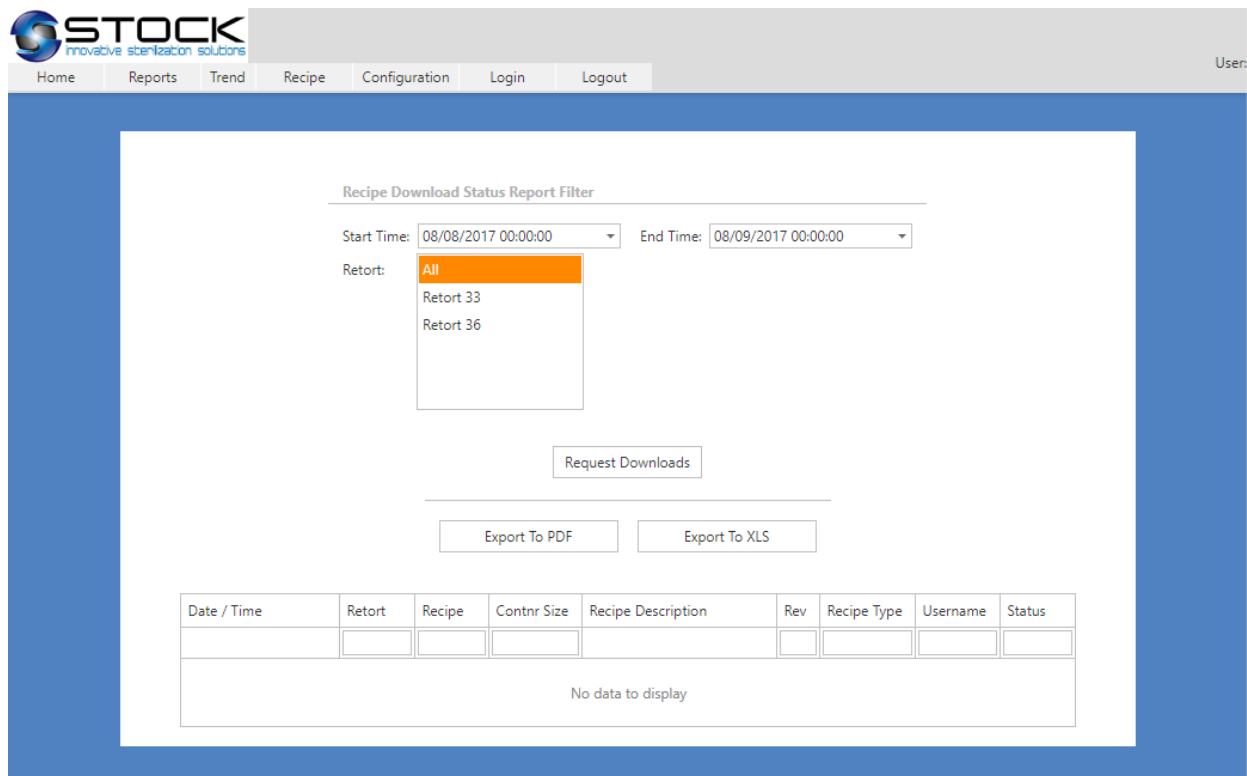


Figure 27 – Recipe Download Status

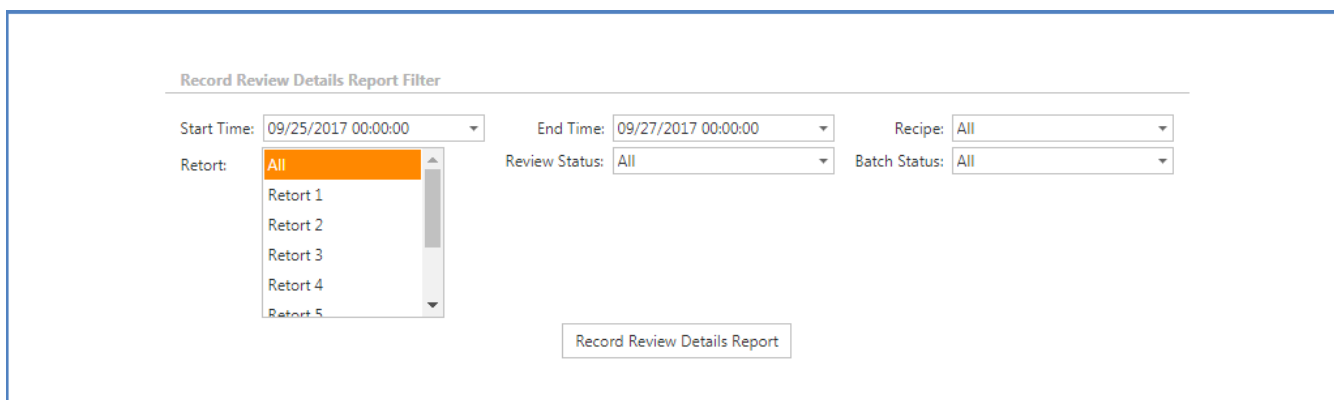
The download information is presented on a grid. The first row contains filter fields which enables the user to enter text and filter the grid information. The user can enter the initial letters of what he/she is filtering. Alternatively, he/she can enter “%” as a wildcard. Figure 30 displays “%1”. This will filter any retort number that contains a one (1). There is an implied wildcard character and the end of every filter. To clear the filter, remove the text from the filter field or click the clear link on the first column of the filter row.

The information presented in the grid consists of the following:

|                           |   |
|---------------------------|---|
| <b>Date - Time</b>        | Date/Time when the recipe was downloaded                            |
| <b>Retort</b>             | Retort in which the recipe was downloaded                           |
| <b>Recipe</b>             | Name of the recipe downloaded                                       |
| <b>Recipe Description</b> | Description of the recipe downloaded                                |
| <b>Revision</b>           | Revision number of the recipe                                       |
| <b>Username</b>           | User that downloaded the recipe                                     |
| <b>Status</b>             | Indicates if the recipe was downloaded successfully or if it failed |

## Record Review Details

The record review details report shows the details of the record review actions performed by a record reviewer and the summary batch information. It shows who was the user who review the record, the time it was reviewed, action taken by the user whether not reviewed, reviewed, hold or released. The user can request the information based on the filters shown in the image below



|                       |   |
|-----------------------|---|
| <b>Start Time:</b>    | Start time of the filtered date range search.   |
| <b>End Time:</b>      | End time of the filtered date range search.   |
| <b>Recipe:</b>        | Name of the recipe  |
| <b>Retort:</b>        | Filters the search by the selected retorts. To select multiple retorts, hold the shift key while selecting the retorts. |
| <b>Review Status:</b> | Action taken by the user when reviewing the batch record which are not reviewed, reviewed, hold or released             |
| <b>Batch Status:</b>  | Options are, All, Aborted, Completed or deviation   |

The report below is a sample showing various entries for record review. The review of the records is show under the row of each batch shown. Below is a description of the fields:



## Record Review Details Report

Report Filters:

Start Time: 09/25/2017 00:00 End Time: 09/27/2017 00:00 Recipe: All Retorts: All Review Status: All Batch Status: All

| Batch #                | Status               | Rotomat Batch Id   | Recipe                      | Rev | R#  | IT (F)              | Start Time          | Total Cut (hh:mm:ss) | Cook Time (hh:mm:ss) | PV Temp (F) | TID Temp (F) | Chart (F) | Press (psi) | PV Lvl (%) | RPM    |
|------------------------|----------------------|--------------------|-----------------------------|-----|-----|---------------------|---------------------|----------------------|----------------------|-------------|--------------|-----------|-------------|------------|--------|
| Deviation              |                      | 0309040609252017   | OP 77                       | 4   | 3   | 130                 | 09/25/2017 09:04:52 | 00:13:27             | 00:11:36             | 250.4       | 251.7        | 250.5     | 33.00       | 72.00      | 192.00 |
| <b>Reviewed Status</b> | <b>Reviewed Date</b> | <b>Reviewed By</b> | <b>Notes</b>                |     |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Reviewed               | 09/26/2017 12:02:23  | Stock America      | Test record review          |     |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Hold                   | 09/26/2017 12:03:02  | Stock America      | Test hold record review     |     |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Released               | 09/26/2017 12:03:27  | Stock America      | Test released record review |     |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Released               | 09/26/2017 12:16:55  | Stock America      | Test released record review |     |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Deviation              |                      | 0810451909252017   | OP 83                       | 1   | 8   | 130                 | 09/25/2017 10:46:49 | 00:13:47             | 00:25:19             | 250.3       | 251.4        | 250.0     | 34.10       | 74.80      | 193.00 |
| Completed              | 0113365209252017     | OP 83              | 1                           | 1   | 147 | 09/25/2017 13:37:47 | 00:13:20            | 00:43:45             | 250.2                | 251.3       | 250.0        | 34.10     | 75.50       | 193.00     |        |
| <b>Reviewed Status</b> | <b>Reviewed Date</b> | <b>Reviewed By</b> | <b>Notes</b>                |     |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Released               | 09/26/2017 12:03:52  | Stock America      |                             |     |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Completed              | 0213550009252017     | OP 83              | 1                           | 2   | 153 | 09/25/2017 13:56:20 | 00:13:55            | 00:42:32             | 250.2                | 251.1       | 250.0        | 34.80     | 75.20       | 194.00     |        |
| Aborted                | 0314035009252017     | OP 83              | 1                           | 3   |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Completed              | 0514115109252017     | OP 83              | 1                           | 5   | 157 | 09/25/2017 14:28:01 | 00:13:29            | 00:42:32             | 250.2                | 251.3       | 250.0        | 35.60     | 75.30       | 193.00     |        |
| Aborted                | 0314193409252017     | OP 83              | 1                           | 3   |     |                     |                     |                      |                      |             |              |           |             |            |        |
| Deviation              |                      | 0314265109252017   | OP 83                       | 1   | 3   |                     | 09/25/2017 14:27:46 | 00:13:18             |                      |             |              |           |             |            |        |
| Completed              | 0614300609252017     | OP 83              | 1                           | 6   | 157 | 09/25/2017 14:31:17 | 00:13:40            | 00:42:32             | 250.1                | 251.5       | 250.0        | 35.20     | 74.80       | 194.00     |        |
| Completed              | 0714371709252017     | OP 83              | 1                           | 7   | 154 | 09/25/2017 14:38:22 | 00:13:20            | 00:42:32             | 250.2                | 251.4       | 250.0        | 34.30     | 74.90       | 193.00     |        |
| Completed              | 0815534709252017     | OP 83              | 1                           | 8   | 135 | 09/25/2017 15:55:24 | 00:13:15            | 00:44:45             | 250.2                | 251.2       | 250.0        | 34.30     | 74.40       | 193.00     |        |
| Completed              | 0116042809252017     | OP 83              | 1                           | 1   | 151 | 09/25/2017 16:06:35 | 00:13:09            | 00:42:32             | 250.1                | 251.3       | 250.0        | 33.80     | 74.40       | 193.00     |        |
| Deviation              |                      | 0216165109252017   | OP 83                       | 1   | 2   | 152                 | 09/25/2017 16:21:05 | 00:13:49             | 00:42:32             | 250.1       | 251.3        | 254.0     | 34.00       | 74.90      | 193.00 |
| Completed              | 0316214809252017     | OP 83              | 1                           | 3   | 120 | 09/25/2017 16:34:00 | 00:13:16            | 00:45:30             | 250.2                | 251.3       | 250.0        | 35.10     | 75.70       | 192.00     |        |
| Completed              | 0516265209252017     | OP 83              | 1                           | 5   | 160 | 09/25/2017 16:27:46 | 00:13:20            | 00:42:32             | 250.2                | 251.3       | 250.0        | 34.60     | 75.60       | 192.00     |        |
| Completed              | 0616404709252017     | OP 83              | 1                           | 6   | 154 | 09/25/2017 16:42:28 | 00:13:15            | 00:42:32             | 250.1                | 251.4       | 250.0        | 35.10     | 75.60       | 194.00     |        |
| Completed              | 0716573309252017     | OP 83              | 1                           | 7   | 155 | 09/25/2017 16:59:12 | 00:13:09            | 00:42:32             | 250.2                | 251.4       | 250.0        | 33.80     | 75.60       | 193.00     |        |
| Completed              | 0817151009252017     | OP 83              | 1                           | 8   | 150 | 09/25/2017 17:21:38 | 00:13:28            | 00:42:32             | 250.2                | 251.2       | 250.0        | 36.00     | 75.60       | 193.00     |        |
| Completed              | 0117220509252017     | OP 83              | 1                           | 1   | 153 | 09/25/2017 17:25:19 | 00:13:14            | 00:42:32             | 250.2                | 251.3       | 250.0        | 36.00     | 75.60       | 193.00     |        |
| Completed              | 0218030509252017     | OP 83              | 1                           | 2   | 150 | 09/25/2017 18:09:08 | 00:13:43            | 00:42:32             | 250.1                | 251.2       | 250.0        | 34.00     | 75.70       | 194.00     |        |
| Completed              | 0319132909252017     | OP 83              | 1                           | 3   | 146 | 09/25/2017 19:15:12 | 00:13:19            | 00:43:45             | 250.1                | 251.4       | 250.0        | 34.60     | 75.50       | 192.00     |        |
| Completed              | 0519165009252017     | OP 83              | 1                           | 5   | 154 | 09/25/2017 19:18:04 | 00:13:35            | 00:42:32             | 250.2                | 251.3       | 250.0        | 34.60     | 75.70       | 193.00     |        |
| Completed              | 0619243609252017     | OP 83              | 1                           | 6   | 157 | 09/25/2017 19:25:55 | 00:13:10            | 00:42:32             | 250.2                | 251.5       | 250.0        | 33.90     | 75.30       | 193.00     |        |
| Completed              | 0719373509252017     | OP 83              | 1                           | 7   | 159 | 09/25/2017 19:39:25 | 00:13:14            | 00:42:32             | 250.2                | 251.4       | 250.0        | 34.20     | 75.70       | 193.00     |        |
| Completed              | 0819484009252017     | OP 83              | 1                           | 8   | 158 | 09/25/2017 19:51:39 | 00:13:29            | 00:42:32             | 250.2                | 251.2       | 250.0        | 34.00     | 75.10       | 193.00     |        |
| Completed              | 0120004609252017     | OP 83              | 1                           | 1   | 154 | 09/25/2017 20:03:21 | 00:13:14            | 00:42:32             | 250.2                | 251.3       | 250.0        | 33.90     | 74.50       | 194.00     |        |
| Completed              | 0220104909252017     | OP 83              | 1                           | 2   | 158 | 09/25/2017 20:11:46 | 00:13:34            | 00:42:32             | 250.2                | 251.3       | 250.0        | 33.60     | 75.20       | 194.00     |        |
| Completed              | 0520324709252017     | OP 83              | 1                           | 5   | 156 | 09/25/2017 20:38:17 | 00:13:33            | 00:42:32             | 250.2                | 251.3       | 250.0        | 33.70     | 75.20       | 193.00     |        |

Printed: 09/26/2017 12:17

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## Record Review Detail Report Fields

The summary batch report contains the following fields.

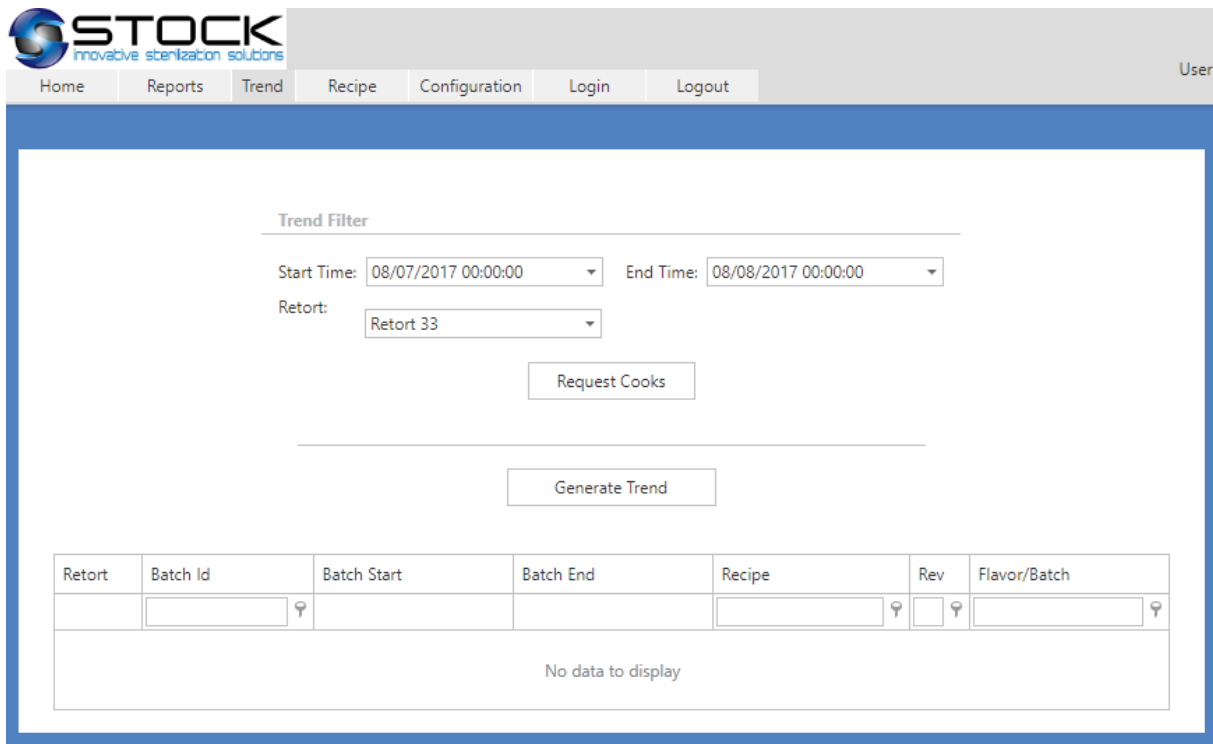
|                |   |
|----------------|---|
| <b>Batch #</b> | User entry at the start of the cook. The alphanumeric value can contain a maximum of 15 characters.   |
| <b>Status</b>  | Shows if the cook was completed, aborted or is there was any deviation alarm. If record was aborted or deviated the text will be displayed red  |
| <b>Batch</b>   | Batch Id is an automatically generated and unique identification used to identify the cook. The number is assigned at the beginning of each cook.<br>The number represents: RRHHMISSMMDDYYYY<br>RR – Retort number<br>HH – Hour of start of batch<br>MI – Minutes of start of batch<br>SS – Seconds of start of batch |

|                      |   |
|----------------------|---|
|                      | MM – Month of start of batch<br>DD – Day of start of batch<br>YYYY – Year of start of batch |
| <b>Recipe</b>        | Recipe Name   |
| <b>Revision</b>      | Recipe revision number  |
| <b>Retort</b>        | Retort Id (numerical)   |
| <b>IT Temp (F)</b>   | Initial Temperature entered by the user.  |
| <b>Start Time</b>    | Cook Start time   |
| <b>Total CUT</b>     | Sum of the total CUT times for the cook (hh:mm:ss)  |
| <b>Cook Time</b>     | Time of the sterilization step (hh:mm:ss)   |
| <b>PV Temp (F)t</b>  | Retort Temperature at the time of the user inputs   |
| <b>TID Temp (F)</b>  | Temperature Indicating Device user Input  |
| <b>Chart (F)</b>     | Chart Temperature user Input  |
| <b>Press (psi)</b>   | PV Pressure at the time of the user inputs  |
| <b>PV Lvl</b>        | PV water level at the time of the user inputs   |
| <b>RPM</b>           | Rotor Speed at the time of the user inputs  |
| <b>Review Status</b> | Shows if cook was reviewed, not reviewed, hold, released                                    |
| <b>Reviewed Date</b> | Date and Time when the cook was reviewed  |
| <b>Reviewed By</b>   | User who reviewed the record.   |
| <b>Notes</b>         | User can enter any notes he desires.  |



## Trend

The trend option from the menu enables the user to request a process trend by filtering the search of batches based on the following fields: (see figure 17)



**Trend Filter**

Start Time: 08/07/2017 00:00:00 End Time: 08/08/2017 00:00:00

Retort: Retort 33

Request Cooks

Generate Trend

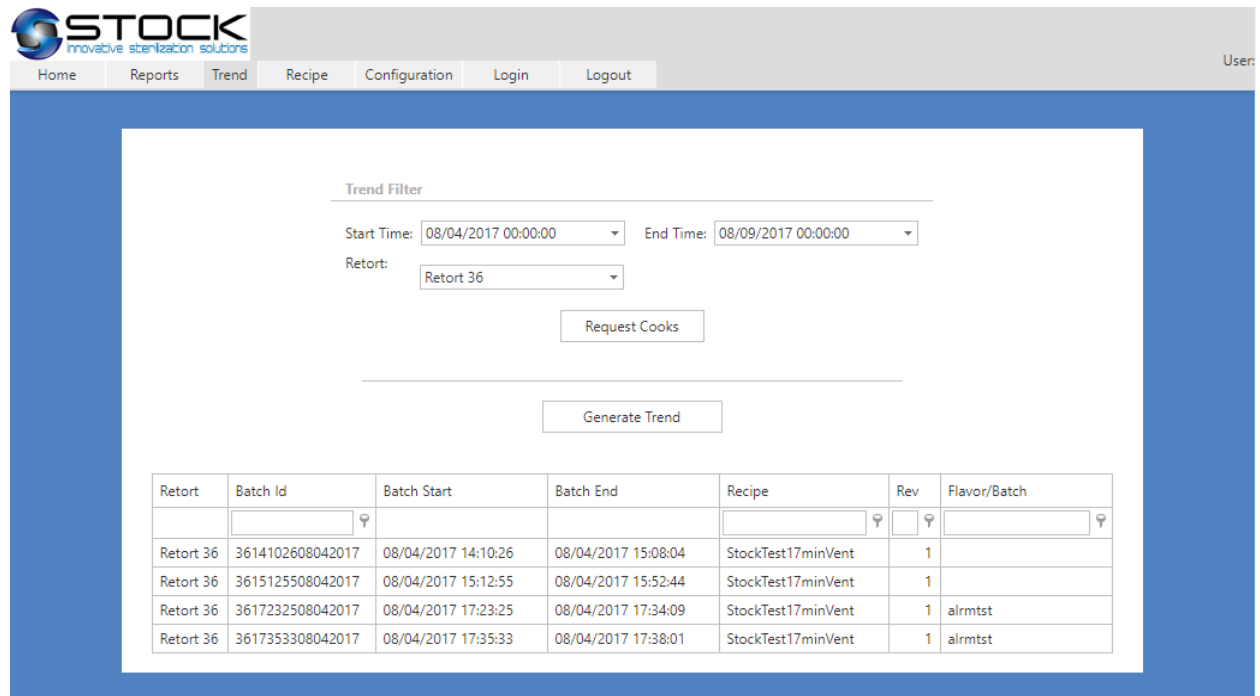
| Retort | Batch Id | Batch Start | Batch End | Recipe | Rev | Flavor/Batch |
|--------|----------|-------------|-----------|--------|-----|--------------|
|        |          |             |           |        |     |              |

No data to display

Figure 17 – Trend Report

## Trend Fields

|                          |  |
|--------------------------|--|
| <b>Batch Start Time:</b> | Start time of the search. The time used for the filter is the start time of the batch. |
| <b>Retort:</b>           | Filters the search by the retort selected  |
| <b>Request Cooks:</b>    | Starts the batch search based on the selected fields                                   |



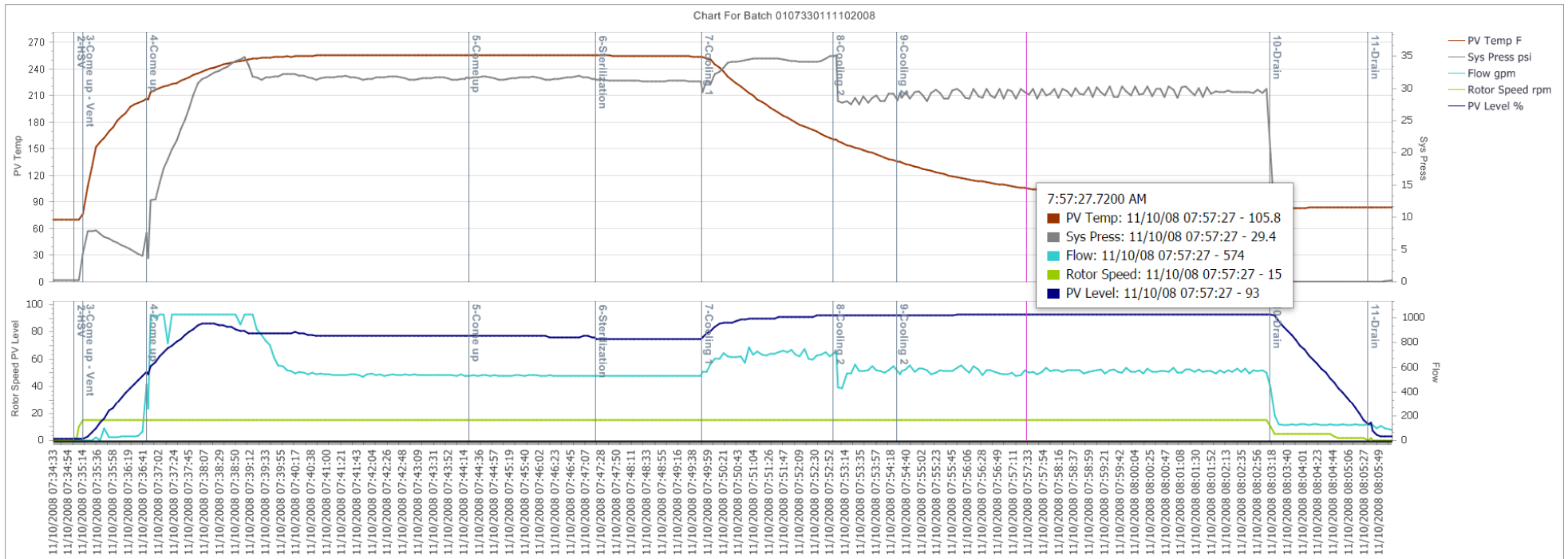
The screenshot shows the 'Trend' report generation interface. At the top, there is a navigation menu with 'Home', 'Reports', 'Trend', 'Recipe', 'Configuration', 'Login', and 'Logout'. The 'Trend Filter' section includes 'Start Time' (08/04/2017 00:00:00), 'End Time' (08/09/2017 00:00:00), and 'Retort' (Retort 36). Below these are 'Request Cooks' and 'Generate Trend' buttons. A table displays the following data:

| Retort    | Batch Id         | Batch Start         | Batch End           | Recipe             | Rev | Flavor/Batch |
|-----------|------------------|---------------------|---------------------|--------------------|-----|--------------|
|           |                  |                     |                     |                    |     |              |
| Retort 36 | 3614102608042017 | 08/04/2017 14:10:26 | 08/04/2017 15:08:04 | StockTest17minVent | 1   |              |
| Retort 36 | 3615125508042017 | 08/04/2017 15:12:55 | 08/04/2017 15:52:44 | StockTest17minVent | 1   |              |
| Retort 36 | 3617232508042017 | 08/04/2017 17:23:25 | 08/04/2017 17:34:09 | StockTest17minVent | 1   | alrmtst      |
| Retort 36 | 3617353308042017 | 08/04/2017 17:35:33 | 08/04/2017 17:38:01 | StockTest17minVent | 1   | alrmtst      |

Figure 18 – Trend Report

After the user has requested the cooks then he can select the desired batch or cook and press the generate trend button to render the process trend data like the image in figure 19

Figure 19 – Process Trend



Templates:

Name:

Description:

| #                    | Pen Id | Description | YAxis | Pane   | Units | Pen Color |
|----------------------|--------|-------------|-------|--------|-------|-----------|
| <a href="#">Edit</a> | 1      | SV Temp     | None  | None   | F     | 0         |
| <a href="#">Edit</a> | 2      | SV Press    | None  | None   | psi   | 0         |
| <a href="#">Edit</a> | 3      | SV Level    | None  | None   | %     | #CFFCC    |
| <a href="#">Edit</a> | 4      | PV Temp     | Y1    | Pane 1 | F     | #993300   |
| <a href="#">Edit</a> | 5      | Sys Press   | Y2    | Pane 1 | psi   | #808080   |
| <a href="#">Edit</a> | 6      | Flow        | Y2    | Pane 2 | gpm   | #33CCCC   |
| <a href="#">Edit</a> | 7      | Rotor Speed | Y1    | Pane 2 | rpm   | #99CC00   |
| <a href="#">Edit</a> | 8      | PV Level    | Y1    | Pane 2 | %     | #000080   |

The trend page allows the user to interact with the trend configuration. The trend user interactions are the followings:

- User can select an area on the trend to display a pen marker which is a legend showing the process values. See image below, the violet vertical line shows the point the user selects by moving their mouse over the chart showing timestamp and values of the process.

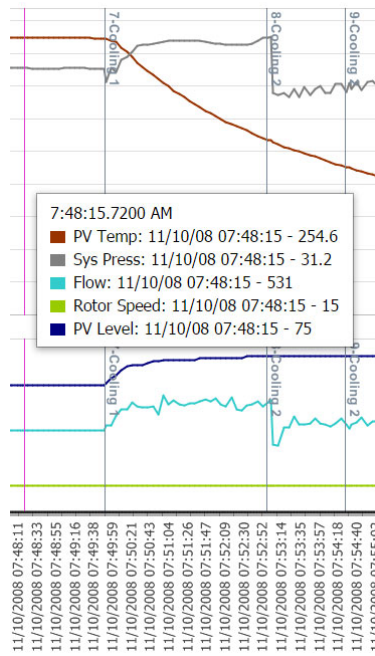


Figure 20 –Pen Marker

- User can configure what pens or data point he will like to graph and each pen can be configured with the following options:
  - Pane - The panes is a rectangular area used to display axes. The user has a selection of 3 options. Pane 1 is the top area of the chart, Pane 2 is the bottom area of the chart, none when the pen will not be graph. Each Pane has 2 Y axis.
  - Y Axis - The user can select from 3 Y Axis options, Y1 is the axis on the left of the selected pane, Y2 is the axis on the right of the selected and None when the pen will not be graph.
  - Pen Color - User can configure the color of the pen.

| #                    | Pen Id | Description | YAxis | Pane   | Units | Pen Color |
|----------------------|--------|-------------|-------|--------|-------|-----------|
| <a href="#">Edit</a> | 1      | SV Temp     | None  | None   | F     | 0         |
| <a href="#">Edit</a> | 2      | SV Press    | None  | None   | psi   | 0         |
| <a href="#">Edit</a> | 3      | SV Level    | None  | None   | %     | #CCFFCC   |
| <a href="#">Edit</a> | 4      | PV Temp     | Y1    | Pane 1 | F     | #993300   |
| <a href="#">Edit</a> | 5      | Sys Press   | Y2    | Pane 1 | psi   | #808080   |
| <a href="#">Edit</a> | 6      | Flow        | Y2    | Pane 2 | gpm   | #33CCCC   |
| <a href="#">Edit</a> | 7      | Rotor Speed | Y1    | Pane 2 | rpm   | #99CC00   |
| <a href="#">Edit</a> | 8      | PV Level    | Y1    | Pane 2 | %     | #000080   |

- Template - The pen configuration can be save by the user by creating templates so they can be loaded for future used. This template helps when trying to analyze the different datasets.

Templates:

Name:

Description:

- The PDF and excel data displays a header with the batch id and additional information grouped by segment. The grouped segment displays the date/time stamp, the segment time in seconds and the process data (PV Temp, PV Press, etc.) at the end of each segment group. The information is summarized and displays the minimum and maximum values of the process data. (see images below).

Trend Data for Batch Id:0100570210022013

| Date / Time                  | Seg Time | PV Temp                    | PV Press                 | Flow                  | PV Level             | Rotor Speed          |
|------------------------------|----------|----------------------------|--------------------------|-----------------------|----------------------|----------------------|
| Process Id: 0100570210022013 |          |                            |                          |                       |                      |                      |
| Seg Id: 1                    |          |                            |                          |                       |                      |                      |
| Phase Desc: HSV              |          |                            |                          |                       |                      |                      |
| 10/02/2013 00:57:09          | 7        | 90.1                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:15          | 13       | 89.9                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:21          | 19       | 89.9                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:27          | 25       | 90.1                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:33          | 31       | 90.3                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:39          | 37       | 90.6                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:44          | 43       | 90.8                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:50          | 49       | 91.1                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:57:56          | 55       | 91.3                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:58:02          | 61       | 91.6                       | 0.3                      | 0.0                   | 6                    | 0                    |
| 10/02/2013 00:58:07          | 66       | 91.7                       | 0.3                      | 66.0                  | 6                    | 0                    |
|                              |          | Min is 89.9<br>Max is 91.7 | Min is 0.3<br>Max is 0.3 | Min is 0<br>Max is 66 | Min is 6<br>Max is 6 | Min is 0<br>Max is 0 |

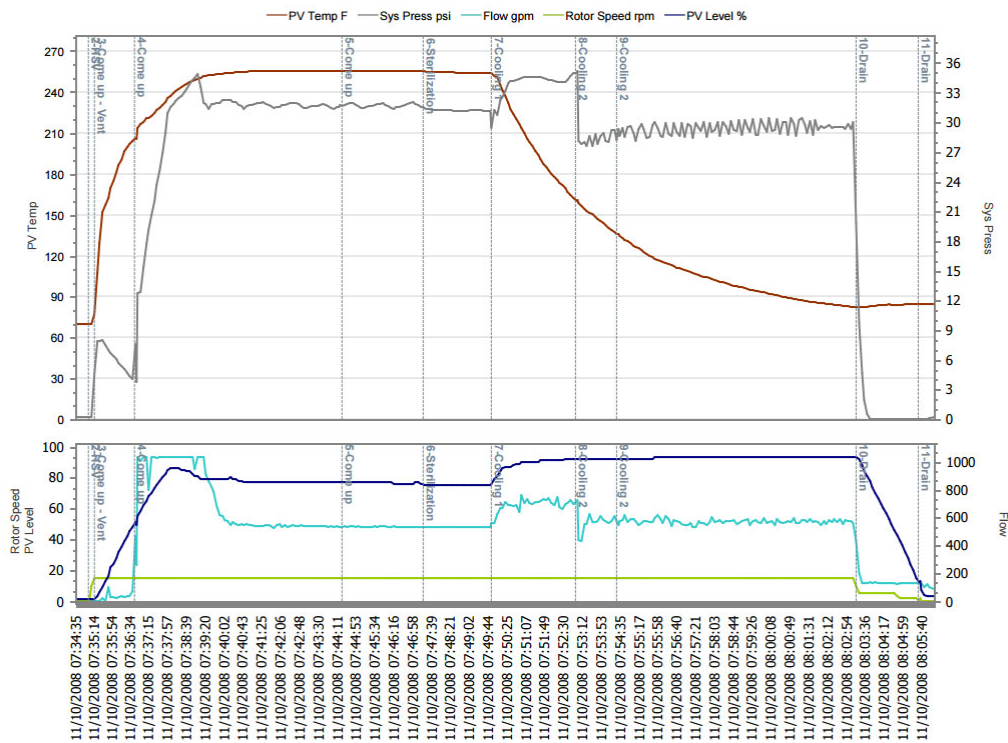
Figure 21 – Exporting Data to PDF Report

| ABC | D                            | E        | F                          | G                        | H                     | I                    | J                    |
|-----|------------------------------|----------|----------------------------|--------------------------|-----------------------|----------------------|----------------------|
| 1   | Date / Time                  | Seg Time | PV Temp                    | PV Press                 | Flow                  | PV Level             | Rotor Speed          |
| 2   | Process Id: 0100570210022013 |          |                            |                          |                       |                      |                      |
| 3   | Seg Id: 1                    |          |                            |                          |                       |                      |                      |
| 4   | Phase Desc: HSV              |          |                            |                          |                       |                      |                      |
| 5   | 10/2/2013 0:57               | 7        | 90.10                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 6   | 10/2/2013 0:57               | 13       | 89.90                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 7   | 10/2/2013 0:57               | 19       | 89.90                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 8   | 10/2/2013 0:57               | 25       | 90.10                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 9   | 10/2/2013 0:57               | 31       | 90.30                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 10  | 10/2/2013 0:57               | 37       | 90.60                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 11  | 10/2/2013 0:57               | 43       | 90.80                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 12  | 10/2/2013 0:57               | 49       | 91.10                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 13  | 10/2/2013 0:57               | 55       | 91.30                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 14  | 10/2/2013 0:58               | 61       | 91.60                      | 0.30                     | 0.00                  | 6                    | 0                    |
| 15  | 10/2/2013 0:58               | 66       | 91.70                      | 0.30                     | 66.00                 | 6                    | 0                    |
| 16  |                              |          | Min is 89.9<br>Max is 91.7 | Min is 0.3<br>Max is 0.3 | Min is 0<br>Max is 66 | Min is 6<br>Max is 6 | Min is 0<br>Max is 0 |
| 17  |                              |          |                            |                          |                       |                      |                      |

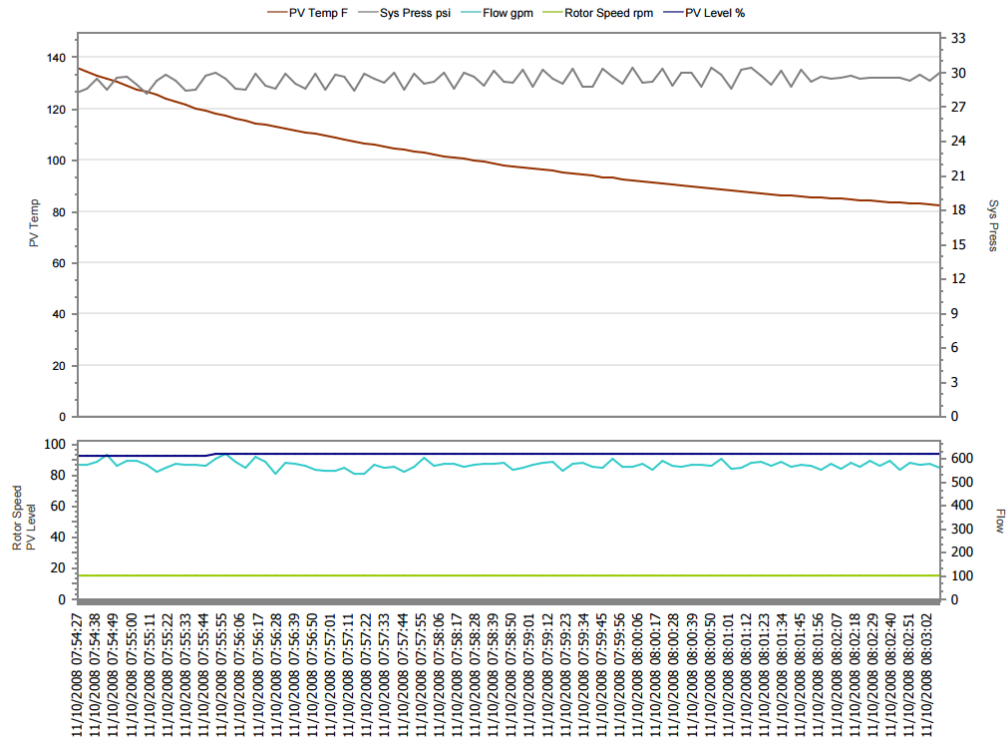
Figure 22 – Exporting Data to XLS Report

- The print to PDF first page of the trend report displays the full batch duration, trends for temperature, pressure, rotor speed, pv level and segment id versus date/time. The information is captured every 6 seconds during the execution of the batch. The report also groups the information by segments that provide a data trend during that segment.

Chart For Batch 0107330111102008



Trend for Segment Id: 9 Phase Description: Cooling 2



## Recipes

The 'Recipe' menu provides the user with recipe management options. These options are:

- Global Alarms
- New
- New From Existing
- Edit
- Download Filter
- Download
- Delete Revision

These options are restricted to specific user groups as defined below:

- Administrator – User can create, edit, delete and download recipes
- Recipe Administrator - User can create, edit, delete and download recipes
- Recipe Download – User can only download production recipes



## Global Alarms

In this section, the user defines the global alarms that can be use on the recipes. The global alarms are defined by process mode by phase. This option allows the user to define the global or defaults alarms that recipes can apply to a recipe. Figure 30a shows the form use to configure the alarms.

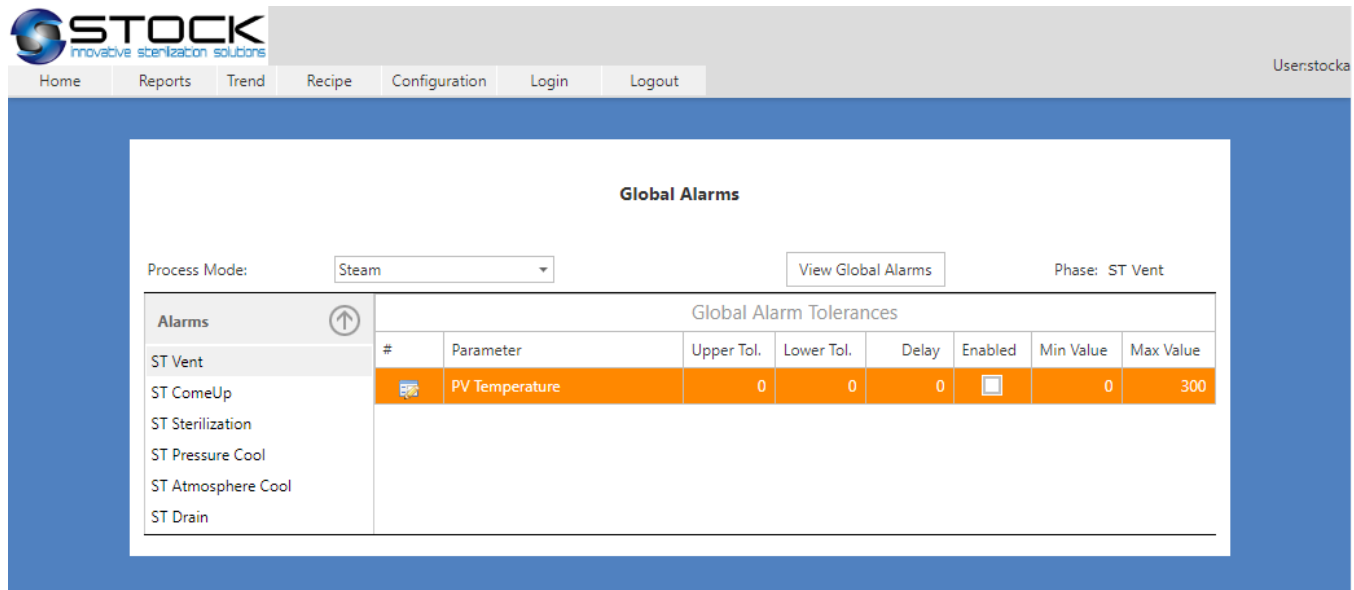


Figure 30a. Global Alarms

The global alarm configuration is accessible selecting the desired process mode and then by pressing the View Global Alarms button. This action will populate the list of phases available for the process mode and a grid showing the possible parameters for the phase.

In order to configure the alarm setpoints, the user will click the Edit image on the desired row or double click the row. This action enables the row for editing. The user can then enter the values. After editing the information, the user can save the changes by pressing the enter key or by pressing the green check mark image, to cancel the edit, the user can press the escape key or click on the red X image.

The edit fields for the default alarms contain the following information:

|                  |  |
|------------------|--|
| <b>Parameter</b> | Description of the parameter being edited. This field is just for information and is not editable.   |
| <b>Upper Tol</b> | Data entry field which enables the user to enter the alarm upper tolerance. For example, if the user enters 2 the system will trigger an alarm when the process values go 2 units above the recipe setpoint.           |
| <b>Lower Tol</b> | Data entry field which enables the user to enter the alarm lower tolerance. For example, if the user enters 2 the system will trigger an alarm when the process values go 2 units below the recipe setpoint.           |
| <b>Delay</b>     | Number of seconds the alarm condition must be active before triggering the alarm. For example, if the user enters 2 the process variables must be in alarm condition for at least 2 secs before triggering the alarms. |
| <b>Enabled</b>   | If Enabled, the alarm is active. If it is not enabled the system will ignore the alarms.   |



---

|                  |  |
|------------------|--|
| <b>Min Value</b> | Minimum value allowed. This field is just for information and is not editable. |
| <b>Max Value</b> | Maximum value allowed. This field is just for information and is not editable. |

The global alarms can be applied to a recipe revision during the recipe segment values. See Recipe Alarms section for more information.

## New Recipe

To create a new recipe the user selects New from the the recipe menu which then will display a submenu to allow the user to select the process mode for the recipe. This will display a new page showing the section, the user defines the header of the recipe (See figure 30). This information is common for all the recipe revisions under the same product code.

### New Recipe Fields

|                                     |  |
|-------------------------------------|--|
| <b>Recipe</b>                       | Alphanumeric field with a maximum field length of 25 characters. The application requires the field to be unique; otherwise a message will be displayed to the user.   |
| <b>Revision</b>                     | A number that is auto incremented by the application. It cannot be edited.   |
| <b>Process Mode</b>                 | Display the process process mode of the recipe. (This option does not apply to all retorts.)<br>The process modes include the following: <ul style="list-style-type: none"> <li>• Water Immersion</li> <li>• Steam / Spray</li> <li>• Spray</li> <li>• Steam</li> </ul>  |
| <b>Description</b>                  | Description of the recipe revision. It is a required field with a maximum of 255 characters.   |
| <b>Comment</b>                      | The comment field can be used by the user to enter comments for the recipe revision. It is a required field with a maximum of 255 characters.  |
| <b>Container Type</b>               | Describes the type of container. It is a required field with a maximum number of characters supported is 50.   |
| <b>Container Size</b>               | Describes the container size. It is a required field with a maximum number of characters supported is 50.  |
| <b>Container Qty</b>                | Number of containers inside the retort during the batch. Valid value range is from 0 – 100,000.  |
| <b>Minimum IT</b>                   | Minimum Initial Temperature allowed, any temperature below the minimum value will mark the cook as a deviated cook. It is a required field.  |
| <b>Process Table</b>                | User can select between the following options: <ul style="list-style-type: none"> <li>• No – No process tables selected.</li> <li>• Free Form: 5 X 5 Matrix of IT values and Retorts Temperatures fill with process times where the system will select the process time based on the IT value and the minimum table between Retort Temperature, Chart Temperature and TID Reference</li> </ul> |
| <b>Num of Inputs</b>                | Number of times the user will be prompted to enter the user inputs during the sterilization phase. The valid range is 1 – 3. This will activate a program hold on the process until the user enters the information.   |
| <b>Input 1, Input 2 and Input 3</b> | Value that indicates the percentage of time during the Hold segment that the user will be prompted for information. The interval value is based on a percentage of total segment time.   |
| <b>CUT Offset (F)</b>               | This offset will be added to the PV Temperature setpoint for the come up steps. For example if the recipe has a temperature setpoint of 251 F for a come up step and the CUT Offset value is 1 the system will control the temperature during come up at 252 F   |
| <b>Sterilization Offset (F)</b>     | This offset will be added to the PV Temperature setpoint for the sterilization step. For example if the recipe has a temperature setpoint of 251 F for sterilization step and the Sterilization Offset value is 2 the system will control the temperature during sterilization to 253 F  |

|                      |   |
|----------------------|---|
| <b>Motion</b>        | When applicable. Select if the recipe will have rocking, rotation or static.  |
| <b>Energy Mode</b>   | Indicated if Energy Mode will be active for the recipe. It doesn't apply to all the retorts.  |
| <b>Save</b>          | Saves the new recipe. A message will be displayed indicating the status of the action and instructions for the next step. (See figure 34) |
| <b>Update</b>        | Updates the recipe changes. A message will be displayed which indicates the status of the action with instructions for the next step.     |
| <b>Segments</b>      | Navigates to the segment page. If the 'Process Table' is selected this button will be disabled.   |
| <b>Process Table</b> | Opens the process table to configure its value. This button is enabled if the process table is selected                                   |
| <b>On</b>            | System generated date which indicates when the recipe revision was created.   |
| <b>By</b>            | The login "username" of the individual that saved the recipe as a production recipe.  |

### Recipe Header and General Information

---

**Recipe Header**

Recipe\*:  Revision: 1 Process Mode: Steam

Description\*:

Comments\*:

Container Type\*:  Container Size\*:  Container Qty:

Recipe Type: Experimental

---

**Initial Temperature / Process Table**

Minimum IT:  Process Table Required:  No  Free Form  Ball Method

Initial Temperature is required if Yes is selected

CUT Offset (F):

Sterilization Offset (F):

---

**User Inputs**

Num of Inputs:

Input 1 Time %:  Input 2 Time %:  Input 3 Time %:

---

**Edit Properties**

By: stocka On: 02/13/2020 12:53:50

Figure 30 –Recipes



## Process Table

A programming feature of the control system is the ability to designate multiple initial temperatures and multiple retort temperatures (see figure 32).

### Free Form

The process table consists of an array of initial temperature (IT) and retort temperature (RT). Validated process times are entered into IT / RT cell. The PLC monitors the products IT entered by the user and the RT during the hold segment and selects the proper process time define in the process table.

#### Fields Descriptions:

|                           |  |
|---------------------------|--|
| <b>Recipe</b>             | Displays the current recipe being edited or created  |
| <b>Revision</b>           | Displays the current recipe revision being edited or created   |
| <b>Recipe Type</b>        | Displays whether a recipe is Developmental or Experimental   |
| <b>I.T.</b>               | Initial Temperature, value range de 32 – 302   |
| <b>Retort Temperature</b> | Retort Temperature value range 32 – 302  |
| <b>Times</b>              | Process Time in Minutes:Sec value range <0 – 999>:<0-59>   |
| <b>Go Back</b>            | Navigates back to the previous page.   |
| <b>Save</b>               | Saves the new process table. A message will be displayed which indicates the status of the action with instructions for the next step. |
| <b>Segment</b>            | Navigates to the segment page  |

**Recipe Alternate Process Free Form**

Recipe: JulioTest Revision: 0 Recipe Type: Development

Lo ----- Hi

Retort Temperature

|    | IT    | 247.0 | 248.0 | 249.0 | 251.0 | 253.0 |
|----|-------|-------|-------|-------|-------|-------|
| Lo | 120.0 | 31:08 | 30:01 | 29:01 | 27:18 | 28:00 |
|    | 130.0 | 30:48 | 29:42 | 28:42 | 26:59 | 28:00 |
|    | 140.0 | 30:26 | 29:20 | 28:20 | 26:38 | 28:00 |
|    | 150.0 | 30:03 | 28:56 | 27:57 | 26:15 | 28:00 |
| Hi | 160.0 | 29:37 | 28:31 | 27:32 | 26:00 | 28:00 |

PLEASE NOTE: TIMES ARE ENTERED IN MINUTES:SECONDS

Figure 32 –Recipe Process Table

## Ball Method

The ball method alternate process calculates the process times for various Retorts and Initial temperatures. The retorts temperature, initial temperature and the heating factors are input by the user, see figure 32b.

The PLC monitors the products IT entered by the user and the RT during the hold segment and selects the proper process time define in the process table.

### Fields Descriptions:

|                             |   |
|-----------------------------|---|
| <b>Recipe</b>               | Displays the current recipe being edited or created   |
| <b>Revision</b>             | Displays the current recipe revision being edited or created  |
| <b>Recipe Type</b>          | Displays whether a recipe is Developmental or Experimental  |
| <b>z-Value</b>              | Temperature difference required to achieve a decimal change of the DT value   |
| <b>Ref Temp</b>             | Reference Temperature   |
| <b>m+g</b>                  | Retort Temperature during heating minus Retort Temperature during cooling cycle   |
| <b>F-Value</b>              | The time, at a constant temperature, Tref, required to destroy a given percentage of microorganisms   |
| <b>fh</b>                   | Heating Rate Factor   |
| <b>jh</b>                   | Heating Lag Factors   |
| <b>xbh</b>                  | Condition at the time where the break, the change in the slope of the heating curve occurs  |
| <b>f2</b>                   | Heating Factor  |
| <b>fc</b>                   | Cooling Rate Factor   |
| <b>Come Up Credit Min</b>   | Come-Up Time Credit in the Ball Formula. The concept is as follows: If the Ball Formula cook time established by the process authority is determined to be X minutes, Ball allows 42% of the <i>qualifying</i> come up time to be subtracted from the cook time X |
| <b>Process Correction %</b> | Percentage of Time that will be add to the calculated process times   |
| <b>I.T. Range</b>           | Initial Temperature Range, value range de 0 – 302   |
| <b>Retort Temp Range</b>    | Retort Temperature value range 0 – 302  |
| <b>Calculate</b>            | Calculate the Process Times using the Ball Method Formula   |
| <b>Times</b>                | Process Time in Minutes:Sec value range <0 – 999>:<0-59>  |
| <b>Go Back</b>              | Navigates back to the previous page.  |
| <b>Save</b>                 | Saves the new process table. A message will be displayed which indicates the status of the action with instructions for the next step.  |
| <b>Update</b>               | Updates the process table changes. A message will be displayed which indicates the status of the action with instructions for the next step.  |
| <b>Segment</b>              | Navigates to the segment page   |

**Recipe Alternate Process Ball Method**

Recipe: JulioTest Revision: 0 Recipe Type: Development

z-Value:  Ref Temp:  m+g:  F-Value:  fh:

jh:  xbh:  f2:  fc:

Min Retort Temp:  Retort Temp Spt:  Min IT Temp:  Max IT Temp:

Procs Correction %:

**Retort Temperature:**

| IT  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
|-----|------|------|------|------|------|------|------|------|------|------|
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| 0.0 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |

PLEASE NOTE: TIMES ARE ENTERED IN MINUTES:SECONDS

Figure 32b –Recipe Process Table



## Segments

The 'Segments' page provides the user with the ability to select the phases to build the list of segments for the recipe (see figure 37). The system supports a maximum of 16 segments in a recipe. Below you will find the descriptions of the phases by product mode.

### Steam Water Spray Process Mode Phases

#### SS Fill

##### Description

The purpose of this step is to fill the bottom of the retort with water to be used for recirculation loop. After the desired level has been reached, the step is completed.

##### Device Matrix

| Valve                    | Type    | Status | Notes  |
|--------------------------|---------|--------|--|
| Steam Valve              | Analog  | Close  |  |
| Cold Water Valve         | Analog  | Close  |  |
| Air Valve                | Analog  | Close  |  |
| Vent Valve               | Analog  | Open   | Open at 100%   |
| Drain Valve              | Analog  | Close  |  |
| Circulation Pump         | Digital | Off    |  |
| Pre-Heat Valve           | Digital | Close  |  |
| Fill Valve               | Digital | Open   | Open until both the maximum water level switch (19.4 + 5) is made and level transmitter reaches a set value for 5 seconds. |
| Direct Circulation Valve | Digital | Open   |  |
| Hx Circulation Valve     | Digital | Close  |  |
| Door Lock Open           | Digital | Off    |  |
| Door Lock Close          | Digital | On     |  |

### Phase Completion

The Fill step will complete when all the following conditions are met:

- Water Level Met
- Initial Temperature entered
- Segment Not in Hold

### Recipe Parameters and Alarms

| Parameter | Alarm Enabled |
|-----------|---------------|
| PV Level  |               |
| Hold      |               |
| PG #1     |               |
| PG #2     |               |
| PG #3     |               |

### SS PreHeat

#### Description

The PreHeat phase is use to heat the water on the bottom of the retort to a temperature that is above the initial temperature of the product so when the circulation pump starts on the come up phase we are not spraying cold water to the product.

#### Device Matrix

| Valve                    | Type    | Status | Notes   |
|--------------------------|---------|--------|---|
| Steam Valve              | Analog  | Close  |   |
| Cold Water Valve         | Analog  | Close  |   |
| Air Valve                | Analog  | Open   | Open 5 %  |
| Vent Valve               | Analog  | Active | We control pressure to 5 psi                        |
| Drain Valve              | Analog  | Close  |   |
| Circulation Pump         | Digital | Off    |   |
| Pre-Heat Valve           | Digital | Active | Open to control temperature to the recipe setpoint. |
| Fill Valve               | Digital | Close  |   |
| Direct Circulation Valve | Digital | Open   |   |

| Valve                | Type    | Status | Notes |
|----------------------|---------|--------|-------|
| Hx Circulation Valve | Digital | Close  |       |
| Door Lock Open       | Digital | Off    |       |
| Door Lock Close      | Digital | On     |       |

### Phase Completion

The preheat step will complete when the following conditions are met:

- Temperature Met
- Segment Time Met
- Segment not in hold.

### Recipe Parameters and Alarms

| Parameter       | Alarm Enabled |
|-----------------|---------------|
| PV Temperature  | X             |
| Segment Minutes |               |
| Segment Seconds |               |
| Segment Hold    |               |
| PG #1           |               |
| PG #2           |               |
| PG #3           |               |

## ST ComeUp

### Description

The Come Up phase the temperature and pressure are controlled and ramped to Cook Temperature. The pump is turn on to start circulating the water and spraying the product.

### Device Matrix

| Valve                    | Type    | Status | Notes  |
|--------------------------|---------|--------|--|
| Steam Valve              | Analog  | Active | Controlled to temperature setpoint using PID, if no setpoint it is closed.                             |
| Cold Water Valve         | Analog  | Close  |  |
| Air Valve                | Analog  | Active | Controlled to pressure setpoint using PID, if no setpoint it is closed.                                |
| Vent Valve               | Analog  | Active | Controlled to pressure setpoint using PID. Closes if adding air, open at 100% if no pressure setpoint. |
| Drain Valve              | Analog  | Close  |  |
| Circulation Pump         | Digital | On     | If minimum water level switch made.  |
| Pre-Heat Valve           | Digital | Close  |  |
| Fill Valve               | Digital | Close  | Open if minimum water level switch is not made and water below 212.                                    |
| Direct Circulation Valve | Digital | Open   |  |
| Hx Circulation Valve     | Digital | Close  |  |
| Door Lock Open           | Digital | Off    |  |
| Door Lock Close          | Digital | On     |  |

## Phase Completion

The come up step will complete when all the following conditions are met:

- Segment Temperature Met
- Segment Time Met
- Segment not in hold.

### Recipe Parameters and Alarms

| Parameter       | Alarm Enabled |
|-----------------|---------------|
| PV Temperature  | X             |
| PV Temp Ramp    |               |
| PV Pressure     | X             |
| PV Press Ramp   |               |
| PV Level        | X             |
| Flow            | X             |
| Segment Minutes |               |
| Segment Seconds |               |
| Segment Hold    |               |
| PG #1           |               |
| PG #2           |               |
| PG #3           |               |

### Sterilization

#### Description

The Sterilization step involves sterilizing the product after it has reached the established Cook. To complete this phase, the time setpoint from the recipe must be met.

During this step, the operator is required to check and entry of the reference indicating device and the Chart temperature and the time and interval specified on the recipe.

#### Device Matrix

| Valve            | Type   | Status | Notes  |
|------------------|--------|--------|--|
| Steam Valve      | Analog | Active | Controlled to temperature setpoint using PID, if no setpoint it is closed.                             |
| Cold Water Valve | Analog | Close  |  |
| Air Valve        | Analog | Active | Controlled to pressure setpoint using PID, if no setpoint it is closed.                                |
| Vent Valve       | Analog | Active | Controlled to pressure setpoint using PID. Closes if adding air, open at 100% if no pressure setpoint. |

| Valve                    | Type    | Status | Notes   |
|--------------------------|---------|--------|---|
| Drain Valve              | Analog  | Close  |   |
| Circulation Pump         | Digital | On     | If minimum water level switch made.                                 |
| Pre-Heat Valve           | Digital | Close  |   |
| Fill Valve               | Digital | Close  | Open if minimum water level switch is not made and water below 212. |
| Direct Circulation Valve | Digital | Open   |   |
| Hx Circulation Valve     | Digital | Close  |   |
| Door Lock Open           | Digital | Off    |   |
| Door Lock Close          | Digital | On     |   |

### Phase Completion

The Sterilization step will complete when all the following conditions are met:

- Segment Time Met.
- Segment not in hold.

### Recipe Parameters and Alarms

| Parameter       | Alarm Enabled |
|-----------------|---------------|
| PV Temperature  | X             |
| PV Pressure     | X             |
| PV Press Ramp   |               |
| PV Level        | X             |
| Flow            | X             |
| Segment Minutes |               |
| Segment Seconds |               |
| Segment Hold    |               |
| PG #1           |               |
| PG #2           |               |
| PG #3           |               |

## Pressure Cooling

### Description

The pressure cooling the system will try to maintain the pressure the system had during sterilization. The steam will collapse due to the cooling water and the system will use the compress air valve and vent valve to control the pressure. The cooling method will be spray cooling. Once the system gets into pressure cooling after been in sterilization it will wait 60 seconds for the pressure to stabilized before starting the cooling process. The system will monitor the empty or safety water level sensor if met it will start the circulation pump ramping up the speed and it will continue to add water until the we have enough water level to maintain a good flow of water; this level is mark by the maximum water level. The pump forces the water to circulate through the heat exchanger where we indirectly cool down the process water. The system allows to have multiple pressure cooling steps, but always the first pressure cooling step will be control at the pressure the system was running during the sterilization step. The system allows for pressure setpoint and ramps where the system will control the pressure based on the setpoints.

### Device Matrix

| Valve                    | Type    | Status | Notes  |
|--------------------------|---------|--------|--|
| Heating Control Valve    | Analog  | Close  |  |
| Indirect Cooling Valve   | Analog  | Open   | Open at 100% if no temperature setpoint, PID control if setpoint.                                      |
| Air Pressure Valve       | Analog  | Open   | Controlled to pressure setpoint using PID, closes if no setpoint.                                      |
| Vent SWS Valve           | Analog  | Open   | Controlled to pressure setpoint using PID. Closes if adding air, open at 100% if no pressure setpoint. |
| Drain Valve              | Analog  | Close  |  |
| Circulation Pump         | Digital | On     | If minimum water level sensor made.  |
| Pre-Heat Valve           | Digital | Close  |  |
| Water Fill Valve         | Digital | Open   | Open if minimum water level switch is not made.  |
| Direct Circulation Valve | Digital | Close  |  |
| Hx Circulation Valve     | Digital | Open   |  |
| Door Lock Open           | Digital | Off    |  |

| Valve           | Type    | Status | Notes |
|-----------------|---------|--------|-------|
| Door Lock Close | Digital | On     |       |

### Phase Completion

The Pressure Cooling step will complete when all the following conditions are met:

- Segment Temperature Met
- Segment Time Met
- Segment not in hold.

### Recipe Parameters and Alarms

| Parameter       | Alarm Enabled |
|-----------------|---------------|
| PV Temperature  | X             |
| PV Temp Ramp    |               |
| PV Pressure     | X             |
| PV Press Ramp   |               |
| PV Level        |               |
| Segment Minutes |               |
| Segment Seconds |               |
| Segment Hold    |               |
| PG #1           |               |
| PG #2           |               |
| PG #3           |               |

### Atmospheric Cooling

Description

The atmospheric cooling the system will open the Vent valve to release all the pressure from the vessel as it continues the cooling process.

Device Matrix

| Valve                 | Type   | Status | Notes |
|-----------------------|--------|--------|-------|
| Heating Control Valve | Analog | Close  |       |



| Valve                    | Type    | Status | Notes  |
|--------------------------|---------|--------|--|
| Indirect Cooling Valve   | Analog  | Close  | Open at 100% if no temperature setpoint, PID control if setpoint.                                      |
| Air Pressure Valve       | Analog  | Close  | Controlled to pressure setpoint using PID, closes if no setpoint.                                      |
| Vent SWS Valve           | Analog  | Open   | Controlled to pressure setpoint using PID. Closes if adding air, open at 100% if no pressure setpoint. |
| Drain Valve              | Analog  | Close  |  |
| Circulation Pump         | Digital | On     | If minimum water level sensor made.  |
| Pre-Heat Valve           | Digital | Close  |  |
| Water Fill Valve         | Digital | Open   | Open if minimum water level switch is not made.  |
| Direct Circulation Valve | Digital | Close  |  |
| Hx Circulation Valve     | Digital | Open   |  |
| Door Lock Open           | Digital | Off    |  |
| Door Lock Close          | Digital | On     |  |

### Phase Completion

The Pressure Cooling step will complete when all the following conditions are met:

- Segment Temperature Met
- Segment Time Met
- Segment not in hold.

### Recipe Parameters and Alarms

| Parameter      | Alarm Enabled |
|----------------|---------------|
| PV Temperature | X             |
| PV Temp Ramp   |               |
| PV Level       |               |

| Parameter       | Alarm Enabled |
|-----------------|---------------|
| Segment Minutes |               |
| Segment Seconds |               |
| Segment Hold    |               |
| PG #1           |               |
| PG #2           |               |
| PG #3           |               |

## Drain

### Description

The Drain phase the system will open the drain valve and use the circulation pump to empty the vessel and allow the process to complete. The drain valve will open if the water is below 125 Deg F

### Device Matrix

| Valve                    | Type    | Status | Notes   |
|--------------------------|---------|--------|---|
| Heating Control Valve    | Analog  | Close  |   |
| Indirect Cooling Valve   | Analog  | Close  |   |
| Air Pressure Valve       | Analog  | Open   | Controlled to pressure setpoint using PID. If no pressure setpoint it closes. |
| Vent SWS Valve           | Analog  | Open   | Open at 100% if no pressure setpoint, PID control if setpoint.                |
| Drain Valve              | Analog  | Open   | Closed if water retained is selected.   |
| Circulation Pump         | Digital | Off    |   |
| Pre-Heat Valve           | Digital | Close  |   |
| Water Fill Valve         | Digital | Close  |   |
| Direct Circulation Valve | Digital | Open   |   |
| Hx Circulation Valve     | Digital | Close  |   |

| Valve           | Type    | Status | Notes |
|-----------------|---------|--------|-------|
| Door Lock Open  | Digital | Off    |       |
| Door Lock Close | Digital | On     |       |

### Phase Completion

The Drain step will complete when all the following conditions are met:

- Water Level Met
- Temperature Door Safety below 130 F
- Zero Pressure Switch
- Level Safety Relay
- Segment not in hold.

### Recipe Parameters and Alarms

| Parameter       | Alarm Enabled |
|-----------------|---------------|
| System Pressure |               |
| PV Level        |               |
| Segment Minutes |               |
| Segment Seconds |               |
| Segment Hold    |               |
| PG #1           |               |
| PG #2           |               |
| PG #3           |               |

## Segment Configuration Fields

|                              |   |
|------------------------------|---|
| <b>Recipe</b>                | Displays the recipe name  |
| <b>Revision</b>              | Revision number of the recipe   |
| <b>Recipe Type</b>           | Displays the recipe type (Development or Experimental)  |
| <b>Available Phases</b>      | Lists available phases that the user can select. To add a phase as a segment, the user will select the desired phase, click on the button label and add or double click on the desired phase. This list varies based on the process mode of the recipe. |
| <b>Insert</b>                | Button to add the selected phase to the segment configuration list. This action is the same action as double clicking on the desired phase. The insert is going to be above the selected phase on the Segment Configuration                             |
| <b>Insert All</b>            | Button to add all the phases to the segment configuration list.   |
| <b>Remove</b>                | Button to remove the selected segment from the segment configuration list.  |
| <b>Clear All</b>             | Button to clear the segment configuration list.   |
| <b>Segment Configuration</b> | List of phases making up the segments for the recipe. The order of the segment list will be the order in which the recipe will be executed. The application supports a maximum of 16 segments per recipe.   |
| <b>Up</b>                    | Button to change the sequence of the segments. Selecting a segment from the list and pressing this button will move up the position of the segment in the list.   |
| <b>Down</b>                  | Button to change the sequence of the segments. Selecting a segment from the list and pressing this button will move down the position of the segment in the list.   |
| <b>Copy</b>                  | Copy the selected segment from the segment configuration. This action duplicates the segment with all the parameters values.  |
| <b>Go Back</b>               | Returns to the previous page  |
| <b>Parameters</b>            | Opens the page for the parameter configuration  |

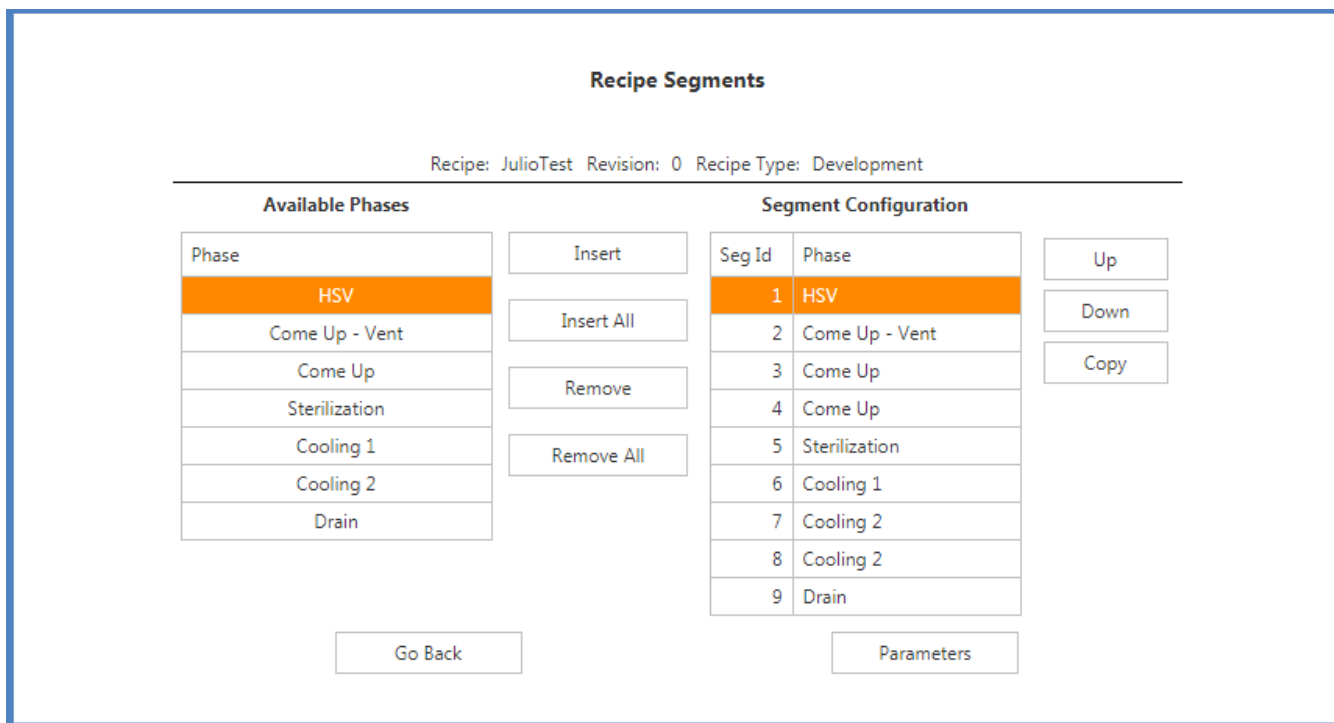


Figure 37 – Segments

## Recipe Segment Values

This page allows the user to configure the parameters of the segments and the alarms. The information is organized on a sidebar grouped by segments. The groups will expand and collapse based on the user selection of a phase. Figure 38 displays the segments group expanded with segment one selected. To configure the segment parameters the user should select the desired segment or phase of interest. The available parameters will then be displayed.

In order to edit the parameter values, the user will click the *desire* the row, this action will enable the row for editing. The user can edit multiple parameters (rows) at a time and submitting all the changes at once by pressing the save changes link. Figure 39a shows a parameter row in an edit mode and figure 39b shows the fields that have been change and not save yet with a green background. To cancel the changes, the user can press link that is label Cancel changes. The edit fields for the segment parameters contain the following information:

|                  |   |
|------------------|---|
| <b>Parameter</b> | Description of the parameter being edited. This field is just for information and is not editable.  |
| <b>Units</b>     | Units of measurement of the parameter. This field is just for information and is not editable.  |
| <b>Value</b>     | Data entry field which enables the user to enter the parameter value or setpoint.   |
| <b>Upper Tol</b> | Data entry field which enables the user to enter the alarm upper tolerance. For example, if the user enters 2 the system will trigger an alarm when the process values go 2 units above the recipe setpoint.          |
| <b>Lower Tol</b> | Data entry field which enables the user to enter the alarm lower tolerance. For example, if the user enters 2 the system will trigger an alarm when the process values go 2 units below the recipe setpoint.          |
| <b>Delay</b>     | Number of seconds the alarm condition must be active before triggering the alarm. For example, if the user enters 2 the process variables must be in alarm condition for at least 2 secs before triggering the alarms |

|                  |  |
|------------------|--|
| <b>Enabled</b>   | If Enabled, the alarm is active. If it is not enabled the system will ignore the alarms. |
| <b>Min Value</b> | Minimum value allowed. This field is just for information and is not editable.           |
| <b>Max Value</b> | Maximum value allowed. This field is just for information and is not editable.           |

### Recipe Segments

Recipe: JulioTest Revision: 0 Seg 1 - HSV Recipe Type: Development

| Segments               | Recipe Segment Values |       |       |            |            |       |                                     |           |           |
|------------------------|-----------------------|-------|-------|------------|------------|-------|-------------------------------------|-----------|-----------|
|                        | Parameter             | Units | Value | Upper Tol. | Lower Tol. | Delay | Tol. Enabled                        | Min Value | Max Value |
| Seg 1 - HSV            |                       |       |       |            |            |       |                                     |           |           |
| Seg 2 - Come Up - Vent | SV Temperature        | F     | 241   | 6          | 6          | 20    | <input checked="" type="checkbox"/> | 0         | 302       |
| Seg 3 - Come Up        | SV Level              | %     | 71    | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 90        |
| Seg 4 - Come Up        | System Press          | PSI   | 20    | 7          | 10         | 10    | <input checked="" type="checkbox"/> | 0         | 100       |
| Seg 5 - Sterilization  | Rotor Speed           | RPM   | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 30        |
| Seg 6 - Cooling 1      | Segment Hold          |       | 1     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 7 - Cooling 2      | PG #1                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 8 - Cooling 2      | PG #2                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 9 - Drain          | PG #3                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |

Save changes
 Cancel changes

Go Back
Set Global Alarms
Next

Figure 38 – Recipe Segment Values

### Recipe Segments

Recipe: JulioTest Revision: 0 Seg 1 - HSV Recipe Type: Development

| Segments               | Recipe Segment Values |       |       |            |            |       |                                     |           |           |
|------------------------|-----------------------|-------|-------|------------|------------|-------|-------------------------------------|-----------|-----------|
|                        | Parameter             | Units | Value | Upper Tol. | Lower Tol. | Delay | Tol. Enabled                        | Min Value | Max Value |
| Seg 1 - HSV            |                       |       |       |            |            |       |                                     |           |           |
| Seg 2 - Come Up - Vent | SV Temperature        | F     | 240   | 6          | 6          | 20    | <input checked="" type="checkbox"/> | 0         | 302       |
| Seg 3 - Come Up        | SV Level              | %     | 70    | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 90        |
| Seg 4 - Come Up        | System Press          | PSI   | 21    | 7          | 10         | 10    | <input checked="" type="checkbox"/> | 0         | 100       |
| Seg 5 - Sterilization  | Rotor Speed           | RPM   | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 30        |
| Seg 6 - Cooling 1      | Segment Hold          |       | 1     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 7 - Cooling 2      | PG #1                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 8 - Cooling 2      | PG #2                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 9 - Drain          | PG #3                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |

Save changes
  Cancel changes

Figure 39a– Parameters entry form

### Recipe Segments

Recipe: JulioTest Revision: 0 Seg 1 - HSV Recipe Type: Development

| Segments               | Recipe Segment Values |       |       |            |            |       |                                     |           |           |
|------------------------|-----------------------|-------|-------|------------|------------|-------|-------------------------------------|-----------|-----------|
|                        | Parameter             | Units | Value | Upper Tol. | Lower Tol. | Delay | Tol. Enabled                        | Min Value | Max Value |
| Seg 1 - HSV            |                       |       |       |            |            |       |                                     |           |           |
| Seg 2 - Come Up - Vent | SV Temperature        | F     | 241   | 6          | 6          | 20    | <input checked="" type="checkbox"/> | 0         | 302       |
| Seg 3 - Come Up        | SV Level              | %     | 71    | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 90        |
| Seg 4 - Come Up        | System Press          | PSI   | 21    | 8          | 9          | 10    | <input checked="" type="checkbox"/> | 0         | 100       |
| Seg 5 - Sterilization  | Rotor Speed           | RPM   | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 30        |
| Seg 6 - Cooling 1      | Segment Hold          |       | 1     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 7 - Cooling 2      | PG #1                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 8 - Cooling 2      | PG #2                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |
| Seg 9 - Drain          | PG #3                 |       | 0     | 0          | 0          | 0     | <input type="checkbox"/>            | 0         | 1         |

Save changes
  Cancel changes

Figure 39b– Parameters entry form

## Available Parameters

The available parameter varies by process mode and by phase so not all of them may be applicable to your application.

| Parameter       | Description  | Units     | Max Value | Min Value |
|-----------------|--|-----------|-----------|-----------|
| Flow            | Flow alarm set point value.  | GPM       | 1450      | 0         |
| PG #1           | Programmable contact #1 provides additional capabilities to the system by turning an output on at the end of the segment. If set to a value of "1" the output will be on during the segment. | NA        | 1         | 0         |
| PG #2           | Programmable contact #2 provides additional capabilities to the system by turning an output on at the end of the segment. If set to a value of "1" the output will be on during the segment. | NA        | 1         | 0         |
| PG #3           | Programmable contact #3 provides additional capabilities to the system by turning an output on at the end of the segment. If set to a value of "1" the output will be on during the segment. | NA        | 1         | 0         |
| PV Level        | Process Vessel Water Level alarm setpoint valve  | %         | 100       | 0         |
| PV Press Ramp   | Process Vessel pressure ramp. The ramp is defined by the number of PSI per minute that the set point will increase until it reaches the set point.   | Psig      | 100       | 0         |
| PV Press        | Process Vessel pressure set point.   | Psig      | 100       | 0         |
| PV Temp Ramp    | Process Vessel temperature ramp. The ramp is defined by the number of degrees per minute that the set point will increase until it reaches the set point.                                    | Deg F/min | 302       | 0         |
| PV Temperature  | Process Vessel temperature set point.  | DegF      | 302       | 0         |
| Segment Hold    | With a value of "1" the segment will be held at the end of the segment until the user removes the hold.  | NA        | 1         | 0         |
| Segment Minutes | Duration of the segment in minutes.  | Minutes   | 499       | 0         |
| Segment Seconds | Duration of the segment set point (in seconds).  | Seconds   | 59        | 0         |



## Recipe Alarms

The recipe alarms are configured by steps.

### Alarm Type

We can classify the alarms by two types which are:

- Process Alarms
  - Alarms which are configured and enabled by the recipe. The recipe contains the definition of the process setpoints, upper tolerance, lower tolerance, delays and enabled which are the parameters that the controller uses to evaluate and trigger the alarms. The triggers generate alarm events which are Hi Alarm, Low Alarm, Out of Alarm and Acknowledge.

The alarm conditions can be break down by different zones. The diagram 1 below shows the different alarm zones and normal process zone it will be used to explain how the alarm events are trigger. But before we continue lets define the **Hi Alarm Limit** and **Low Alarm Limit**.

- **Hi Alarm Limit** = Recipe Setpoint + Upper Alarm Tolerance
- **Low Alarm Limit** = Recipe Setpoint - Lower Alarm Tolerance

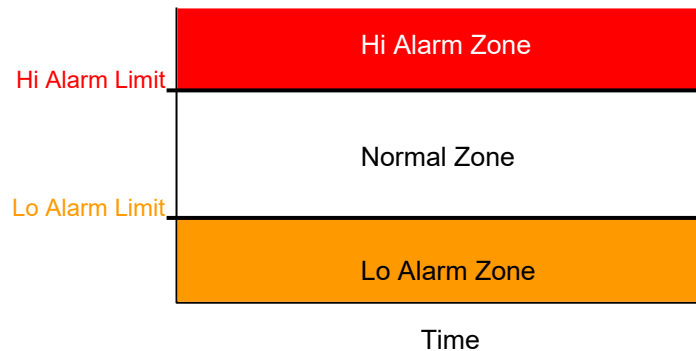


Diagram 1 - Alarm Zones

The In Alarm and Out of Alarm events are triggered by the PLC, and are monitored and logged by the HMI. The alarm acknowledgement event is triggered by the operator when he or she acknowledge the alarm from the HMI.

- **In Alarm** - The In Alarm Event is trigger when the process value crosses the **Hi Alarm Limit** or the **Lo Alarm Limit** and it stays in that zone for a duration equal or longer or equal than the delay time configured on the recipe. Below we will provide an example for the Hi Alarm Event but the event for the Lo Alarm Event will have similar behavior, with the exception that for the Lo Alarm the setpoint has to be met at least once or the time in step elapsed.

If the process values cross the **Hi Alarm Limit** but it doesn't stay in that zone for the duration of the delay the alarm will not be trigger.

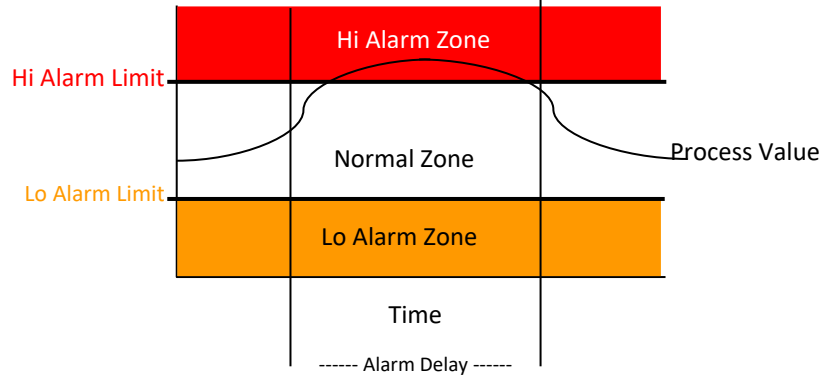


Diagram 2 - Process not in alarm

See diagram 2 it shows a condition where the Hi Alarm event was not trigger because proces value was not above the **Hi Alarm Limit** for duration of the alarm delay. The system considers the process value out of alarm immediately when the process values goes below the **Hi Alarm Limit** into the Normal Zone.

See diagram 3 the shows the condition where the **In Alarm** event will be trigger because the process value remain above the **Hi Alarm Limit** for a time greater or equal to the alarm delay.

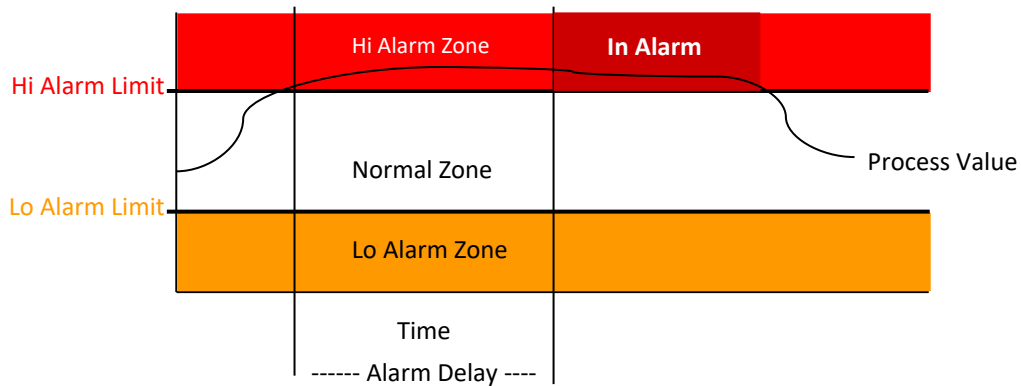


Diagram 3 - Process In alarm

- Out of Alarm** - The Out Alarm Event is trigger when the process value returns to the **Normal Zone** by crossing above the **Lo Alarm Limit** for the Lo Alarm or crosses below the **Hi Alarm Limit** for the Hi Alarm. There is not a delay for this event when the process values return to it normal zone after being in a In Alarm condition it is consider out or alarm.

Below diagram 4 shows an example for the Out of Alarm Event after Hi **In Alarm** condition, which happens when the process values goes below the **Hi Alarm Limit**.

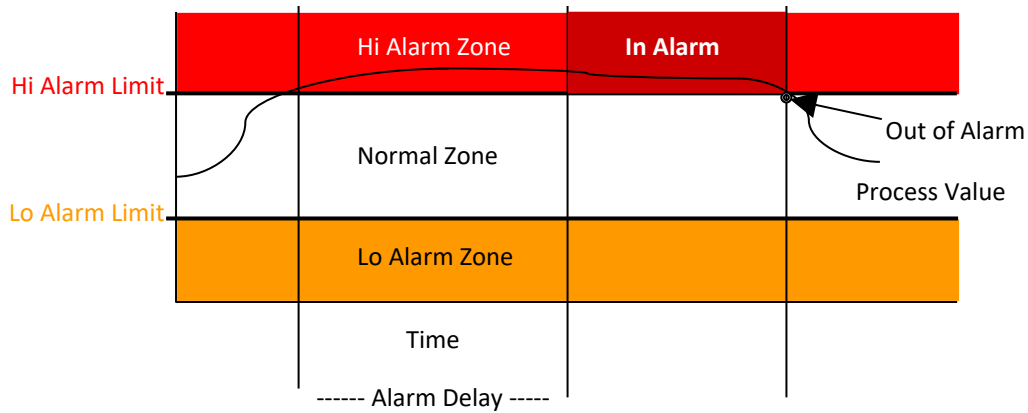


Diagram 4 - Process Out of Alarm

Once the process values goes out of alarm if the process value goes back into an alarm zone it will have to stay in the alarm zone for the duration of the Alarm Delay before the the In Alarm event if trigger again.  
See Diagram 5.

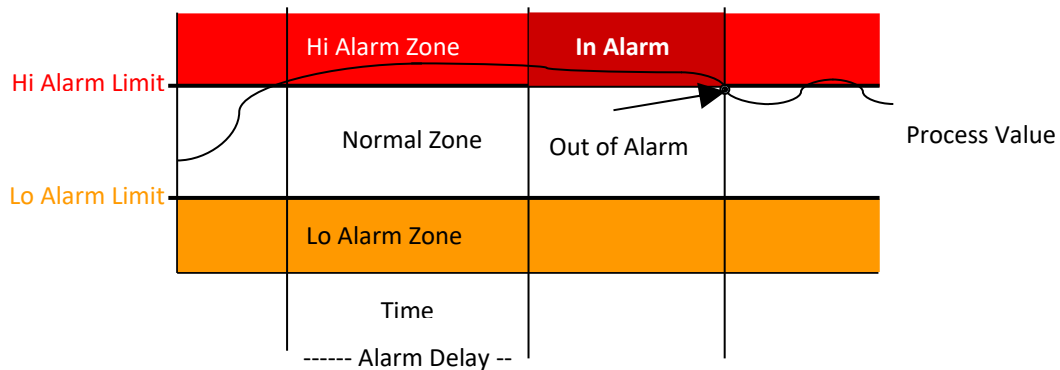


Diagram 5

Diagram 5 shows the process out of alarm it will stay out of alarm even when it crosses the alarm limit because it did not stay in the **Hi AlarmZone** for the duration of the alarm delay.

- **Acknowledge** - Event that occurs when the user acknowledges the alarm from the HMI.

### Discrete Alarms

Discrete Alarms are conditions that monitor equipment failures, on/off sensors or contacts and user actions. They are not driven by recipe or process values just by the status of an input, contacts or user action or entry

### Global Alarms

The global alarms can be applied to a recipe revision by pressing the set global alarms button which will copy the global alarms parameters to the recipe. Global alarms are like templates for that alarms.

### Configure Recipe Type

This screen gives the user the opportunity to change the recipe type to “Experimental” or “Production” (see figure 41). This option can be accessed at any time during the life cycle of the experimental recipe.

#### Types of Recipes:

|                     |  |
|---------------------|--|
| <b>Development</b>  | This is the initial recipe type and is created when a new recipe is started. The recipe type will remain as “Development” unless and/or until the user saves the recipe as “Experimental” or “Production”. This recipe type is not available to any user for download since it is at a stage in the development process that has not been saved. |
| <b>Experimental</b> | This type of recipe can be edited and downloaded to the PLC only by the “Administrator” or “Recipe Administrator”. The “Operator” user group cannot download “Experimental” recipes. The experimental type can be edited at any time without changing its revision number if the user selects the edit function from the recipe menu.            |
| <b>Production</b>   | This type of recipe is to be used during production. This type of recipe cannot be edited but can be downloaded to the “Recipe Download” user group for the purpose of production.   |

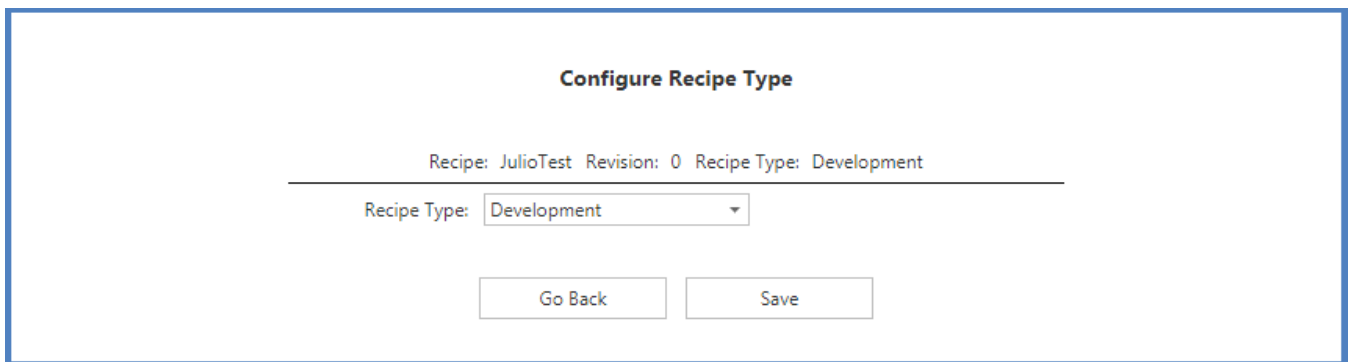


Figure 41 – Change Product Type

## Copy

This option allows the user to **use an existing recipe as a template to create a new recipe**. When this option is selected, a list of recipes, grouped by process mode, recipe type, and recipe (see figure 42), will be displayed. The user selects the recipe to be used as the template and then selects the button label Copy Selected recipe which will display the new recipe for to enter the new name

**Copy Recipes**

Select the Recipe to use as a template and click the button label Copy Recipe

Process Mode ▲ ♀

| #   | Recipe ▲        | Contrnr Size | Revision ▲ | Description  | Recipe Type ▲ ♀ |
|---|-----------------|--------------|------------|--|-----------------|
| <span>⌂</span> Process Mode: Water Immersion (Continued on the next page) |                 |              |            |  |                 |
|   | Baseline Recipe | 15.5oz       | 1          | Initial TD Test  | Experimental    |
|   | Baseline Recipe | 15.5oz       | 1          | Initial TD Test  | Production      |
|   | Baseline Recipe | 15.5oz       | 2          | Baseline Recipe 2. Changes to Initial TD   | Experimental    |
|   | Baseline Recipe | 15.5oz       | 2          | Baseline Recipe 2. Changes to Initial TD   | Production      |
|   | Baseline Recipe | 15.5oz       | 3          | Baseline Recipe 3. Official TD Recipe for 254F Process. Changes to Initial TD  | Experimental    |
|   | Baseline Recipe | 15.5oz       | 3          | Baseline Recipe 3. Changes to Initial TD   | Production      |
|   | Baseline Recipe | 15.5oz       | 4          | Baseline Recipe 4 for Queso Blanco. Official TD Recipe for 250F Process. Changes to Initial TD                         | Experimental    |
|   | Baseline Recipe | 15.5oz       | 4          | Baseline Recipe 4 for Queso Blanco. Changes to Initial TD  | Production      |
|   | Baseline Recipe | 15.5oz       | 5          | Baseline Recipe 5 for Queso Blanco. Changed CUV to 3 min and CU2 to 2min to allow time for vessel to fill.             | Experimental    |
|   | Baseline Recipe | 15.5oz       | 5          | Baseline Recipe 7. Low RPM for TD Based on Recipe #3 Queso   | Production      |
|   | Baseline Recipe | 15.5oz       | 6          | Baseline Recipe 6. Control PV Temp at 253F during sterilization. Overshoot temp on CU1&2 is changed to 255F            | Experimental    |
|   | Baseline Recipe | 15.5oz       | 7          | Baseline Recipe 7. Low RPM for TD Based on Recipe #3 Queso   | Experimental    |
|   | Baseline Recipe | 15.5oz       | 8          | Baseline Recipe 3. Changes to Initial TD   | Experimental    |
|   | Baseline Recipe | 15.5oz       | 9          | Baseline Recipe 7. Low RPM for TD Based on Recipe #3 Queso and lower SV level during HSV and MicroCooling Steps (75%). | Experimental    |

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1
2
3
4
5
6
⏩

Copy Selected Recipe

Figure 42 – New recipe from existing

## Edit Recipe

This option allows the recipe administrator and the administrator users to **edit an Experimental or Development and revised a Production recipe**. When this option is selected a submenu is display to allow the user to select the type of recipe then a list of recipe is presented to the user so he can select the desired recipe to edit (see figure 44). The user selects the recipe that requires editing. After clicking on the recipe, the user presses the “Edit Recipe” button and is taken to recipe general information page.

**Edit Recipes**

Select the Recipe to edit and click the button label Edit Recipe

Process Mode ▲ 🔍

| #                               | Recipe ▲        | Contrn Size | Revision ▲ | Description                                    | Recipe Type ▲ 🔍 |
|---------------------------------|-----------------|-------------|------------|--|-----------------|
| ⌵ Process Mode: Water Immersion |                 |             |            |  |                 |
|                                 | Baseline Recipe | 15.5oz      | 0          | Baseline Recipe 3. Changes to Initial TD       | Development     |
|                                 | Baseline Recipe | 15.5oz      | 0          | Baseline Recipe 3. Changes to Initial TD       | Development     |
|                                 | Baseline Recipe | 15.5oz      | 0          | Baseline Recipe 2. Changes to Initial TD       | Development     |
|                                 | Baseline Recipe | 15.5oz      | 0          | Baseline Recipe 3. Changes to Initial TD       | Development     |
|                                 | Baseline Recipe | 15.5oz      | 0          | Baseline Recipe 3. Changes to Initial TD       | Development     |
|                                 | Baseline Recipe | 15.5oz      | 0          | Baseline Recipe 3. Changes to Initial TD       | Development     |
|                                 | JulioTest       | 15.5oz      | 0          | JulioTest Run Hi Temp                          | Development     |
|                                 | OP 77           | 15.5oz      | 0          | Tostitos 15 oz. Queso Blanco                   | Development     |
|                                 | OP 77           | 15.5oz      | 0          | Tostitos 15 oz. Queso Blanco                   | Development     |
|                                 | OP 81           | 24 oz.      | 0          | Tostitos 23 oz. Queso                          | Development     |
|                                 | TestVal1        | 15.5oz      | 0          | Test Validation 1 Tostitos 15 oz. Queso Blanco | Development     |
|                                 | TestValid       | wqewq       | 0          | TestValid                                      | Development     |

Edit Selected Recipe

Figure 44 – Edit Recipe

## Filter

This page enables the user with the ability to configure the recipes that will be available for download (see figure 45). There are two ways of filtering the recipes which are:

|                               |  |
|-------------------------------|--|
| <b>Recipe Revision Filter</b> | Checking this option will filter the list of available recipe revision, showing the active recipes with the highest revision.                                    |
| <b>De-activate</b>            | Deactivating a recipe for download hides it from the list of available recipes for download. To activate a recipe, the user has to uncheck the 'deactivate' box. |

### Recipe Revision Filter

Checking this option will filter the list of available recipe revision, showing the active recipes with the highest revision.

Recipe Revision Filter

Check the Recipe Revision to Filter

Process Mode ▲

| #  | Filter                   | Recipe          | Contrn Size | Revision | Description  | Recipe Type <span style="float: right;">📌</span> |
|--|--------------------------|-----------------|-------------|----------|--|--|
| ⌵ Process Mode: Water Immersion (Continued on the next page) |                          |                 |             |          |  |  |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 1        | Initial TD Test  | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 2        | Baseline Recipe 2. Changes to Initial TD   | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 3        | Baseline Recipe 3. Official TD Recipe for 254F Process. Changes to Initial TD  | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 4        | Baseline Recipe 4 for Queso Blanco. Official TD Recipe for 250F Process. Changes to Initial TD                         | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 5        | Baseline Recipe 5 for Queso Blanco. Changed CUV to 3 min and CU2 to 2min to allow time for vessel to fill.             | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 6        | Baseline Recipe 6. Control PV Temp at 253F during sterilization. Overshoot temp on CU1&2 is changed to 255F            | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 7        | Baseline Recipe 7. Low RPM for TD Based on Recipe #3 Queso   | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 8        | Baseline Recipe 3. Changes to Initial TD   | Experimental                                     |
|  | <input type="checkbox"/> | Baseline Recipe | 15.5oz      | 9        | Baseline Recipe 7. Low RPM for TD Based on Recipe #3 Queso and lower SV level during HSV and MicroCooling Steps (75%). | Experimental                                     |

Page 1 of 9 (83 items) ⏪ 1 2 3 4 5 6 7 8 9 ⏩

Figure 45 – Download Filter

## Download Recipe

The download recipe option gives the user the ability to **select a production recipe and download it to the retort**. Only users with the roles of Administrator, Recipe Administrator, and Operator can access this page. The production recipes listed are the last production revisions of the recipes.

The user selects the desired recipe to download and then clicks the ‘Download Recipe’ button (see figure 46). A list of available retorts of the recipe process mode is then displayed. The user then chooses the retort(s) for the recipe download (see figure 47). If a retort is running or if there is an error reading the status of the retort, it will be disabled from selection (see figure 47 which shows retort 1 as the only retort available for download). When the user selects to download a recipe a confirmation box will be displayed confirming whether user would like to download the recipe. If the user chooses “no”, the download will be cancelled. If the user chooses “yes”, a loading animation is presented to indicate that the download process is taking place.

If the sequence of downloading a recipe is completed with no errors, a message is displayed informing the user that the recipe was downloaded successfully. If there is an error in the sequence, the user is informed of the error. If the download results in an error, the user can attempt to download the recipe again. The events of downloading a recipe are logged and a report can be requested. See the “Reports” section for more information on the download recipe status.

Recipe List

Select the Recipe to Download

Process Mode ▾

| #  | Recipe            | Contrn Size | Revision | Description  | Prod Type    |
|--|-------------------|-------------|----------|--|--------------|
| ⓘ Process Mode: Water Immersion (Continued on the next page) |                   |             |          |  |              |
|  | Baseline Recipe   | 15.5oz      | 22       | Baseline Recipe #3 for 16oz with revisions made for 24oz Queso TD testing. SV Level decreased to 75% from 85%, Sterilization time increased to 29 minutes from 26 minutes & Cooling 2 time increased to 10 minutes from 8 minutes to match OP63. | Experimental |
|  | ChemicalFeedwVent | Non         | 1        | Recipe for the Chemical Feed in preparation for passivation with Come Up Vent so the PV will be fill from the SV Water   | Experimental |
|  | CookMats          | mats        | 1        | This Recipe is to cook the mats 250 Deg 120 min @ 5 RPM with 20 psi of pressure  | Experimental |
|  | dft TD-Study      | ANY         | 1        | Fritos Chili Cheese  | Experimental |
|  | DFTtest           | ANY         | 1        | DFT Test Recipe  | Experimental |
|  | Drain Retort      | NA          | 1        | Drain Retort   | Experimental |
|  | EmptySV           | ANY         | 1        | Empty SV Drain all water   | Experimental |
|  | HP recipe 1       | 15.5oz      | 4        | Based on HP recipe 1 Rev2. For Queso Blanco. CU temp 251. Sterilization temp 250. RPM remains at 18rpm. Updated process table. Updated Sterilization length to 36min 26sec   | Experimental |
|  | interogator       | ANY         | 1        | Alarm interrogation recipe   | Experimental |

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Download Recipe

Figure 46 – Recipe Download



**Please select retort to download recipe**

Recipe: dft TD-Study Revision: 1  
Description: Fritos Chili Cheese

Retorts:

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> Retort 1 | <input type="checkbox"/> Retort 6 |
| <input type="checkbox"/> Retort 2 | <input type="checkbox"/> Retort 7 |
| <input type="checkbox"/> Retort 3 | <input type="checkbox"/> Retort 8 |
| <input type="checkbox"/> Retort 5 |                                   |

Figure 47 – Retort list for recipe download

## Delete Recipe

This option allows the user to **delete recipes of type 'Development' and 'Experimental'**. The user is presented with the list of recipes available for deletion (See figure 48).



**Deleting a recipe will delete any information that was stored about this recipe.**

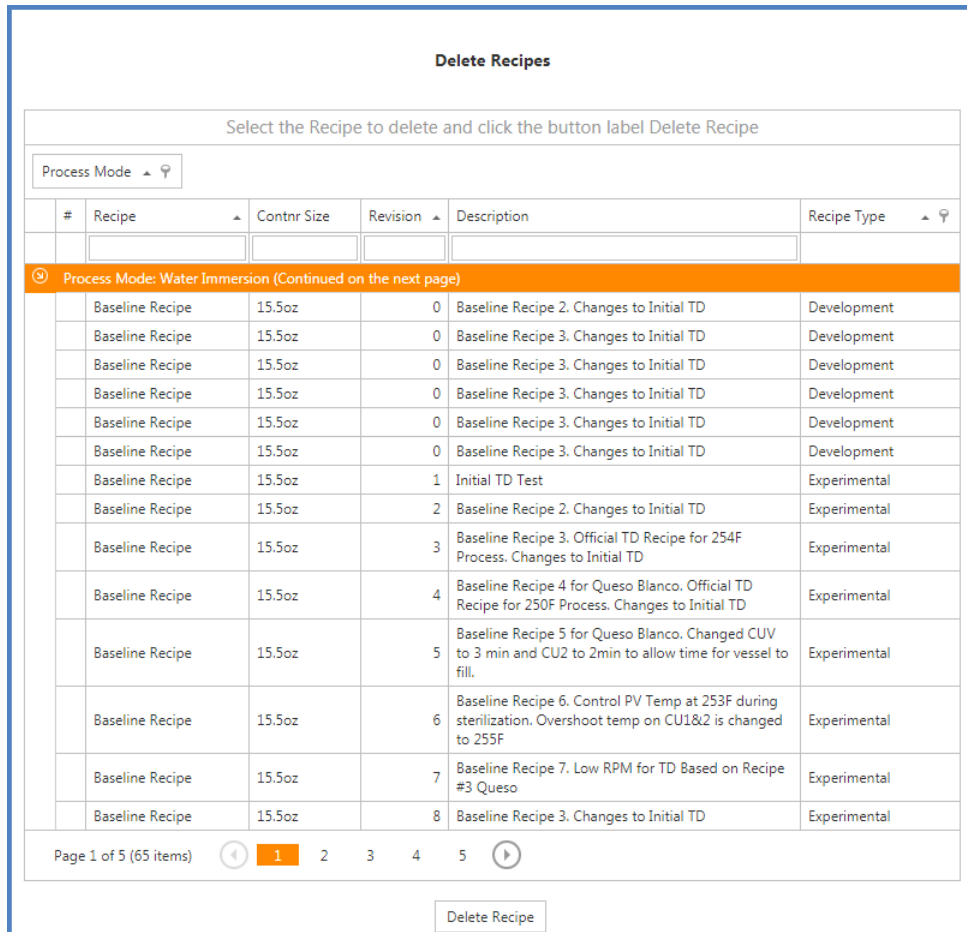


Figure 48 – Delete Recipe

## Configuration

### User Administration

The IconSMS application authenticates against a Windows Active Directory Domain Services (WADDS) so all the users are managed from the IconSMSADDS server. This page allows users with “Administrator” and “User Administrator” rights to copy the users configured on the WADDS.



The following fields are display (see figure 51):

|                   |  |
|-------------------|--|
| <b>Username</b>   | Application username. Maximum number of characters is 50.  |
| <b>Password</b>   | Maximum number of characters is 10. Minumum 5  |
| <b>First name</b> | Maximum number of characters is 50.  |
| <b>Last name</b>  | Maximum number of characters is 50.  |
| <b>Roles</b>      | <p>This field lists available user roles.</p> <ul style="list-style-type: none"><li>• Administrator / Domain Admins: User with all the application rights. User can create or edit users, configure printers, create new recipes, edit recipes, download experimental and production recipes, run retort, manual screen, pid tuning and acknowledge alarms.</li><li>• Maintenance - User can run retort, acknowledge alarms, and access manual screens.</li><li>• Operators - User can run retort and acknowledge alarms.</li><li>• Recipe Administrator: User can create new recipes, edit recipes, download experimental and production recipes, run retort and acknowledge alarms.</li><li>• Recipe Download: User can download production recipes, run retorts and acknowledge alarms.</li><li>• Recipe Reviewer: User group to review process records.</li><li>• User (Guest) - User can generate reports, view retort screens and view alarms.</li><li>• User Administrator: User can create or edit users, configure printers, run retort and acknowledge alarms.</li></ul> |

If new users are greated or group membership changes the user administrator should login to the IconSMS application and update the users in the IconSMS application to make sure it contains the update information which is important for the application.

**User Administration, user are created using the windows domain controller interface make sure to press the update users button to copy the users information to the IconSMS application**

| User List  | User Details   |
|--|--|
| Stock America<br>Julio Delgado<br>Retort Room<br>Retort Operator<br>test<br>a agui<br>a arms<br>a delgado<br>a nix<br>b boman<br>b dame<br>b watkins | User Name: <input type="text"/><br>First name: <input type="text"/> Last Name: <input type="text"/><br>Email Address: <input type="text"/> Login Disabled: <input type="checkbox"/><br>Assigned Roles:<br><div style="border: 1px solid black; height: 150px; width: 200px;"></div><br><input type="button" value="Update Users"/> |

Figure 51 – User Administration

## Retort Printers

The retort printers section of the application enables administrators of the application the ability to configure the printers to utilize the auto print application to print batch reports for the reports. The configuration is by retort so each retort can have a different printer (see figure 52).

To configure a printer for a retort, click the edit image of the row or double click the row for the desired retort and a pull down list of the printers configured on the IconSMS host will be displayed.

**Configure Retort Printers**









| #   | Retort   | Printer                          |
|---|----------|----------------------------------|
|  | Retort 1 | NPIE86F6F (HP LaserJet 600 M601) |
|  | Retort 2 | NPIE86F6F (HP LaserJet 600 M601) |
|  | Retort 3 | NPIE86F6F (HP LaserJet 600 M601) |
|  | Retort 4 | NPIE86F6F (HP LaserJet 600 M601) |
|  | Retort 5 | NPIE86F6F (HP LaserJet 600 M601) |
|  | Retort 6 | NPIE86F6F (HP LaserJet 600 M601) |
|  | Retort 7 | NPIE86F6F (HP LaserJet 600 M601) |
|  | Retort 8 | NPIE86F6F (HP LaserJet 600 M601) |

Figure 52-Retort Printers

## Login

In order to login to the application, the user must enter his/her username and password. The user is also given the opportunity to change his/her password (see figure 53).

**Please login with your user name and password**

User doesn't have permission

User Name:\*

Password:\*

[Change Password](#)

Figure 53 – Login

## Logout

When the user selects this option he/she will be logged out of the application and the login page will be displayed.

## Change Password

The user password can be changed from a computer that is part of the windows active directory. It cannot be change from the IconSMS application.

## Record Review

The record review page can be accessed from the menu, but only administrators and Record Reviewers user will have access to the page. The user can request the information using the following filters:

- Start Time
- End Time
- Recipe
- Retort - Multiple selection allowed
- Review Status - All, Not Reviewed, Reviewed, Hold, Released
- Batch Status - All, Aborted, Completed, Deviation

After the user request the cooks, a grid like the one shown in the image below, the grid can be exported to PDF file or excel by pressing the button label Export to PDF or Export to XLS. The grid will display the following columns:

- Edit - Enabled the editing of the record so user can select the review status and add notes.
- Batch # - User input at the start of cook.
- Status - Display the status of the batch
  - In Progress - Batch Started but not completed.
  - Aborted - Batch was aborted by the user. Text will be display red to indicated it was an aborted cook
  - Completed - Batch process completed
  - Deviation - There was a process deviation during the batch. The row text color will be displayed red.
  - Rotomat Batch Id - Automated batch id number generated by the IconRMS application to identify a batch. The field is also a hyperlink which will launch the full batch report of the cook on a new web page. (Please verify that your web browser is configured to allowed popups for the site). The user will be able to view the full batch report and review the record on the same page. (See image below)The rotomat batch id number is a 16 character number with the following format RRHHMMSSMMDDYYYY where
    - RR - Retort number Ex. for retort 1 it will be 01
    - HH - The hour number of the start of the cook.
    - MM -Minutes of the start of the cook
    - SS - Second of the start of the cook
    - MM - Month number of the start of the cook
    - DD - Day number of the start of the cook
    - YYYY - Year of the start of the cook.
  - R# - Retort number.
  - IT (F) - Initial Temperature value
  - Start Time - The start time of the Come up Vent Phase.
  - Total Cut - Total time for the Come Vents phases and Come Up phases.
  - Cook Time - Total Sterilization Time

- PV Temp (F) - Retort Temperature
- R. Temp (F) - User input temperature of the Reference temperature device.
- Chart - User input of the Chart Temperature
- Press (psi) - Pressure reading of the system at the time of the user inputs.
- PV Lvl (%) - Process Vessel water level at the time of the user inputs.
- RPM - Rotor Speed at the time of the user inputs.
- Reviewed - Show the latest batch review status. The status will also be represented with the following text color:
  - Reviewed - Green
  - Not Review - Blue
  - Hold - Red
- Review By - User name of the latest Record Reviewer
- Review Data - Date/Time of the latest record review

Summary Batch Record Review

Start Time:  End Time:  Recipe:

Retort:  Review Status:  Batch Status:

Retort 1  
Retort 2  
Retort 3  
Retort 4  
Retort 5

| Edit                 | Batch #          | Status    | View Batch Record | R# | IT (F) | Start Time          | Total CUT | Cook Time | PV Temp (F) | TID Temp (F) | Chart | Press (psi) | PV Lvl (%) | RPM  | Reviewed     | Review By | ReviewDate |
|----------------------|------------------|-----------|-------------------|----|--------|---------------------|-----------|-----------|-------------|--------------|-------|-------------|------------|------|--------------|-----------|------------|
| <a href="#">Edit</a> | 0301500409292017 | Completed |                   | 3  | 124    | 09/29/2017 01:51:09 | 00:13:08  | 00:32:15  | 254.2       | 255.4        | 254   | 32.2        | 75.3       | 19.2 | Not Reviewed |           |            |
| <a href="#">Edit</a> | 0502030509292017 | Completed |                   | 5  | 132    | 09/29/2017 02:04:19 | 00:13:48  | 00:31:35  | 254.1       | 255.3        | 254   | 32.7        | 75.1       | 19.3 | Not Reviewed |           |            |
| <a href="#">Edit</a> | 0602130809292017 | Completed |                   | 6  | 150    | 09/29/2017 02:14:04 | 00:13:23  | 00:30:00  | 254.2       | 255.5        | 254   | 32.5        | 74.5       | 19.3 | Not Reviewed |           |            |
| <a href="#">Edit</a> | 0702230009292017 | Completed |                   | 7  | 148    | 09/29/2017 02:23:59 | 00:13:23  | 00:30:45  | 254.2       | 255.4        | 254   | 32.8        | 74.4       | 19.3 | Not Reviewed |           |            |
| <a href="#">Edit</a> | 0802333109292017 | Completed |                   | 8  | 152    | 09/29/2017 02:34:31 | 00:13:21  | 00:30:00  | 254.2       | 255.3        | 254   | 32.9        | 74.2       | 19.3 | Not Reviewed |           |            |
| <a href="#">Edit</a> | 0203462809292017 | Completed |                   | 2  | 140    | 09/29/2017 03:47:48 | 00:13:53  | 00:30:45  | 254.2       | 255.2        | 254   | 32.7        | 74.7       | 19.3 | Not Reviewed |           |            |

To review a cook record the user has two options press the link label edit which will display the options to review a record or by pressing the batch id link which will display the full batch reports and they user will also have the options to review the record. The user will have to enter its login password to save the record review information.

## Summary Batch Record Review

Start Time:  End Time:  Recipe:   
 Retort:  Review Status:  Batch Status:

- All
- Retort 1
- Retort 2
- Retort 3
- Retort 4
- Retort 5

Request Cooks

Export To PDF

Export To XLS

Summary Batch Report

| Edit   | Batch #              | Status               | View Batch Record                | R#                   | IT (F)               | Start Time          | Total CUT | Cook Time | PV Temp (F) | TID Temp (F) | Chart | Press (psi) | PV Lvl (%) | RPM  | Reviewed             | Review By            | ReviewDate |
|--|----------------------|----------------------|----------------------------------|----------------------|----------------------|---------------------|-----------|-----------|-------------|--------------|-------|-------------|------------|------|----------------------|----------------------|------------|
| <input type="checkbox"/>   | <input type="text"/> | <input type="text"/> | <input type="text"/>             | <input type="text"/> | <input type="text"/> |                     |           |           |             |              |       |             |            |      | <input type="text"/> | <input type="text"/> |            |
| <input checked="" type="checkbox"/>  |                      | Completed            | <a href="#">0301500409292017</a> | 3                    | 124                  | 09/29/2017 01:51:09 | 00:13:08  | 00:32:15  | 254.2       | 255.4        | 254   | 32.2        | 75.3       | 19.2 | Not Reviewed         |                      |            |
| Reviewed: <input type="text" value="Not Reviewed"/> Password: <input type="text"/><br>Note: <input type="text"/> |                      |                      |                                  |                      |                      |                     |           |           |             |              |       |             |            |      |                      |                      |            |
| <input checked="" type="checkbox"/>  | <a href="#">Edit</a> | Completed            | <a href="#">0502030509292017</a> | 5                    | 132                  | 09/29/2017 02:04:19 | 00:13:48  | 00:31:35  | 254.1       | 255.3        | 254   | 32.7        | 75.1       | 19.3 | Not Reviewed         |                      |            |
| <input checked="" type="checkbox"/>  | <a href="#">Edit</a> | Completed            | <a href="#">0602130809292017</a> | 6                    | 150                  | 09/29/2017 02:14:04 | 00:13:23  | 00:30:00  | 254.2       | 255.5        | 254   | 32.5        | 74.5       | 19.3 | Not Reviewed         |                      |            |

[Update](#) [Cancel](#)





| ICON SMS Batch Report |                            | DFA Schulenburg                            |                          |              | Cook #:          |                |
|-----------------------|----------------------------|--|--------------------------|--------------|------------------|----------------|
| <b>Retort:</b>        | 3                          | <b>Batch:</b>                              | 0301500409292017         |              | <b>Cook Id:</b>  |                |
| <b>Recipe:</b>        | OP 78                      | <b>Description:</b>                        | Tostitos Smooth & Cheesy |              | <b>Rev:</b>      | 6 - Production |
| <b>Start Time:</b>    | 09/29/2017 01:50:04        | <b>End Time:</b>                           | 09/29/2017 02:50:48      |              | <b>Duration:</b> | 01:00:44       |
| <b>Container:</b>     | Glass - 15.5oz             | <b>Cont Qty:</b>                           | 3780                     |              |                  |                |
| <b>Seg #:</b>         | <b>HSV - 1</b>             | <b>SV Temp</b>                             | <b>Sys Pres</b>          | <b>Rotor</b> | <b>PV Level</b>  | <b>Flow</b>    |
|                       |                            | <b>°F</b>                                  | <b>psi</b>               | <b>rpm</b>   | <b>%</b>         | <b>gpm</b>     |
| Seg Begin             | 09/29/2017 01:50:04        | 270.1                                      | 28.70                    | 0.0          | 8.0              | 0              |
|                       | <b>09/29/2017 01:51:09</b> | <b>Initial Temperature Entry: 124.0 °F</b> |                          |              |                  | <b>dslig</b>   |
| Seg End               | 09/29/2017 01:51:09        | 270.1                                      | 38.10                    | 0.0          | 8.0              | 0              |
| Time In Seg:          | 00:01:05                   |  |                          |              |                  |                |
| <b>Seg #:</b>         | <b>Come Up - Vent - 1</b>  | <b>PV Temp</b>                             | <b>Sys Pres</b>          | <b>Rotor</b> | <b>PV Level</b>  | <b>Flow</b>    |
|                       |                            | <b>°F</b>                                  | <b>psi</b>               | <b>rpm</b>   | <b>%</b>         | <b>gpm</b>     |
| Seg Begin             | 09/29/2017 01:51:09        | 81.1                                       | 0.00                     | 0.0          | 8.0              | 0              |
| Seg End               | 09/29/2017 01:53:57        | 211.8                                      | 8.20                     | 91.0         | 828.0            | 46             |
| Time In Seg:          | 00:02:48                   |  |                          |              |                  |                |
| <b>Seg #:</b>         | <b>Come Up - 1</b>         | <b>PV Temp</b>                             | <b>Sys Pres</b>          | <b>Rotor</b> | <b>PV Level</b>  | <b>Flow</b>    |
|                       |                            | <b>°F</b>                                  | <b>psi</b>               | <b>rpm</b>   | <b>%</b>         | <b>gpm</b>     |

Batch Record Review

Review Status:

New Note:

Password: