



SERVICE INFORMATION LETTER

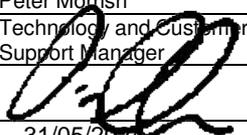
SIL-BER004

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Date:	31/05/2024		31/05/2024

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New Software Release Announcement for Beran PlantProtech™ 7600 PCMS & PlantProtech™ PROTOR Mobile

We are excited to announce the latest update in Beran Instruments' ongoing commitment to product enhancement. As part of our continuous product improvement program, we are pleased to offer a new software release for the Beran PlantProtech™ 7600 PCMS & PROTOR Mobile product suite. The following version is now available for upgrade:

- **Version 4.0.0**

Please note, it is essential that all product modifications, including software upgrades release files, are supplied by a Beran authorised Service Centre to ensure quality and compliance.

Software V4.0.0 updates:

Import Cutlass Data Files.

This feature allows users to import data from a Cutlass system so that they can review the data within the condition monitoring system.

**Please note, this update is only available for users that have a PlantProtech™ 7600 PCMS System.*

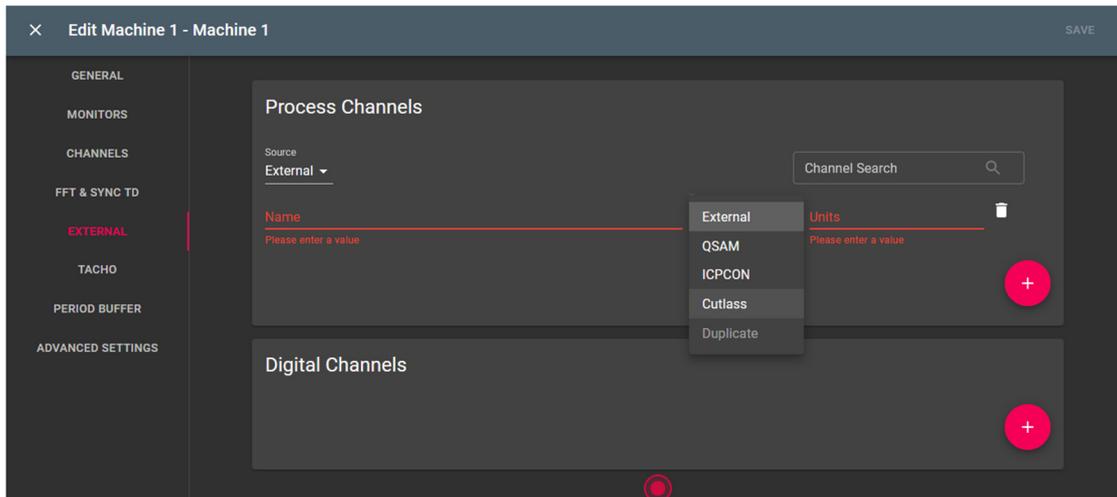


Figure 1 - Importing Cutlass Data Files

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System Log Enhancements

This feature updates the system log to now contain a larger range of notable events that would assist when diagnosing plant problems. The log now contains records of all machine state changes as well as speed signal losses.

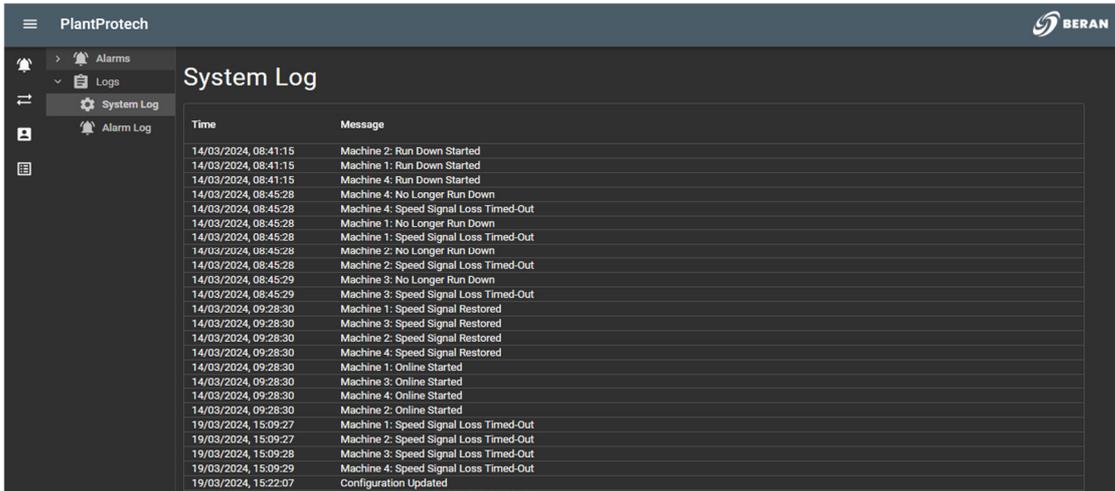


Figure 2 - System Log Enhancements

Store full Configuration in the datastore each time it changes.

Provide the ability to recover all complete user configuration files applied to the system so that it is possible to avoid having to remake configurations. The admin panel allows for the download of all the historic user configuration files.

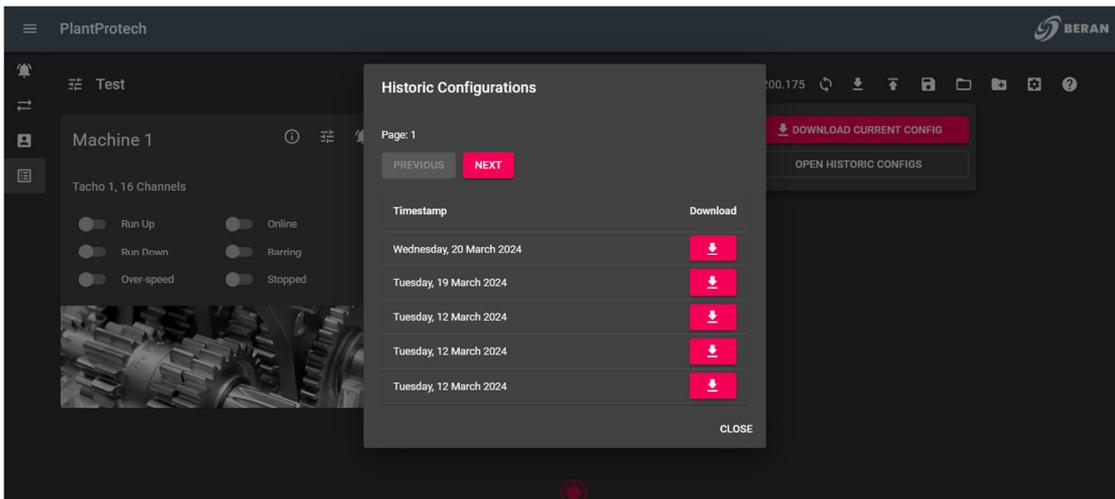


Figure 3 - Store User Configuration Interfaces

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Display Machine Name when Editing.

This feature allows the user to see the relevant machine name easily when editing a specific machine so that the user can be sure they are modifying the intended machine configuration.

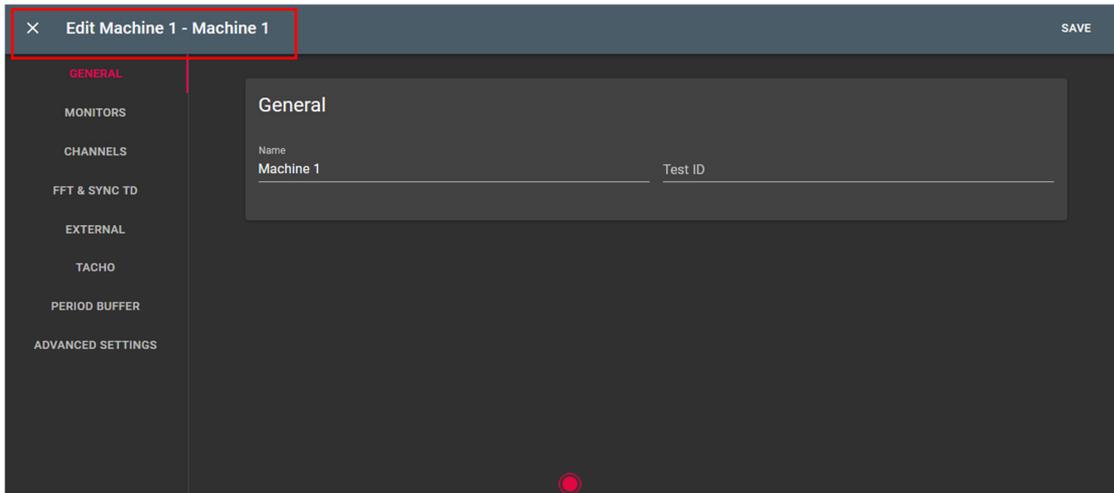


Figure 4 - Display Machine Name When Editing

Axis Rotation on Vector/Ellipse Alarm Displays

Ellipse and Vector alarm configuration displays now plot historic data points to provide context to the alarm boundaries. The displayed data takes account of the axis rotation settings, and the user can select the channel & files to display data from.

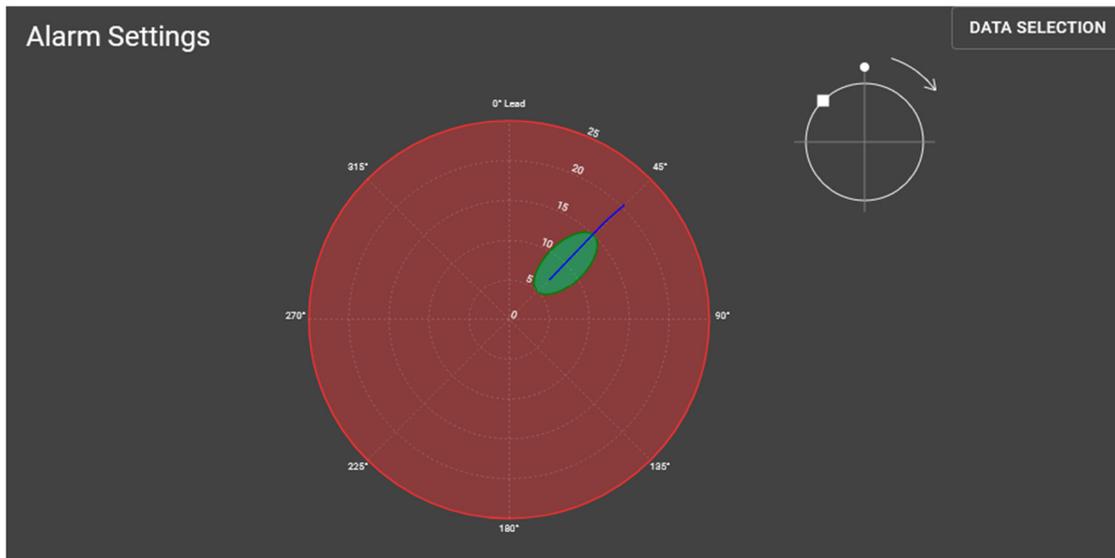


Figure 5 - Axis Rotation Example

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Set Magnitude Scalars for User Defined Units

Allows the user to define magnitude scalars for the user defined units so that these can be displayed in PlantProtech Vision correctly.

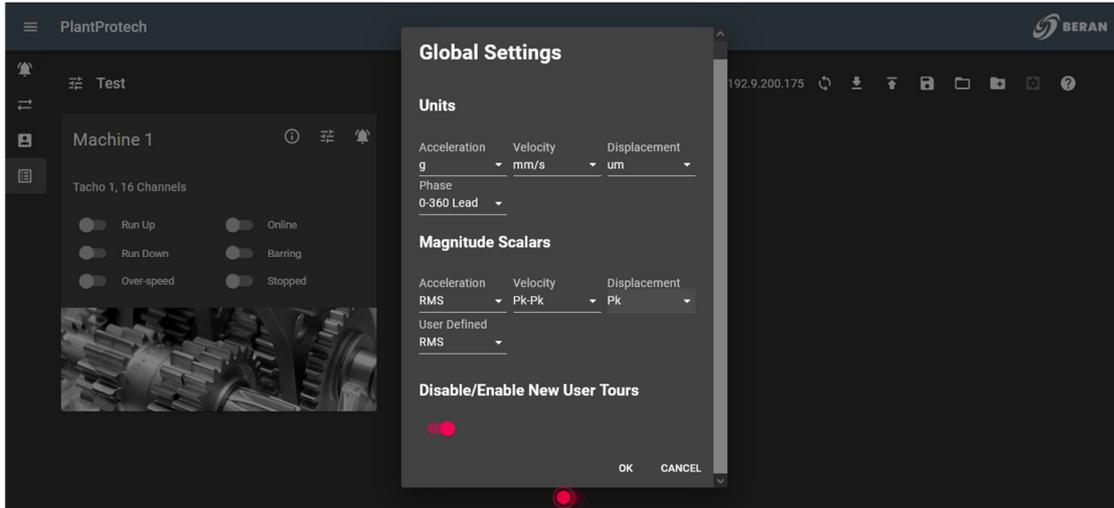


Figure 6 - Magnitude Scalars

Ability to Clear the Alarm Log

This feature allows the user to see alarms that have not yet been accepted. This ensures that the alarm log does not fill up excessively.

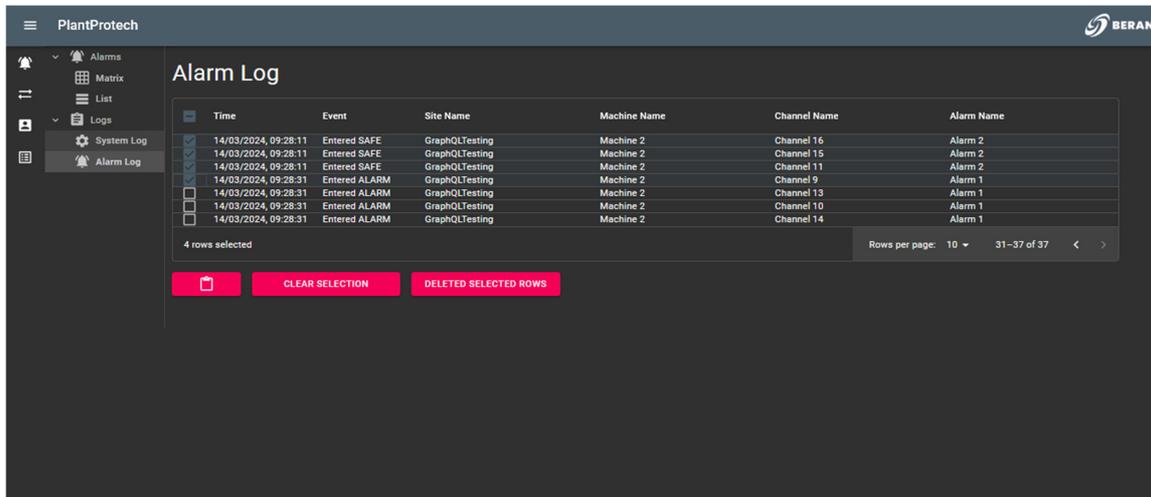


Figure 7 - Clear Alarm Log

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Review Alarm Config from Alarm List

Enables the user to review the alarm config and its live values from the alarm list. This improves the usability and efficiency of using the system.

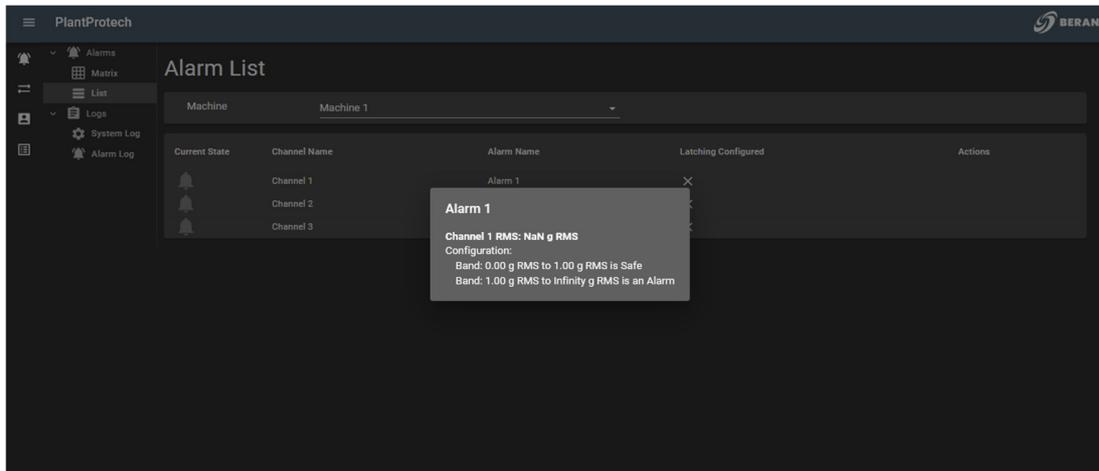


Figure 8 - Alarm Configuration from alarm List View

Download Configuration Naming

Downloaded configurations now use more informative descriptions. This means the user will not have to search among various generic configuration files.

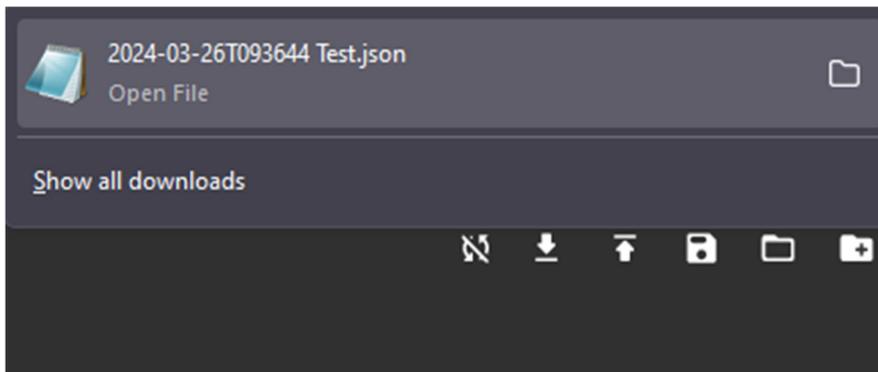


Figure 9 - Download Configuration Naming

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Probe Angle Display

Allows the user to further review the definition of the probe angles set in the configuration so that they understand the configuration is correct and appropriate.



Figure 10 - Probe Angle

Adjust the Tacho Pulse Width

Allows the user to configure the Minimum Tacho Pulse width for the Beran PlantProtech™ 7600 PCMS/PROTOR Mobile. This allows the system to be configured to record speed information on fast-rotating machines with very low mark/space ratios (which have correspondingly shorter pulse widths)

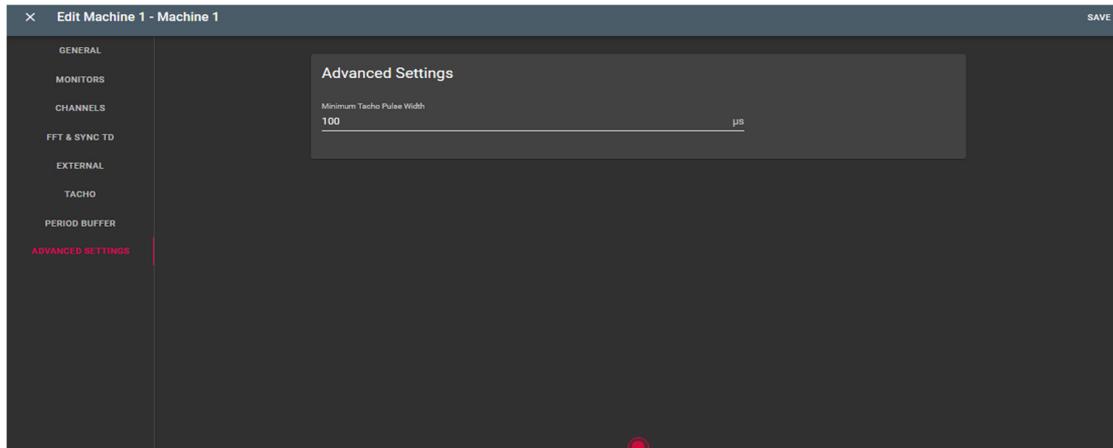


Figure 11 – Adjusting Tacho Pulse Width

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Calculate Alarms Based on Last Period Buffer Values.

The Alarm Update and Buffer Rate setting controls the frequency at which alarms are triggered. This setting also determines the data storage rate during the one-hour buffer period when an alarm is active. By default, the buffer logging rate is set to 10 seconds, which typically logs data more frequently than the normal system logging frequency. Adjusting the Alarm Update and Buffer Rate will change both the alarm triggering interval and the buffer logging rate, ensuring that critical vibration data is captured more frequently during periods of concern

Please note, the “Last Hour Buffer” file is no longer stored as a separate file. Instead, the data is stored in the current file at a higher recording rate (e.g. configurable value).

Modbus Read Interface

Allows the user to read real-time data from their Beran PlantProtech™ 7600 PCMS/PROTOR Mobile so they can integrate this with other external systems.

External Channel Filtering for Process Channels

Additional search/filter facilities have been added to assist when editing configurations on systems with large numbers of process channels. The process channel configuration screen has a new search bar to search for particular channels to edit:

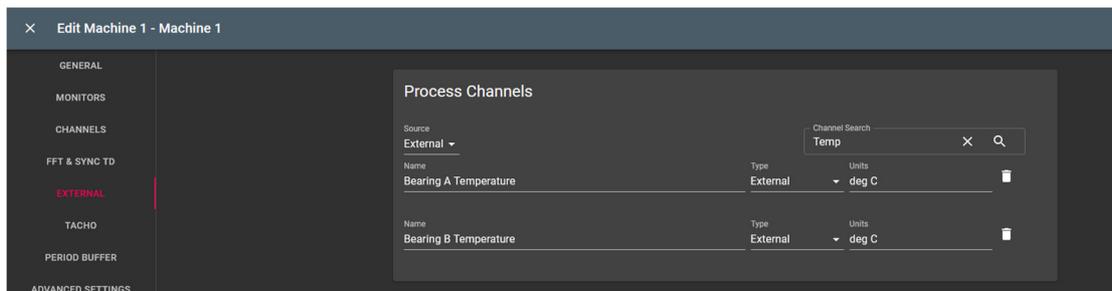


Figure 12 – External Channel Filtering

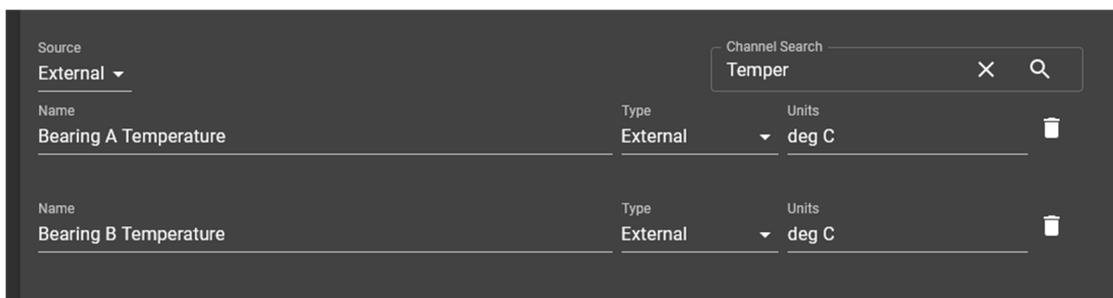


Figure 13 - External Channel Filtering

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The alarm screen also has a search functionality to assist in finding process channels to use as activation criteria for alarms.

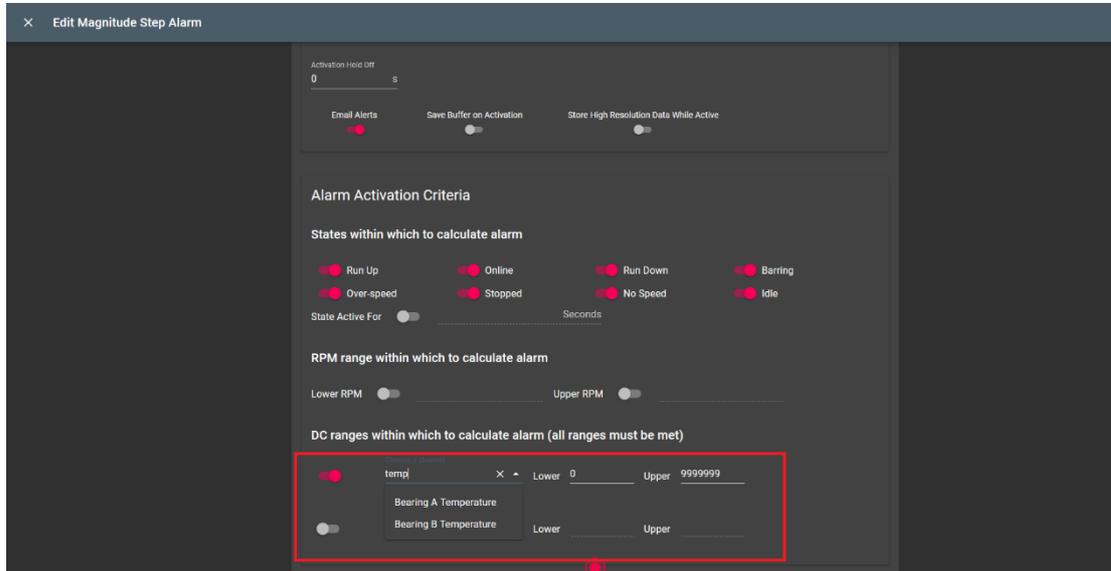


Figure 14 - External Channel Filtering

Auto-Generate Ellipse Alarms

Allows the user to automatically generate alarm parameters based on their previous data set. This means the user can have a confidence level of 95%/99% that the alarm setting has captured a typical vibration pattern. Previously configured ellipse alert and alarms can be easily configured to reflect the change in the machine’s dynamic behavior, for example following a return to service.

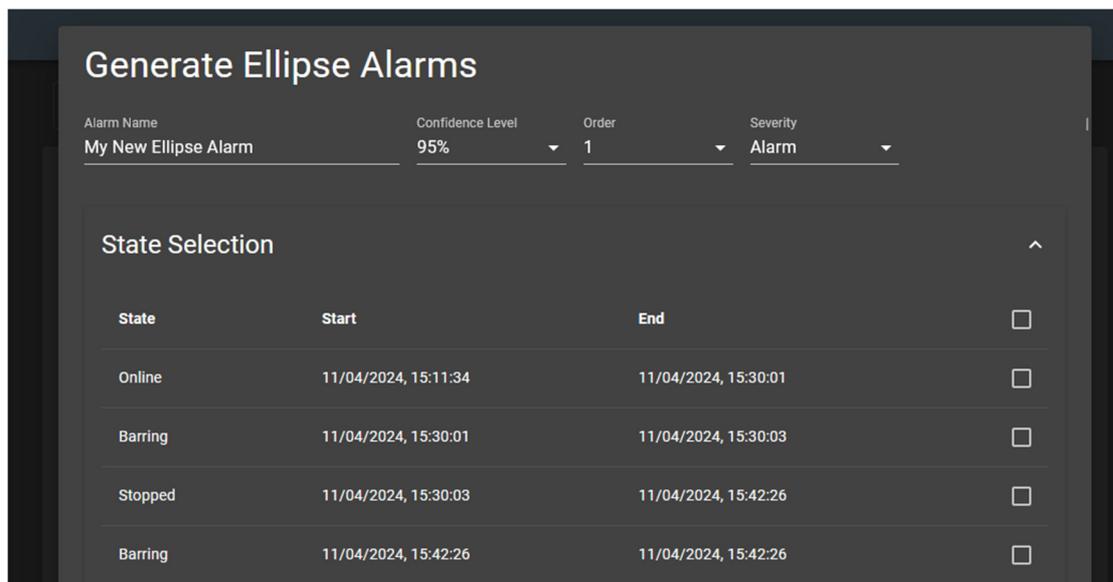
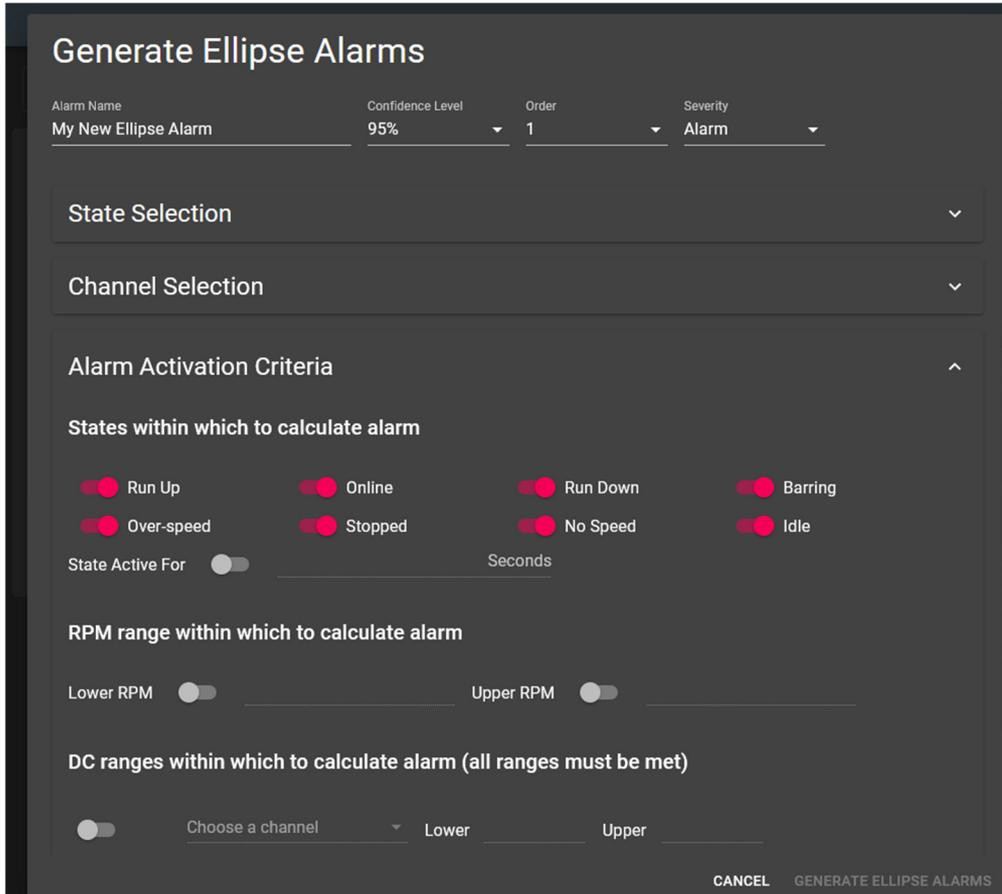


Figure 15 - Auto-Generate Ellipse Alarms

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Generate Ellipse Alarms

Alarm Name: My New Ellipse Alarm | Confidence Level: 95% | Order: 1 | Severity: Alarm

State Selection

Channel Selection

Alarm Activation Criteria

States within which to calculate alarm

Run Up
 Online
 Run Down
 Barring
 Over-speed
 Stopped
 No Speed
 Idle

State Active For: Seconds

RPM range within which to calculate alarm

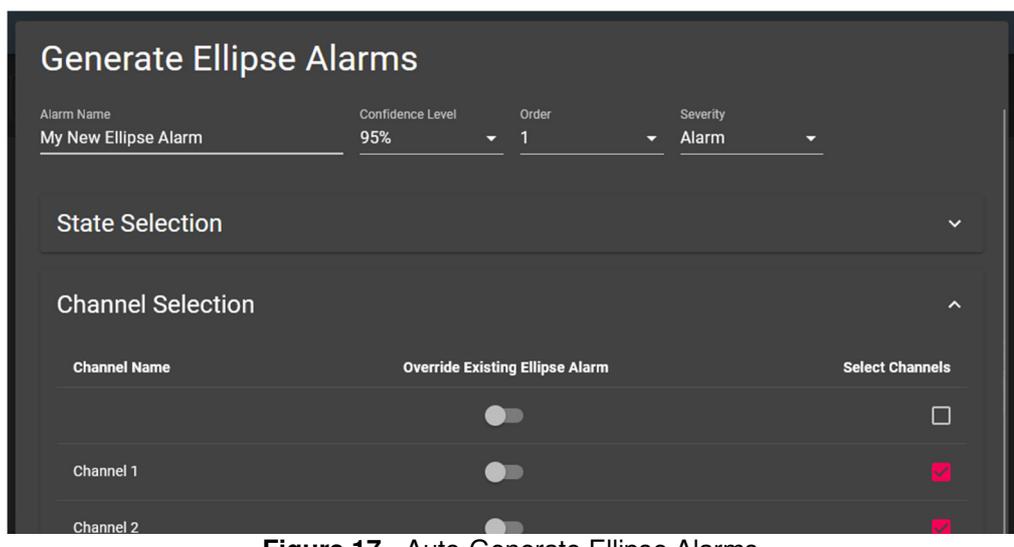
Lower RPM: Upper RPM:

DC ranges within which to calculate alarm (all ranges must be met)

Choose a channel: Lower Upper

CANCEL GENERATE ELLIPSE ALARMS

Figure 16 - Auto-Generate Ellipse Alarms



Generate Ellipse Alarms

Alarm Name: My New Ellipse Alarm | Confidence Level: 95% | Order: 1 | Severity: Alarm

State Selection

Channel Selection

Channel Name	Override Existing Ellipse Alarm	Select Channels
	<input type="checkbox"/>	<input type="checkbox"/>
Channel 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Channel 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 17 - Auto-Generate Ellipse Alarms

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The Creation of an alternative View of Configured Alarms

A new 'Channel View' allows the user to see all alarms associated with a particular channel quickly, which is especially useful for alarm types that are typically configured on a single channel. The user can also create alarms specific to this channel.

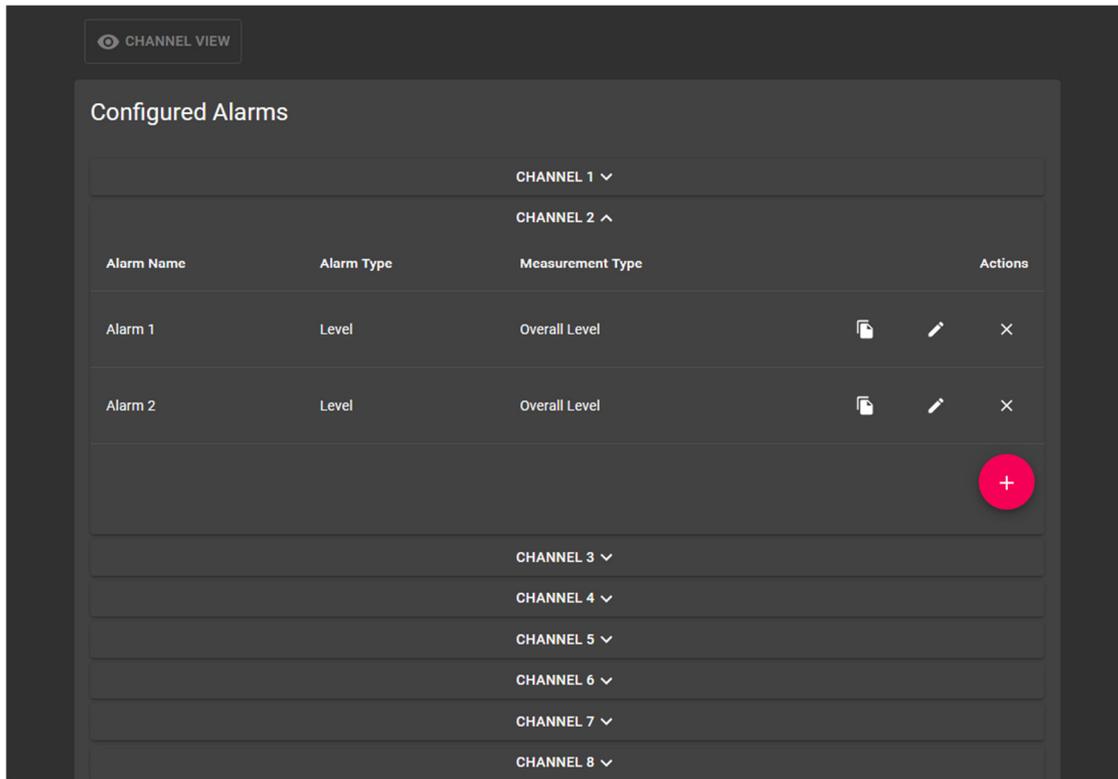


Figure 18 – Alternative View of Configured Alarms

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