



# Insight Core™ HOW TO Guide: Quality Thresholds

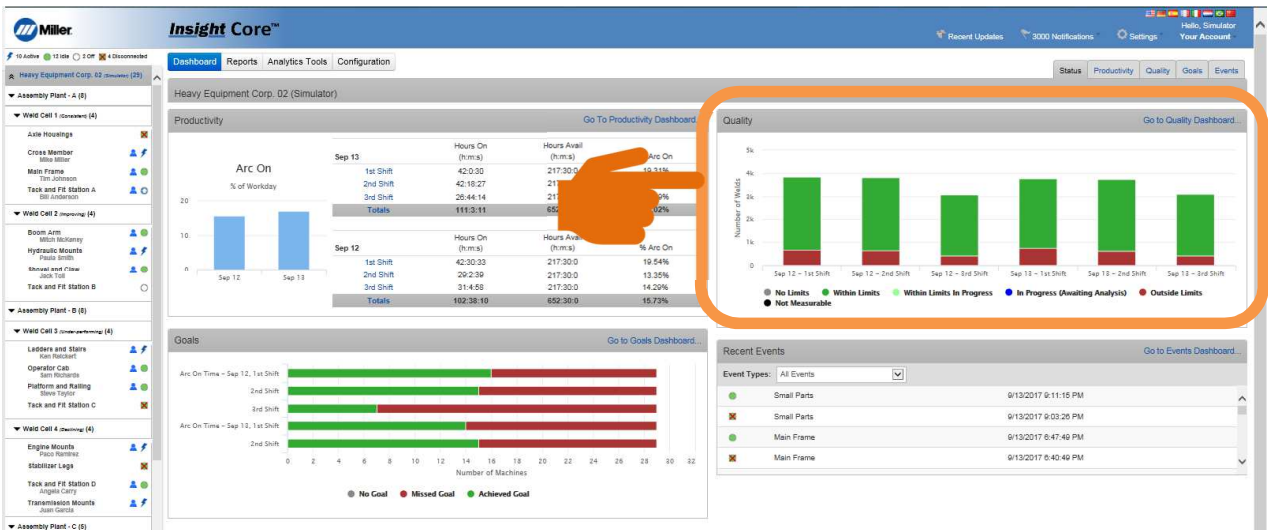
This document will walk a user through how to set up Quality threshold definitions.

What is a Quality threshold definition? A threshold definition is what Insight Core uses to analyze a weld and document if the weld was made within the expected parameter range or not. From a dashboard view, the welds are classified in three different colors, under the quality tab:

**Green:** all welding parameters fell within the set threshold ranges.

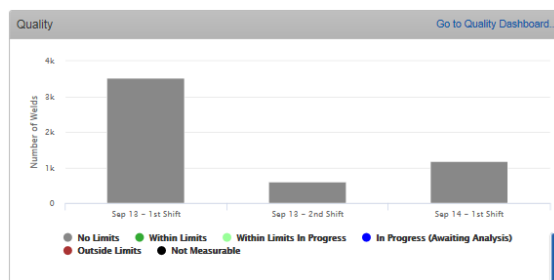
**Red:** parameters of the weld fell outside of the set threshold ranges.

**Black:** the weld was too short to analyze based on the thresholds set. Think of this as a tack weld.



Main dashboard

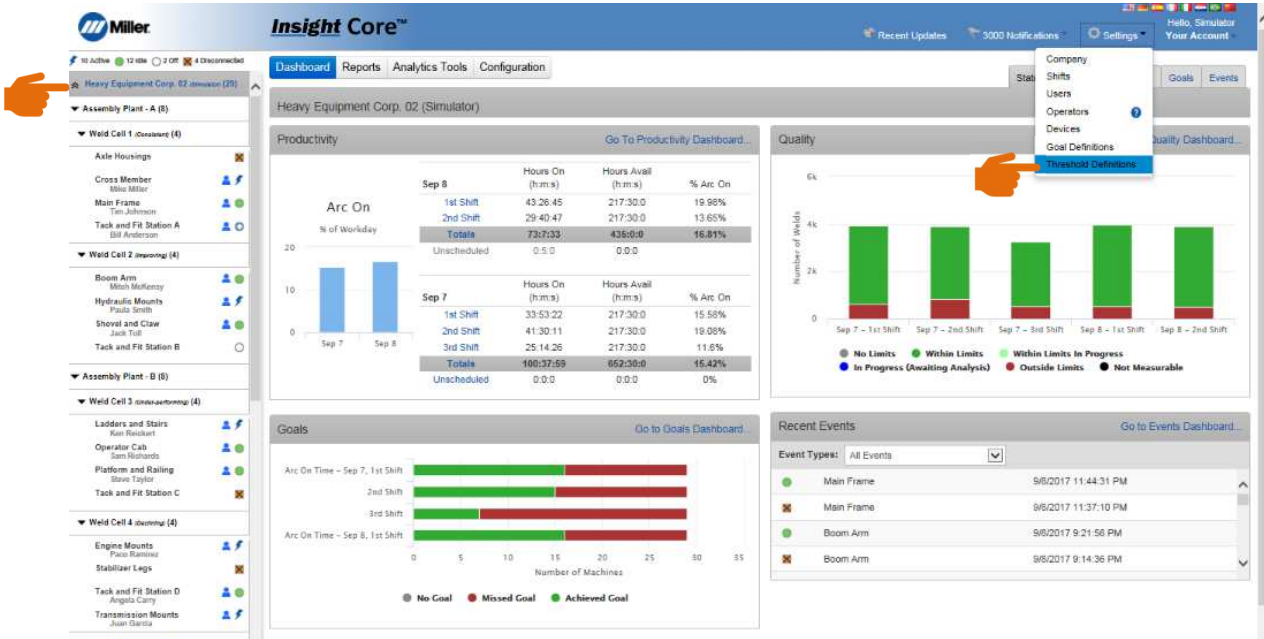
Thresholds are set and assigned based what you have selected in the Asset tree (list of groups/machines) on the left-hand side of the screen. If you add thresholds for the top level (parent) of the entire organization, you are creating a list of thresholds to select and assign for your assets further down the tree. Once your list is created under the “parent” of the organization, you then go through your assets and assign the threshold to them based on what products are being welded in each cell. You can assign thresholds to groups, or individual assets. This will be shown later in the setup document. If no thresholds are set for your organization, the Quality portion of Insight Core dashboard will look as follows:



No thresholds set for organization

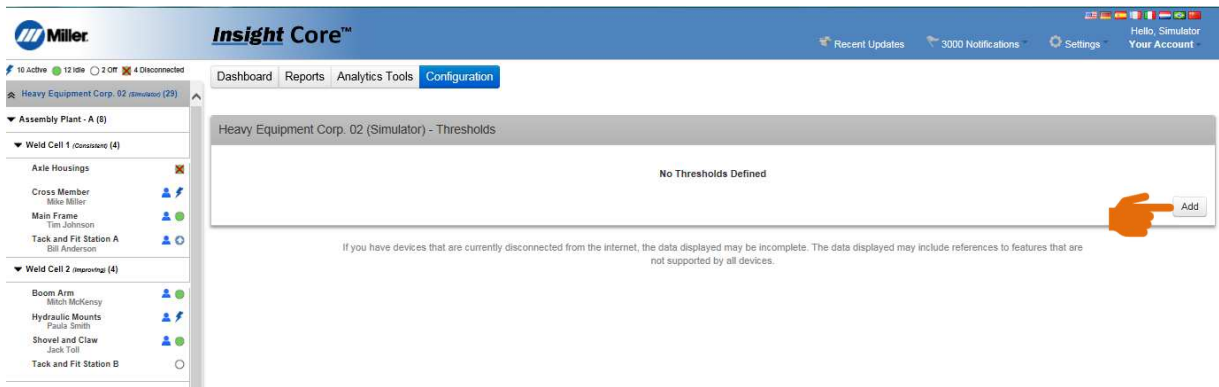
To set a quality threshold definition, and begin analyzing your welds for being in/out of expected parameter:

1. Select the “company level” item in your asset tree
2. Go up to the Settings menu in the upper right corner and select “Threshold Definitions”.

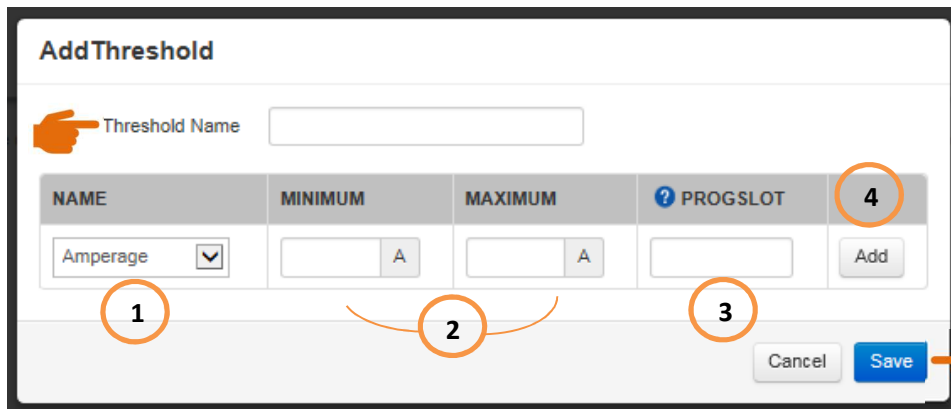


Thresholds menu with no thresholds defined

You should now be at a screen that looks as follows:



To add a threshold, click “Add” in the lower right corner. This will bring up the following screen:

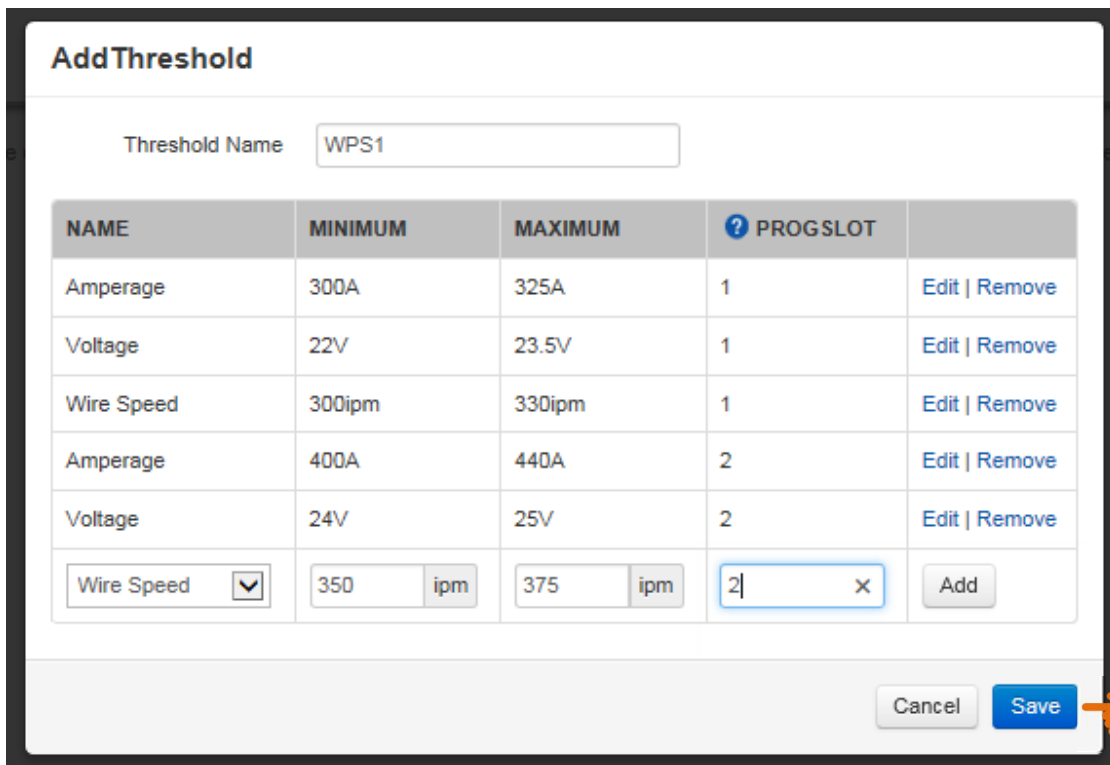


Add Threshold menu

“Threshold Name” is any name you want these parameter ranges to be called when you reference the threshold to assign them later in the process. To begin adding the threshold parameter ranges:

1. Click on the arrow under “Name” and select the parameter you want to monitor from the drop-down list:  
Amperage, Voltage, Wirefeed speed
2. Enter your minimum and maximum parameter (the window you expect the weld to fall within)
3. Enter a program number, if you are utilizing an Axxess family or Continuum family power source, that corresponds with this threshold.
  - a. These power sources will monitor parameter ranges based on what program is being used in the welding process, allowing you to set multiple thresholds based on the specific program number being used on the power source. PROGSLOT needs to be the same program as being used in the power source.
  - b. If not using an Axxess or Continuum, leave the PROGSLOT field blank.
4. Add another parameter, if desired, by clicking on “Add” and following the same process. You can assign a threshold for Amperage, Voltage, and Wirefeed Speed. Click the SAVE button when finished.

**Note:** You are able to add one Amperage, one Voltage, and one wirefeed speed threshold, without a program number, per “Threshold Name”. If you have a power source, described above, that has program capabilities, you can add multiple thresholds per “Threshold name” if the program number is different. This can be seen in the following screen shot:



The screenshot shows a web interface titled "AddThreshold". At the top, there is a text input field for "Threshold Name" containing the value "WPS1". Below this is a table with the following columns: NAME, MINIMUM, MAXIMUM, and PROGSLOT. The table contains five rows of data, each with an "Edit | Remove" link in the fifth column. At the bottom of the table, there is an "Add" button. Below the "Add" button, there are input fields for a new threshold: a dropdown menu for "Wire Speed", a minimum value of "350" with a unit of "ipm", a maximum value of "375" with a unit of "ipm", and a "PROGSLOT" field containing the value "2". At the bottom right of the interface, there are "Cancel" and "Save" buttons. An orange hand icon is pointing to the "Save" button.

NAME	MINIMUM	MAXIMUM	PROGSLOT	
Amperage	300A	325A	1	Edit   Remove
Voltage	22V	23.5V	1	Edit   Remove
Wire Speed	300ipm	330ipm	1	Edit   Remove
Amperage	400A	440A	2	Edit   Remove
Voltage	24V	25V	2	Edit   Remove

Wire Speed [v] 350 ipm 375 ipm 2 [x] Add

Cancel Save

Image of thresholds being added by Program number

If you don't have an Access or Continuum, your thresholds can't be set by program number, and will look as follows:

NAME	MINIMUM	MAXIMUM	? PROGSLOT	
Amperage	200A	235A		Edit   Remove
Voltage	20V	21.5V		Edit   Remove
Wire Speed	300 ipm	327 ipm		Add

Image of thresholds being added without a Program number being used

5. Click on "Save" when you have your thresholds set. This will take you to the following:

Name		
WPS1	Configure	Remove

Threshold menu with one defined threshold

To add another "Threshold Name" after you click on "Save" you will be brought back to the list of thresholds and allowed to either "Add" another, or take the next steps to assign the ranges you just specified to your specific power sources.

Once your list of threshold names/ranges are created, the next step is to assign them to the power source(s) you want to meet that range of parameters. To assign a threshold you need to select a group of power sources, or single power source from the asset tree on the left hand side. Ensure that you are under the "configuration" tab in the upper left hand corner, and then "thresholds" tab in the upper right corner.

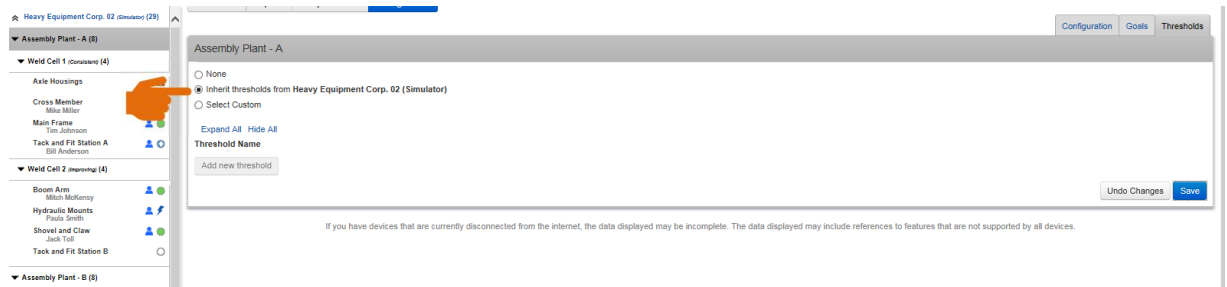
You will have three options when assigning a threshold:

### 1. None:

No quality parameters will be monitored with this welder/group of welders.



### 2. Inherit thresholds from....



You are able to assign thresholds to a group of power sources by taking the thresholds that are assigned to the group level name in the asset tree. Inherit will assign the thresholds to all assets within the group name.

### 3. Select Custom:



Add a new custom threshold in addition to what has already created in the parent level, or assign a threshold from the list that was created under the parent level item in the asset tree. When you select this option you must then select which group of thresholds are to be active.