HAWKEYE ONLINE VENTING CALCULATOR

Quick Start Guide - Creating Projects & Manual Vent Selection

Introduction to the Hawkeye Vent Sizing Calculator

The Hawkeye Vent Calculator is organized around projects to help users efficiently manage vent sizing information across one or multiple applications.

Each project acts as a container for your vent sizing work and can represent:

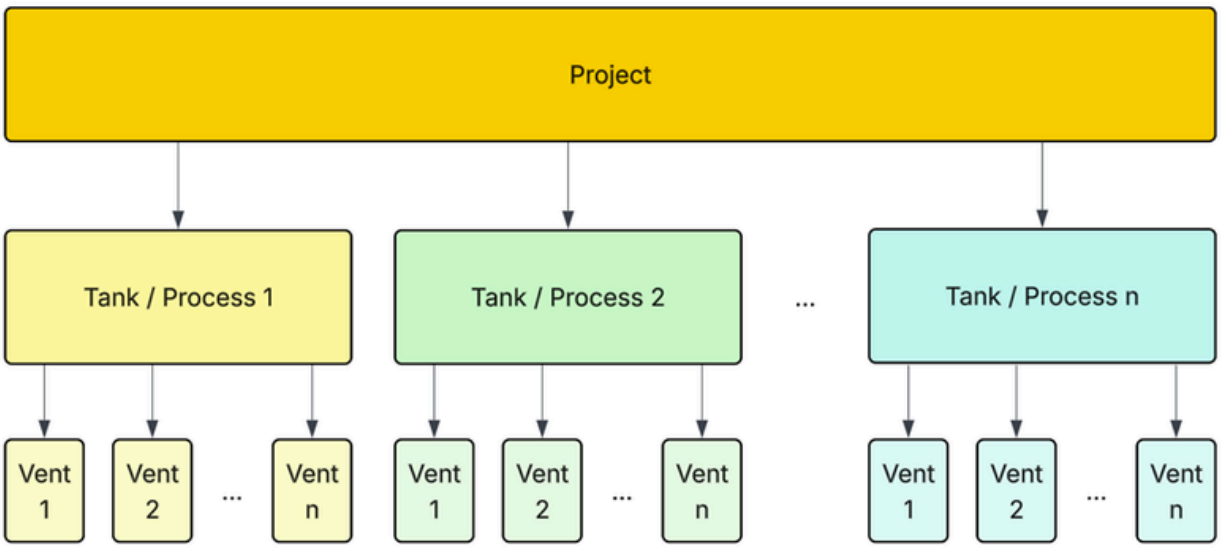
- **a single tank or process,**
- **a battery of tanks, or**
- **an entire facility or field.**

Structuring the calculator this way allows you to organize multiple vents within one location and quickly generate a quote once sizing is complete.

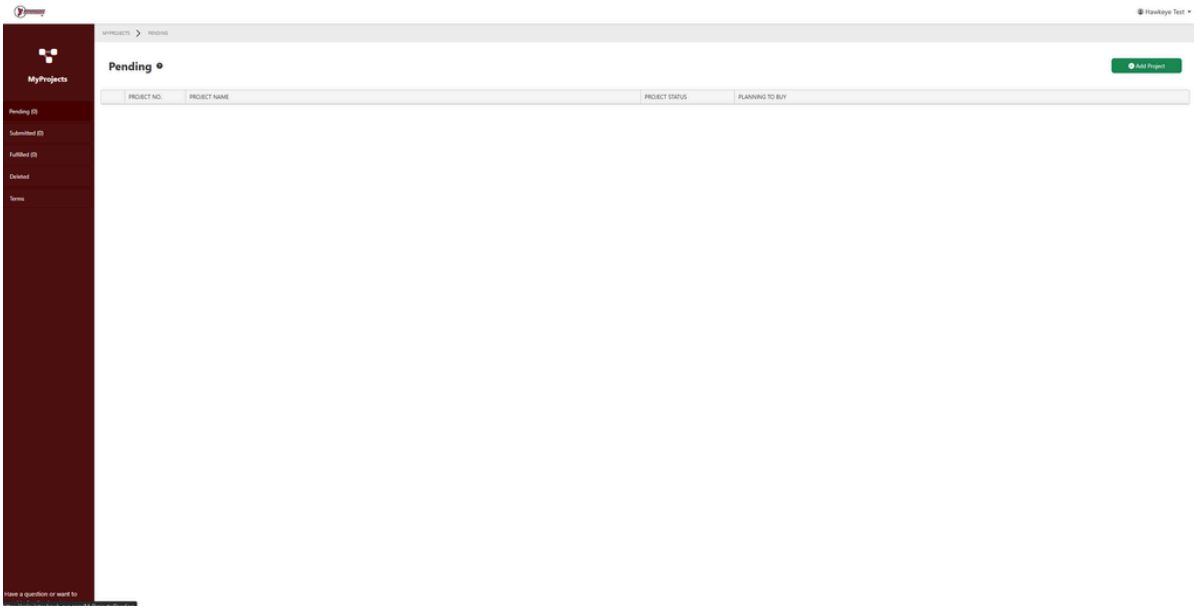
Before a vent can be configured, the calculator requires users to first create a project and then add a tank or process. This ensures that all vent selections are associated with a specific application and remain properly organized within your sizing workflow.

For a new vent sizing exercise, you will need to start a new project before proceeding.

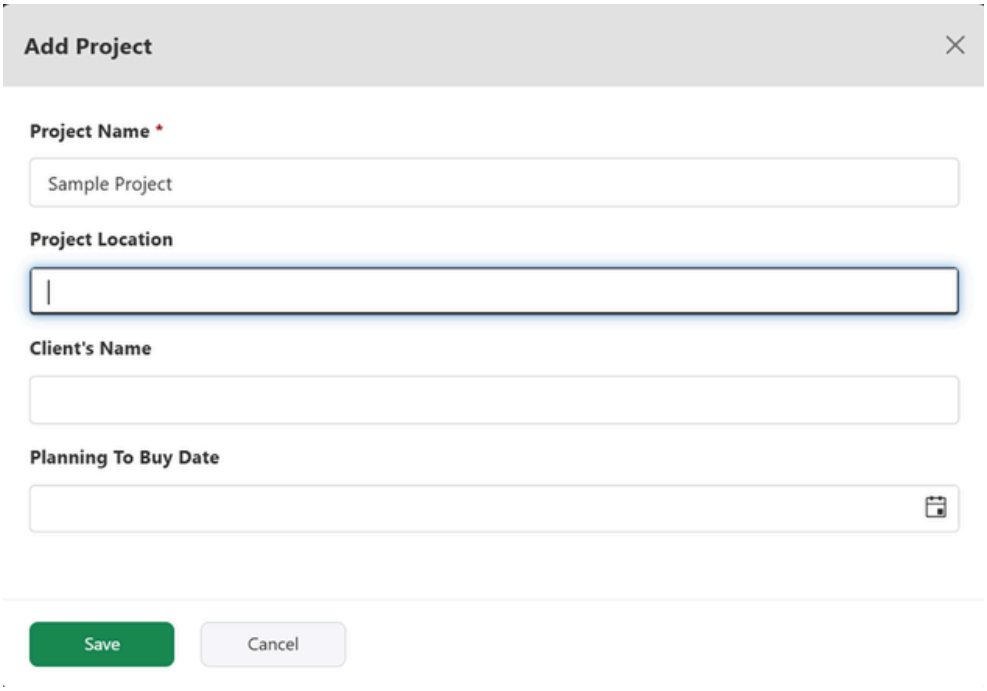
Once a tank or process has been added to the project, vents can be configured based on the required operating conditions and flow requirements. After completing the selections, the project can be submitted to Hawkeye Industries for quotation with just a few clicks.



Section I – Creating a Project

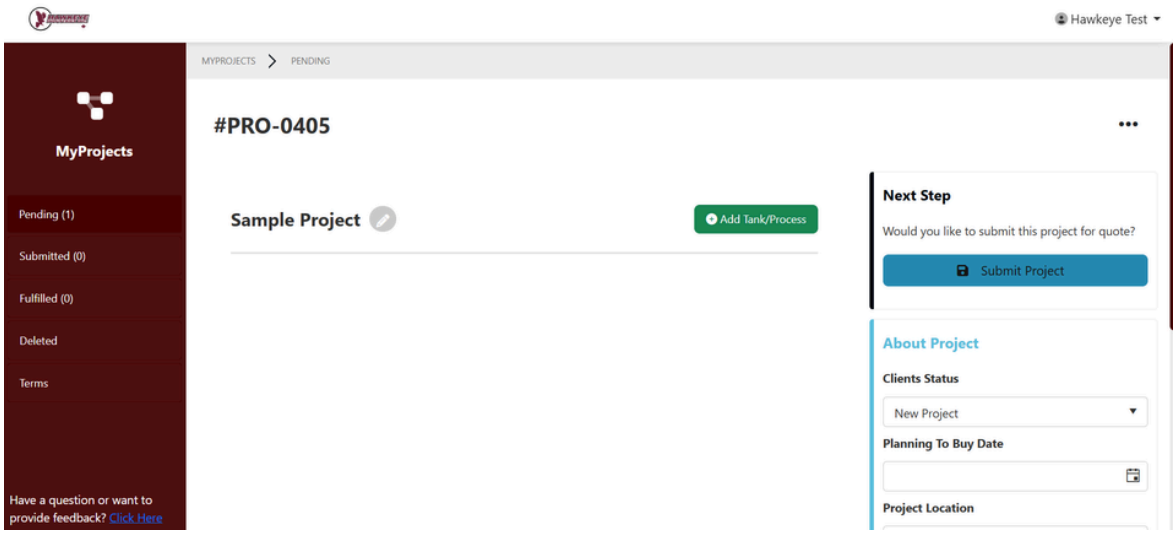


Step 1: After logging in, click Add Project in the top-right corner.

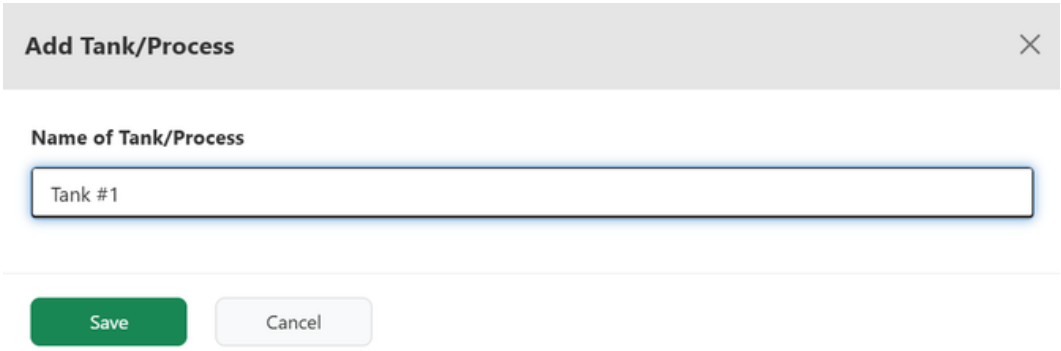


Step 2: Enter the project details, then click Save.

Section II – Adding Tanks or Processes

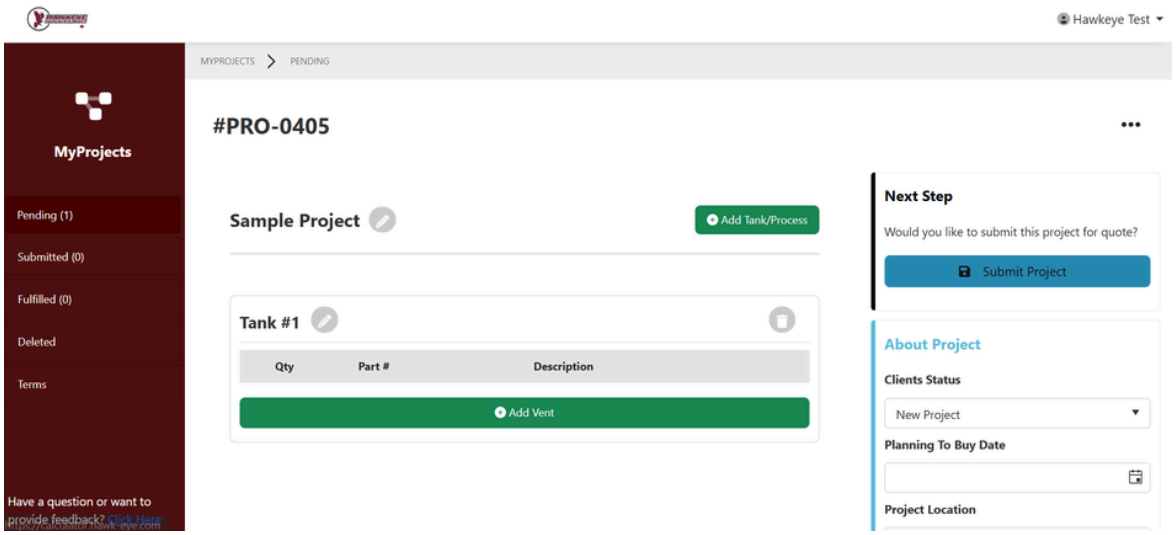


Step 3: Click Add Tank/Process.

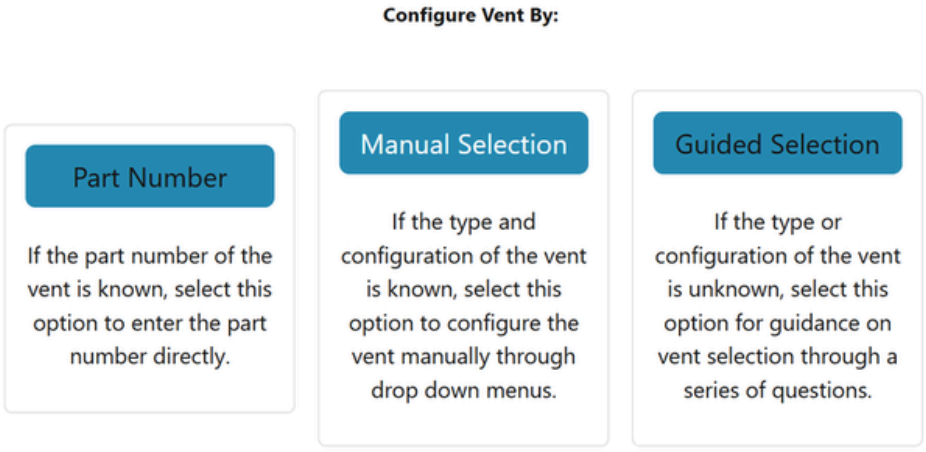


Step 4: Enter the tank (or process) name, then click Save.

Section III – Adding and Selecting a Vent

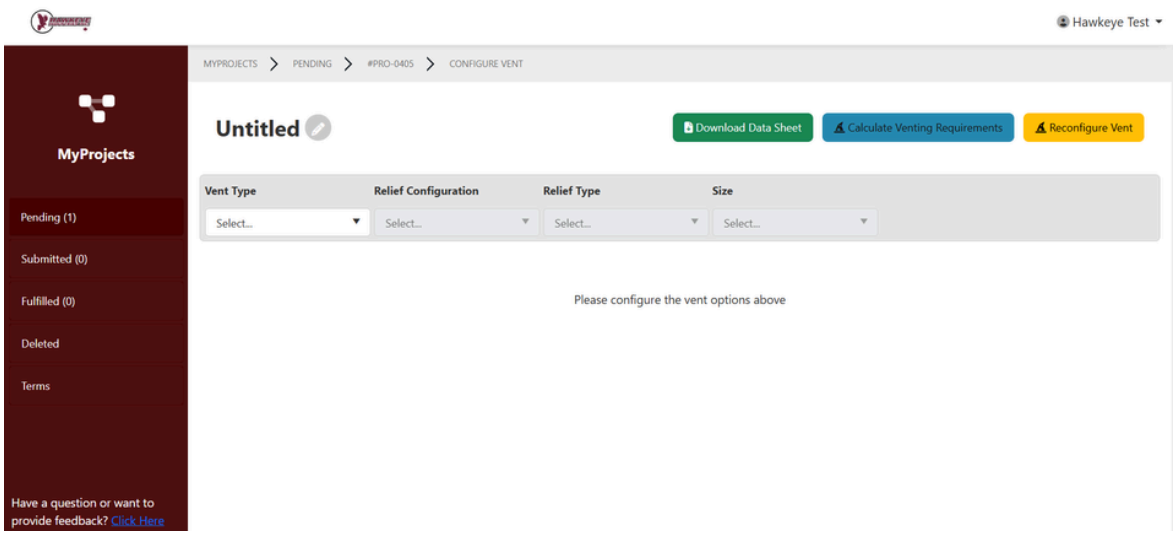


Step 5: The tank or process now appears in your project. You can now add vents under this tank.

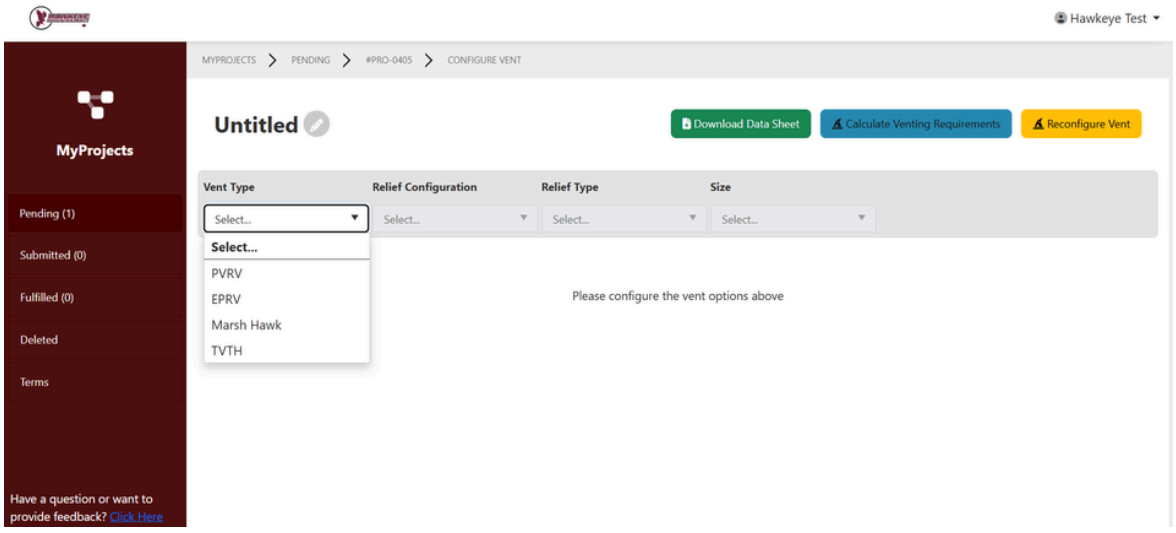


Step 6: After clicking Add Vent, choose how you would like to configure the vent. If you already know the vent part number, select Part Number for direct entry. If you know the vent type and configuration, choose Manual Selection. If the vent type or configuration is unknown, use Guided Selection to assist with the selection.

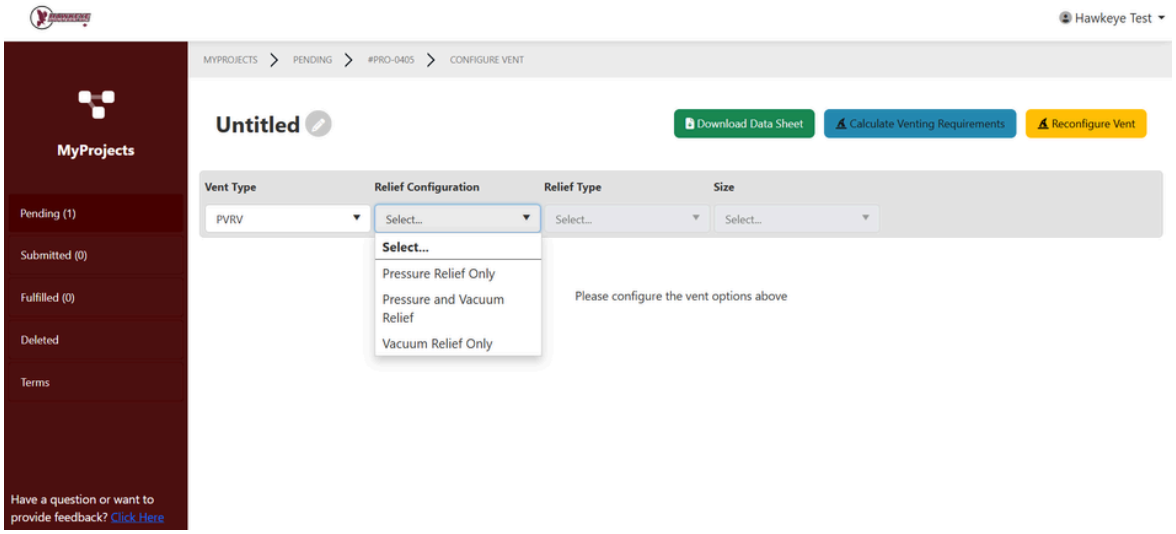
Section IV – Manual Vent Selection



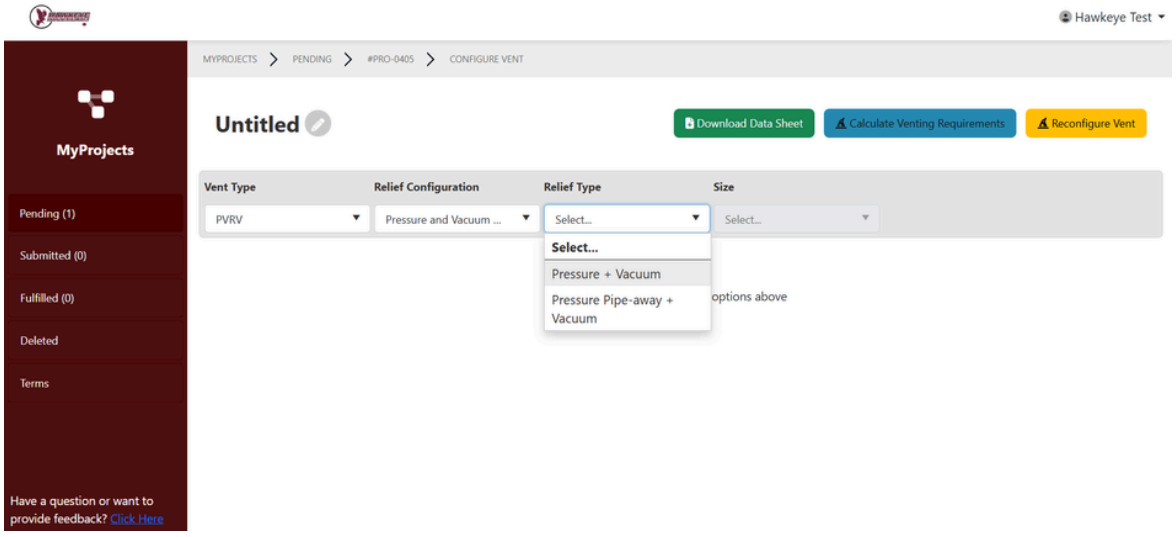
Step 7: The following steps in this guide will proceed using Manual Selection. You can now configure the vent. Click Vent Type and select the required vent for this project.



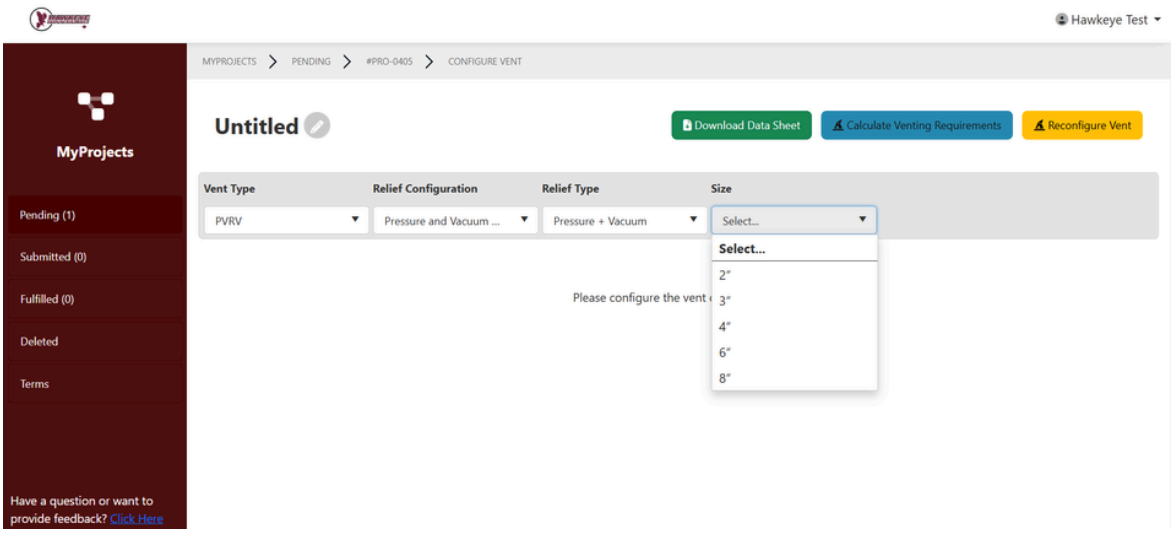
Step 8: Choose one of the following vent types: PVRV, EPRV, Marsh Hawk, or TVTH. For this example, we will select PVRV.



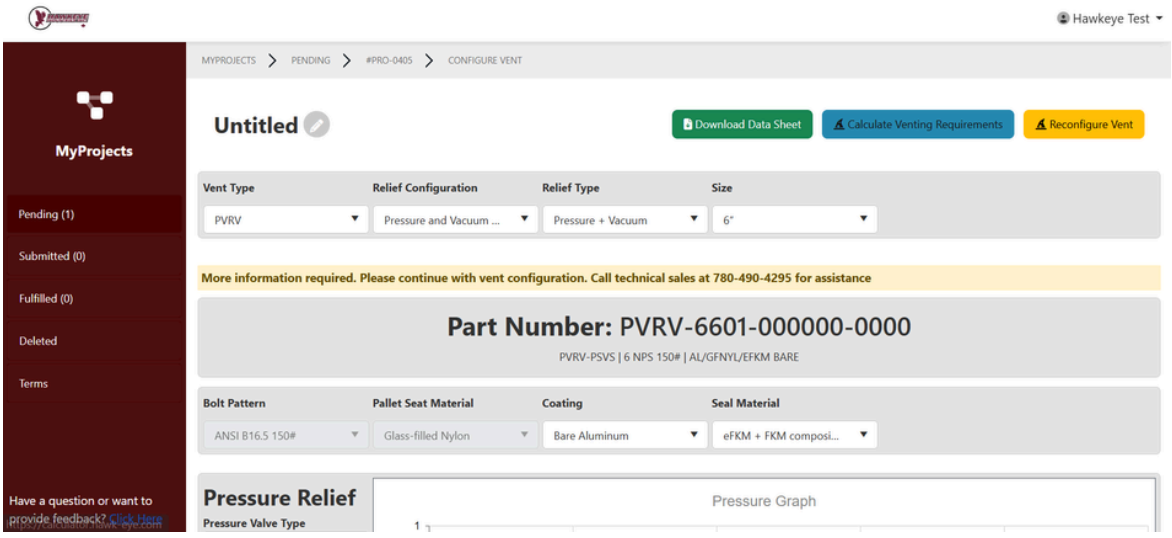
Step 9: Select the relief configuration: pressure relief, vacuum relief, or both.



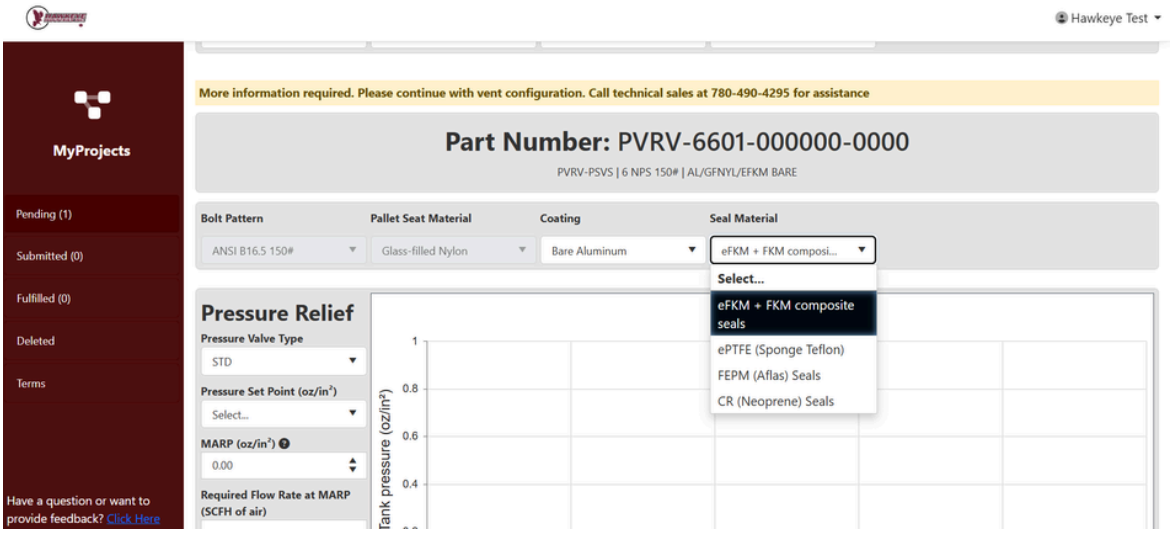
Step 10: Select whether the PVRV outlet is pipe-away (in-line) or vent-to-atmosphere (end-of-line).



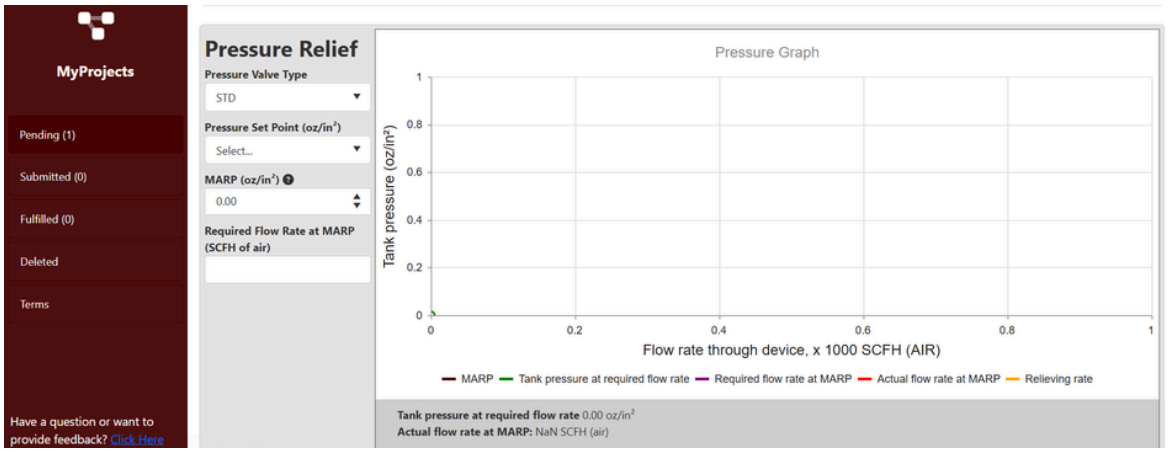
Step 11: Select the required PVRV size. If the vent size is unknown, select “Calculate Venting Requirements” to determine the required vent size.



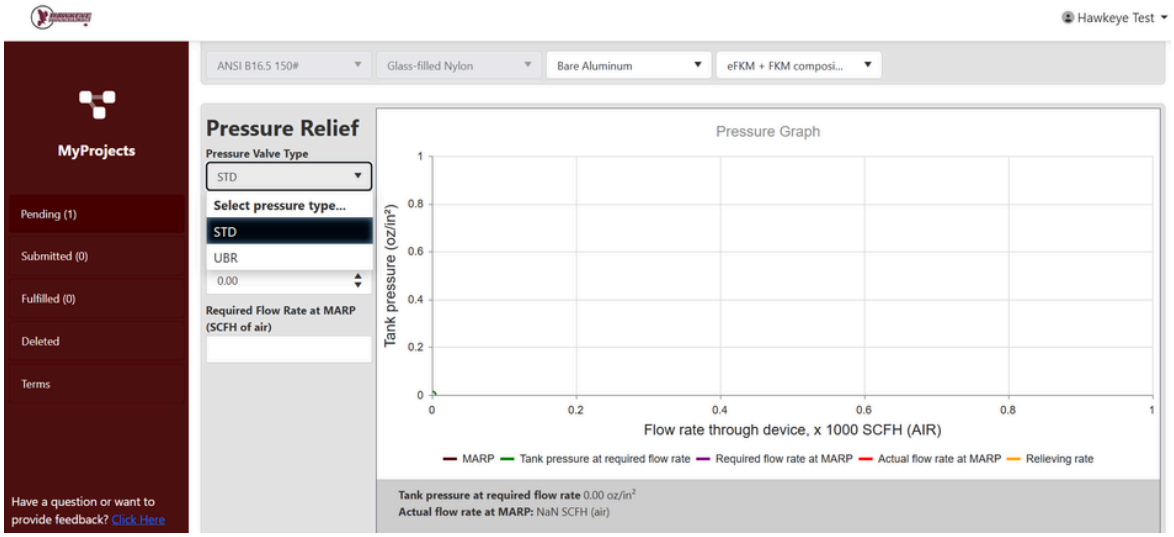
Step 12: Scroll down to view the flow curves. In this example, a 6″ PVRV with a pressure and vacuum relief configuration and a vent-to-atmosphere relief type has been selected.



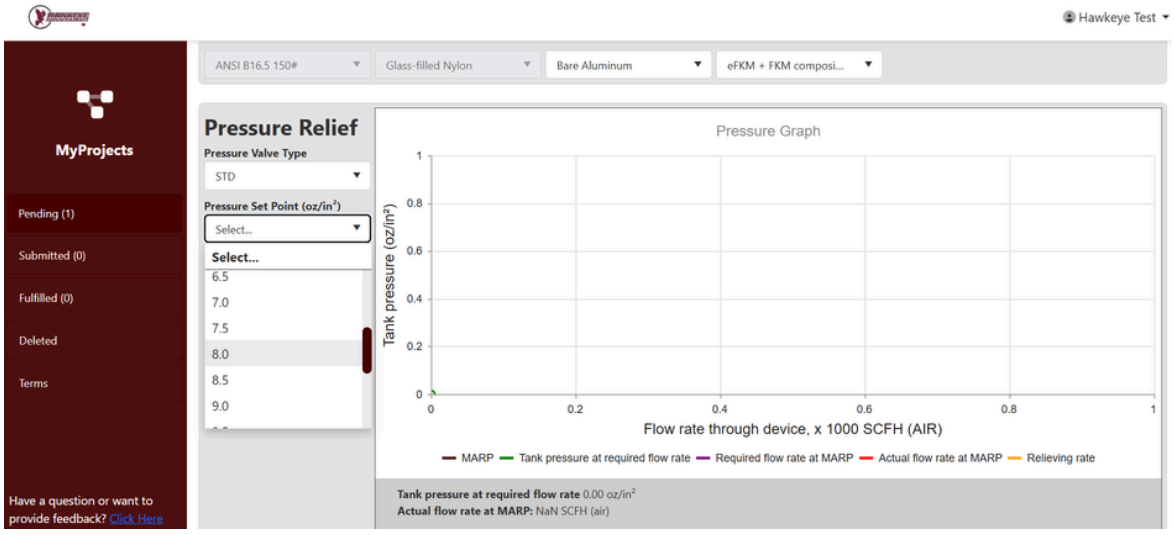
Step 13: Select the required options from the available settings, such as bolt pattern, pallet seat material, coating, seal material, and other applicable selections



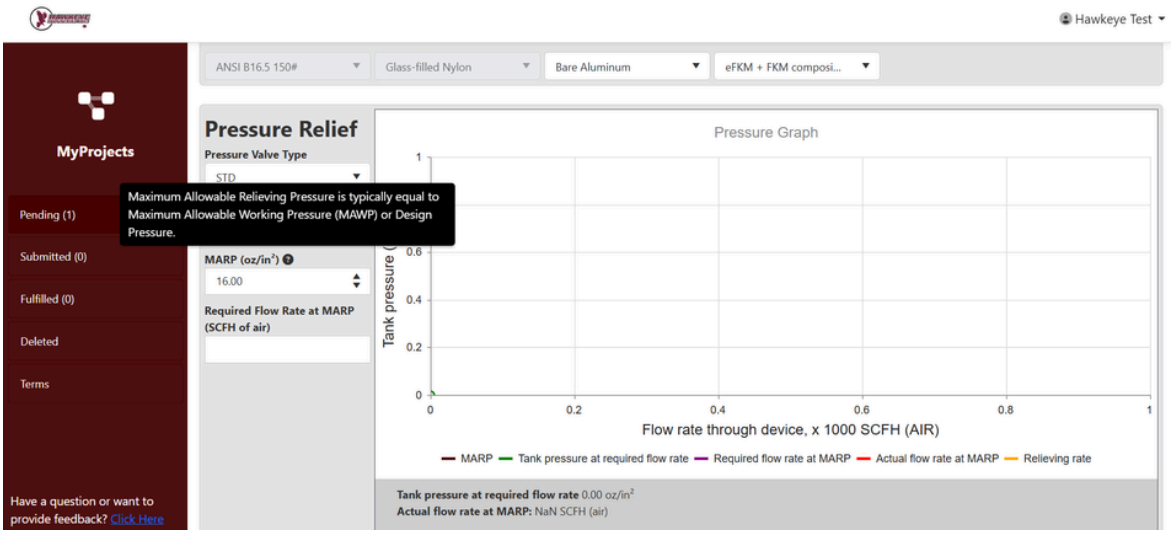
Step 14: Enter the required inputs for the pressure relief curve.



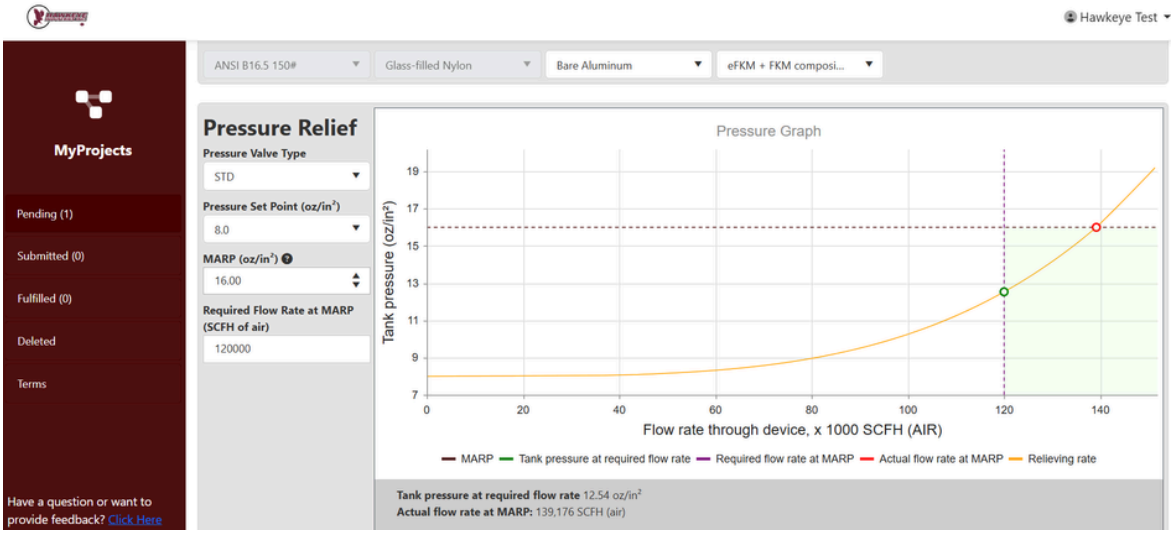
Step 15: Select the pressure vent type: Standard or UBR PVRV.



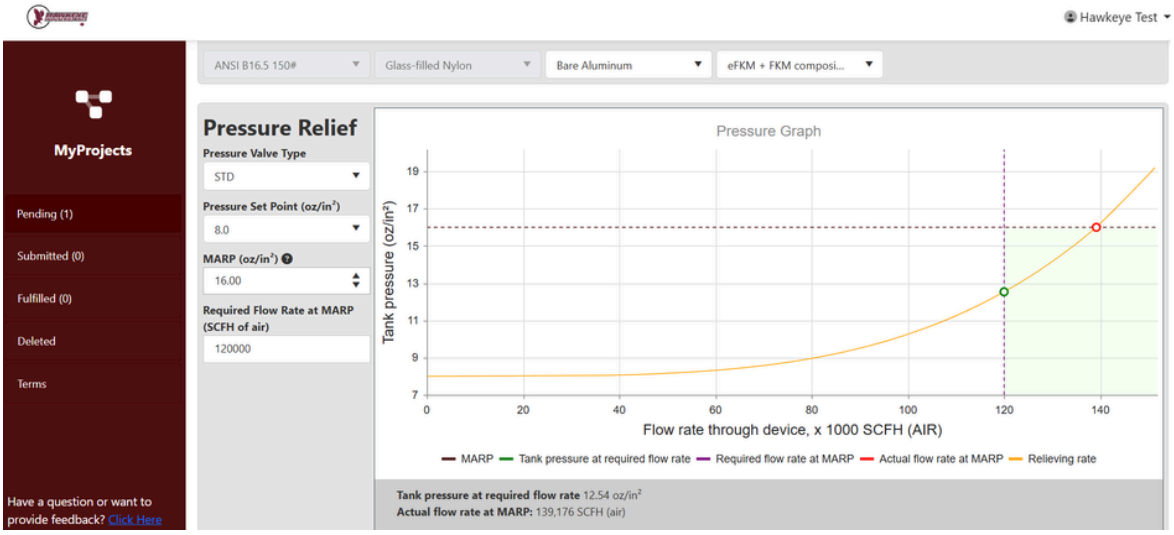
Step 16: Select the pressure set point. Standard PVRVs allow up to 16 oz/in², while UBR PVRVs allow up to 32 oz/in².



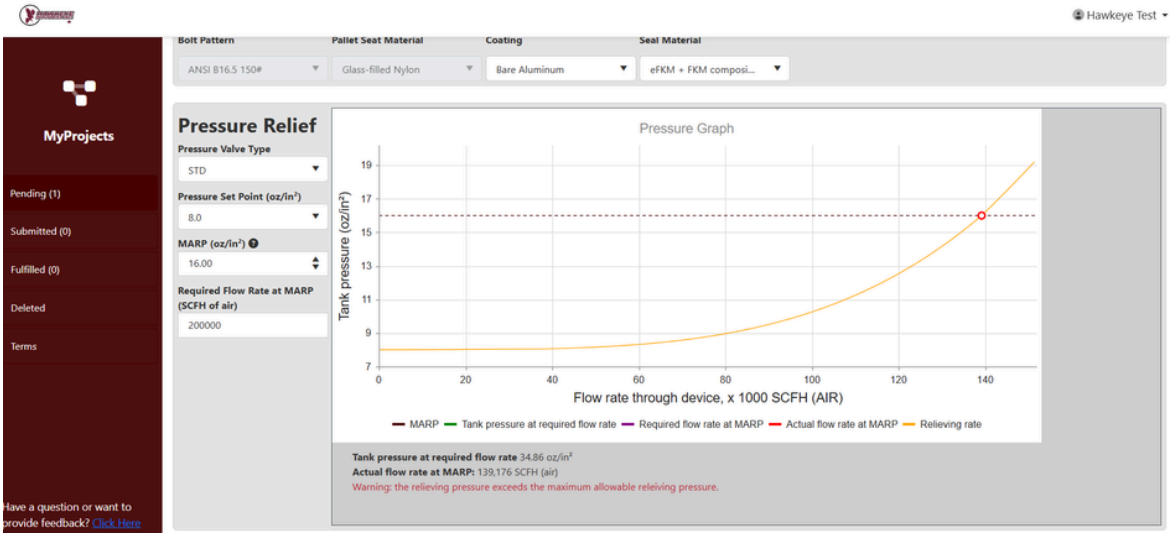
Step 17: Enter the Maximum Allowable Relieving Pressure (MARP). MARP is the highest tank pressure at which the vent must deliver its rated relieving capacity.



Step 18: If known, enter the required flow rate at MARP.

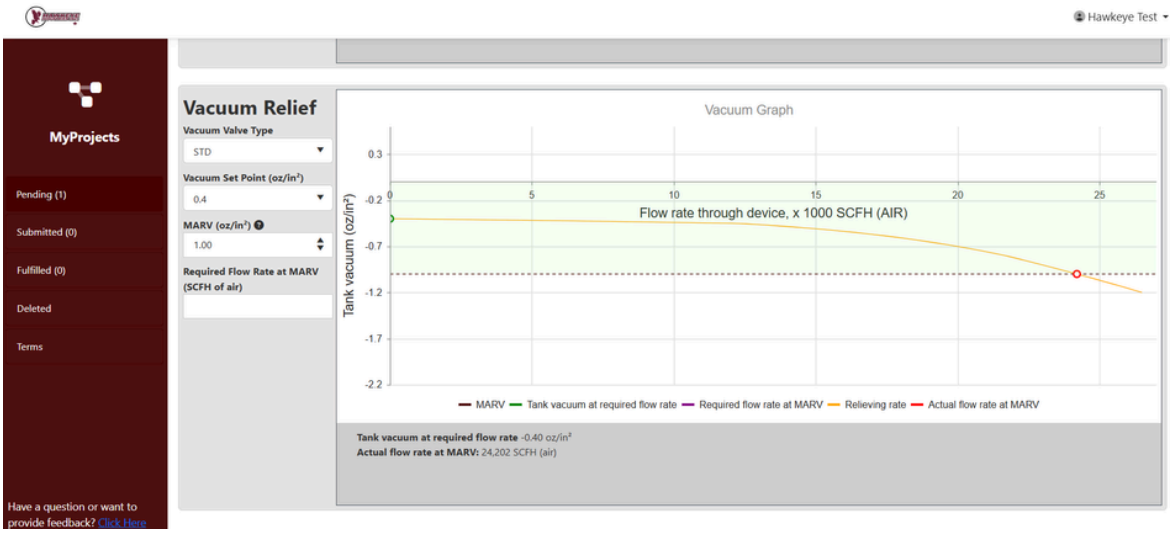


Step 19: The graph shows the actual relieving capacity at MARP. In this example, the PVRV capacity exceeds the required flow rate at MARP and is suitable for this application.

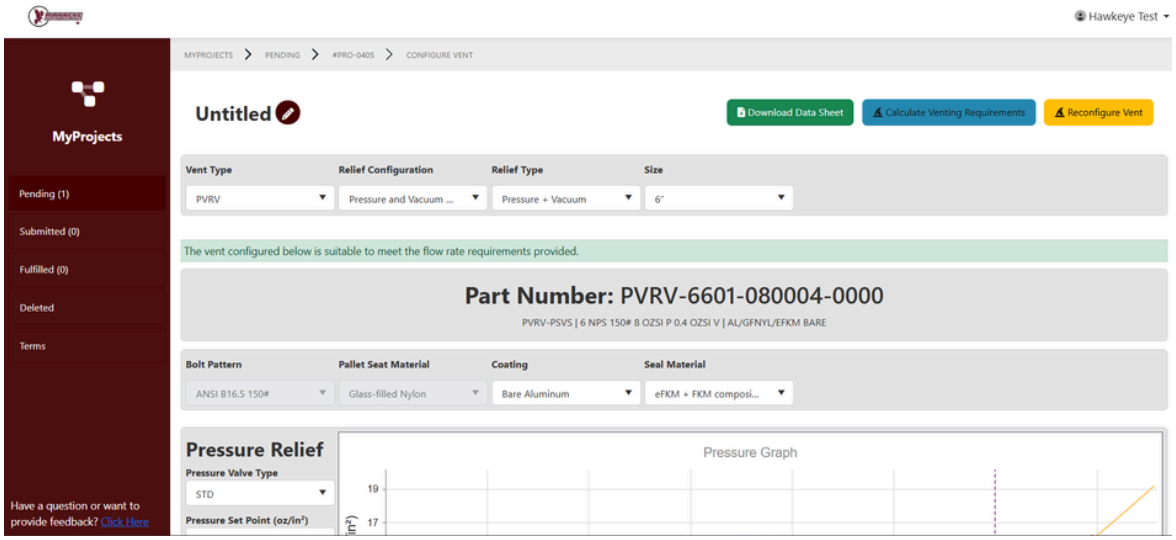


Step 20: If the vent cannot relieve at the required capacity, a red warning message will appear. Please take note of this warning.

Step 21: Scroll to the Vacuum Relief section to configure the vacuum relief settings if applicable. Select the vacuum vent type: Standard or UBR PVRV and the Vacuum Set Point based on project requirements.

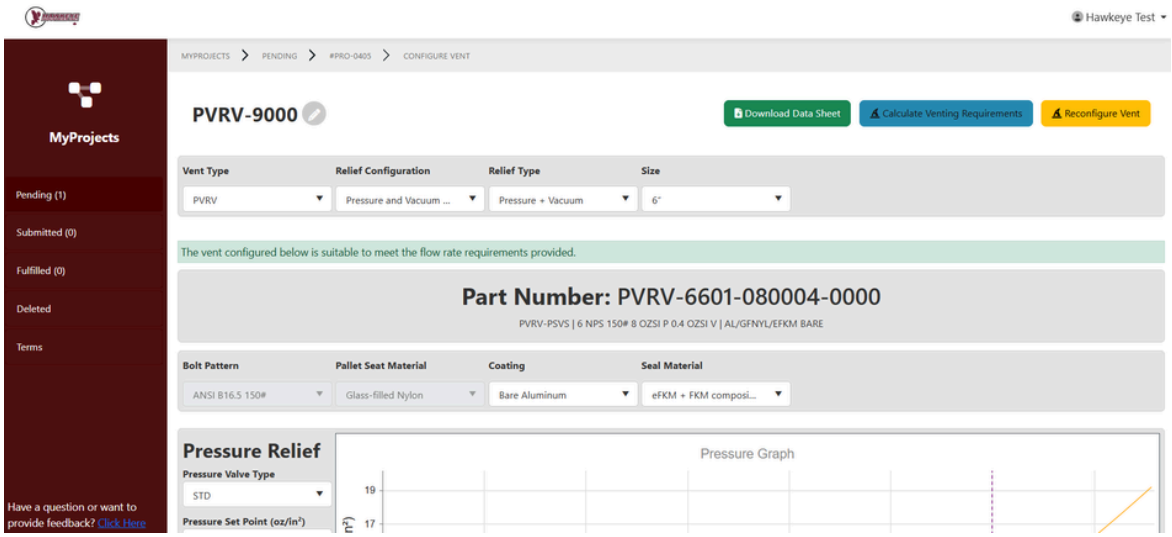


Step 22: Enter the Maximum Allowable Relieving Vacuum (MARV). The vacuum relieving curve will update automatically.



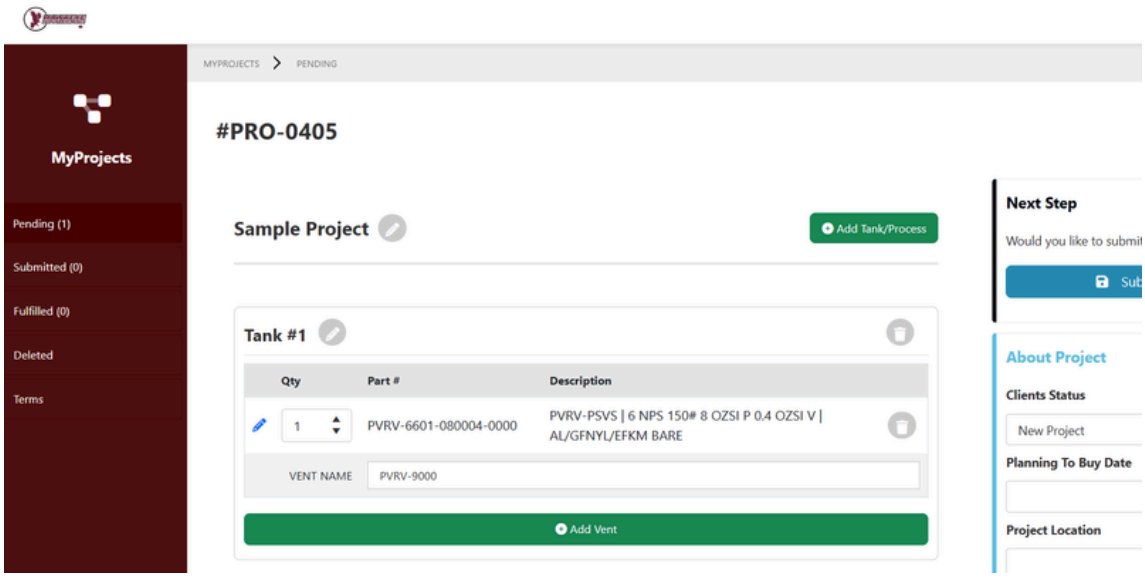
Step 23: Click the pencil icon to edit the vent name if required.

Step 24: Click Save after updating the vent name.



Step 25: Return to the configured vent screen to review the selections and confirm suitability. If the selected vent size cannot relieve at the required flow rate, a warning message will appear. Please review this warning before proceeding. To download a PDF datasheet, click the green Download Datasheet button.

Section V – Submitting a Project for Quotation



Step 26: If you would like to place an order for this vent, please return to the project screen and click Submit Project, or contact Hawkeye Industries at 780-490-4295.