

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:

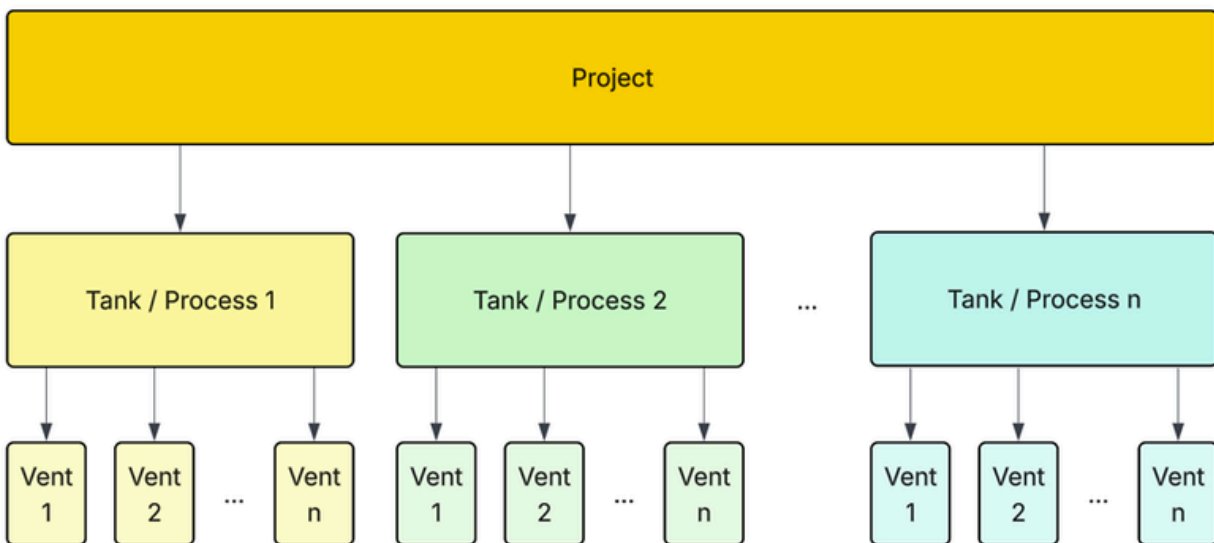
- a single tank or process,
- a battery of tanks, or
- an entire facility or field.

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

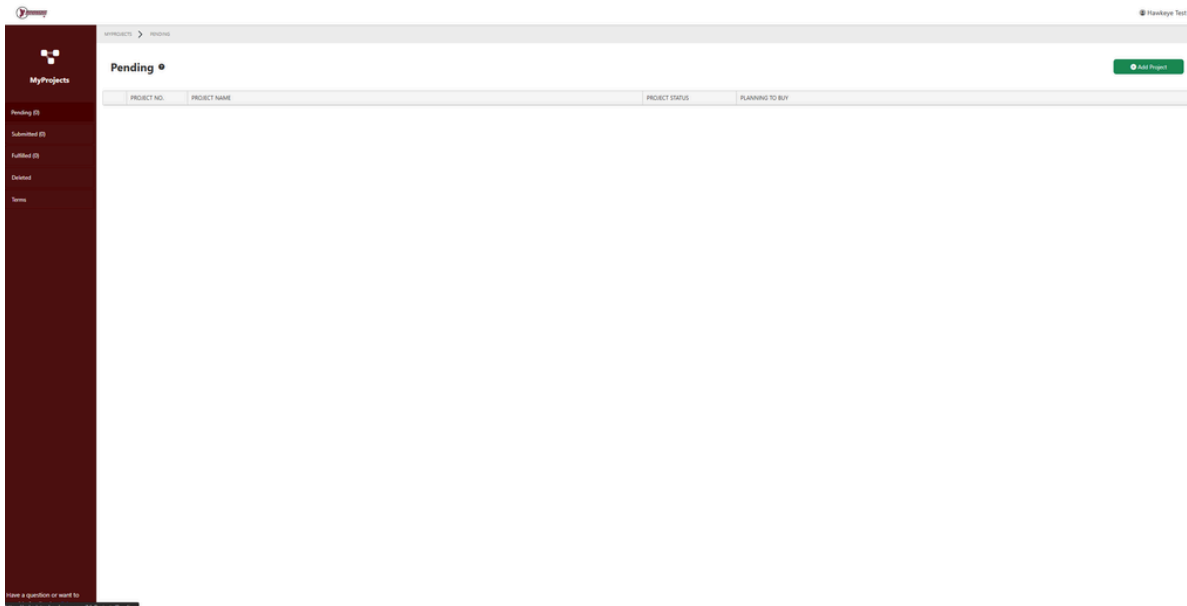
Before a vent can be configured, the calculator requires users to first create a project and then add a tank or process. This ensures that all vent selections are associated with a specific application and remain properly organized within your sizing workflow.

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.

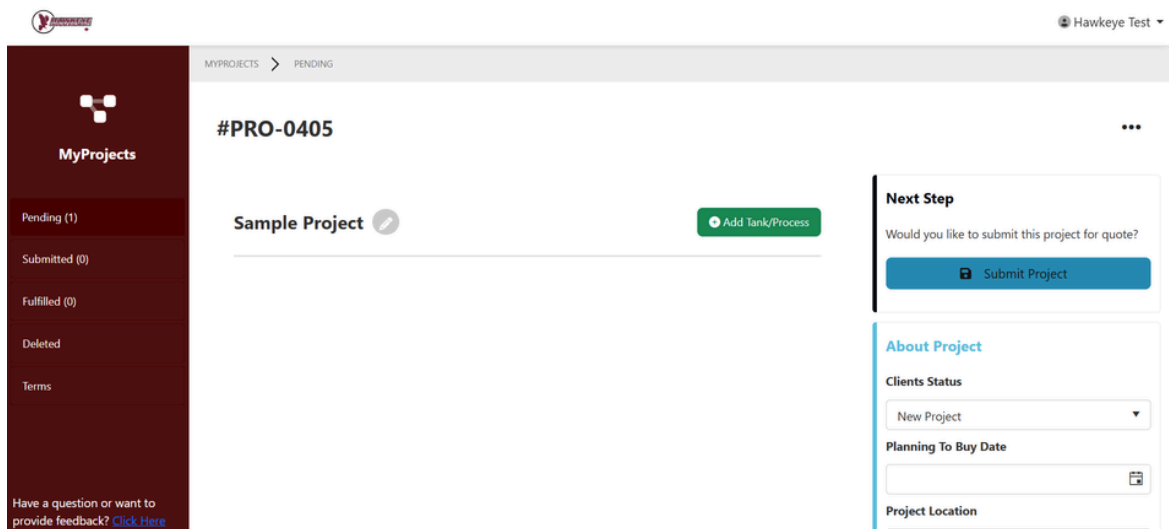
A screenshot of a modal window titled 'Add Project' with a close button (X) in the top right corner. The form contains the following fields:

- Project Name ***: A text input field containing 'Sample Project'.
- Project Location**: A text input field that is currently empty and has a blue border.
- Client's Name**: An empty text input field.
- Planning To Buy Date**: A date picker input field with a calendar icon on the right.

At the bottom of the modal are two buttons: a green 'Save' button and a grey 'Cancel' button.

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

Section II – Adding Tanks or Processes

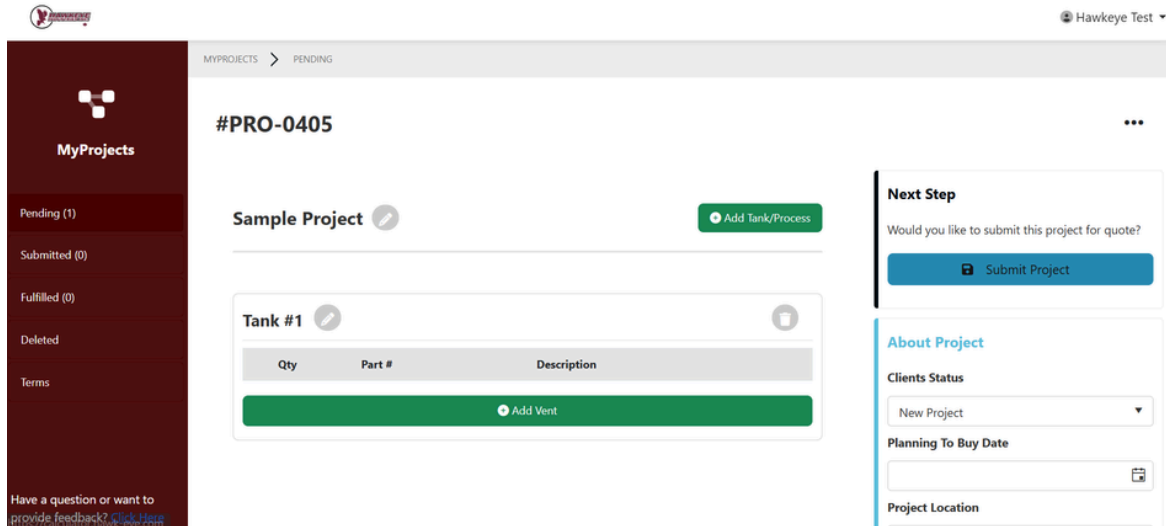


Step 3: Click Add Tank/Process.

The screenshot shows a modal window titled 'Add Tank/Process' with a close button (X) in the top right corner. Below the title is the label 'Name of Tank/Process' followed by a text input field containing the text 'Tank #1'. At the bottom of the modal are two buttons: a green 'Save' button and a light gray 'Cancel' button.

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.

Configure Vent By:

Part Number

If the part number of the vent is known, select this option to enter the part number directly.

Manual Selection

If the type and configuration of the vent is known, select this option to configure the vent manually through drop down menus.

Guided Selection

If the type or configuration of the vent is unknown, select this option for guidance on vent selection through a series of questions.

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

MYPROJECTS > PENDING > #PRO-0405 > CONFIGURE VENT

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Download Data Sheet Calculate Venting Requirements Reconfigure Vent

Vent Type	Relief Configuration	Relief Type	Size
Select...	Select...	Select...	Select...

Please configure the vent options above

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.

MYPROJECTS > PENDING > #PRO-0405 > CONFIGURE VENT

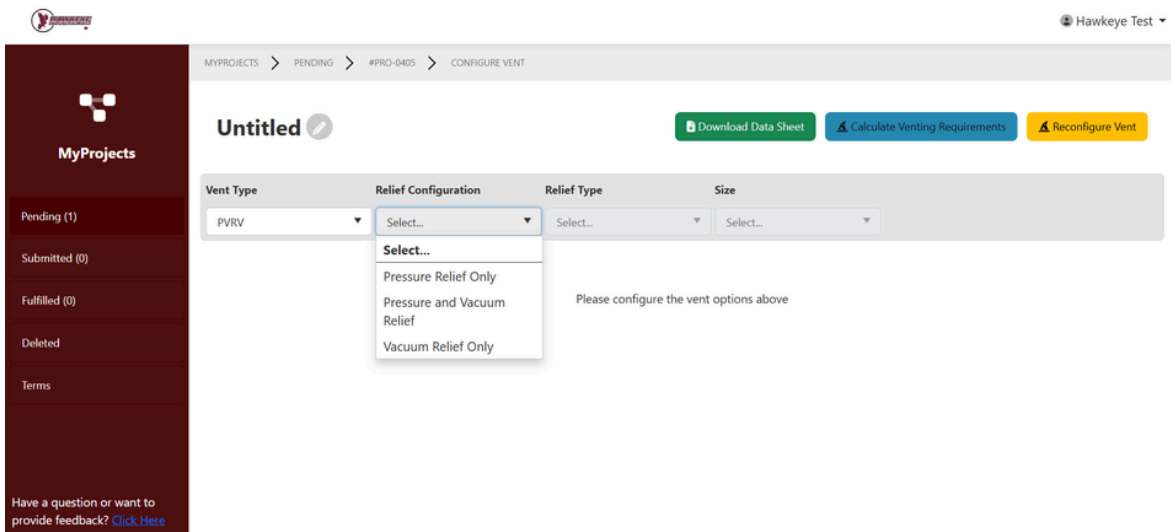
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Download Data Sheet Calculate Venting Requirements Reconfigure Vent

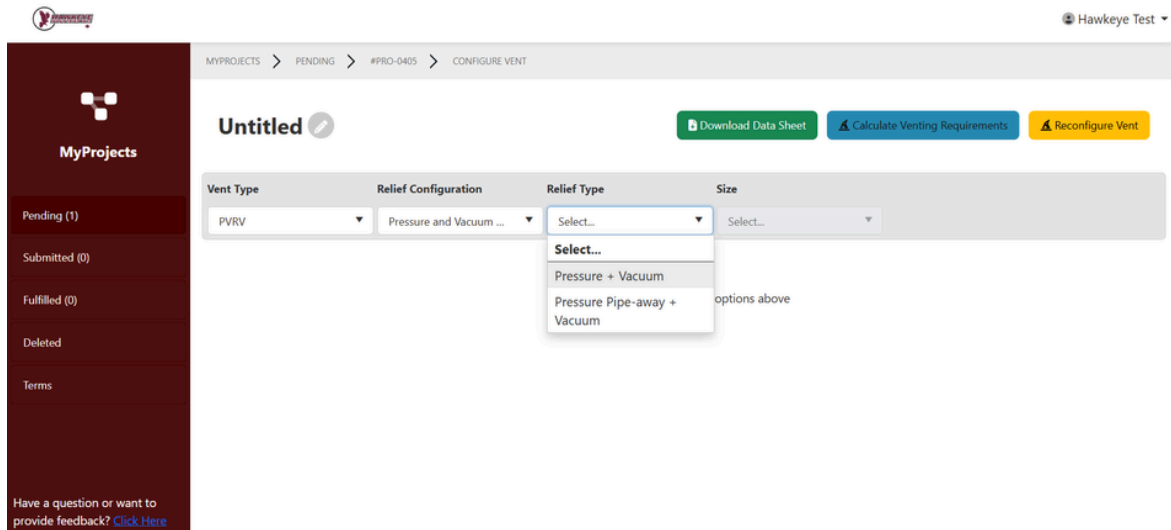
Vent Type	Relief Configuration	Relief Type	Size
Select... Select... PVRV EPRV Marsh Hawk TVTH	Select...	Select...	Select...

Please configure the vent options above

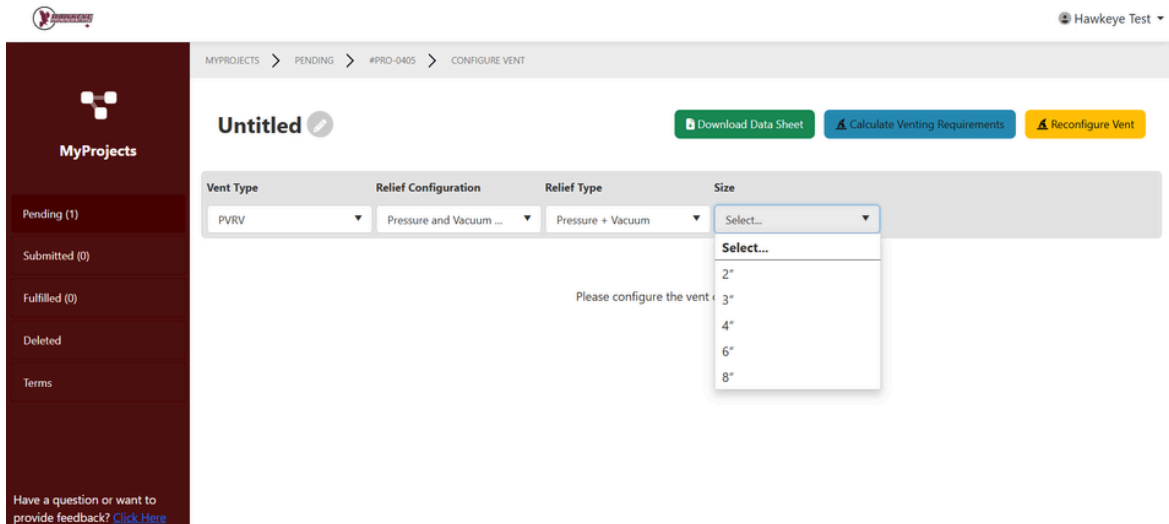
Step 8: Choose one of the following vent types: PVRV, EPRV, Marsh Hawk, or TVTH. For this example, we will select PVRV.



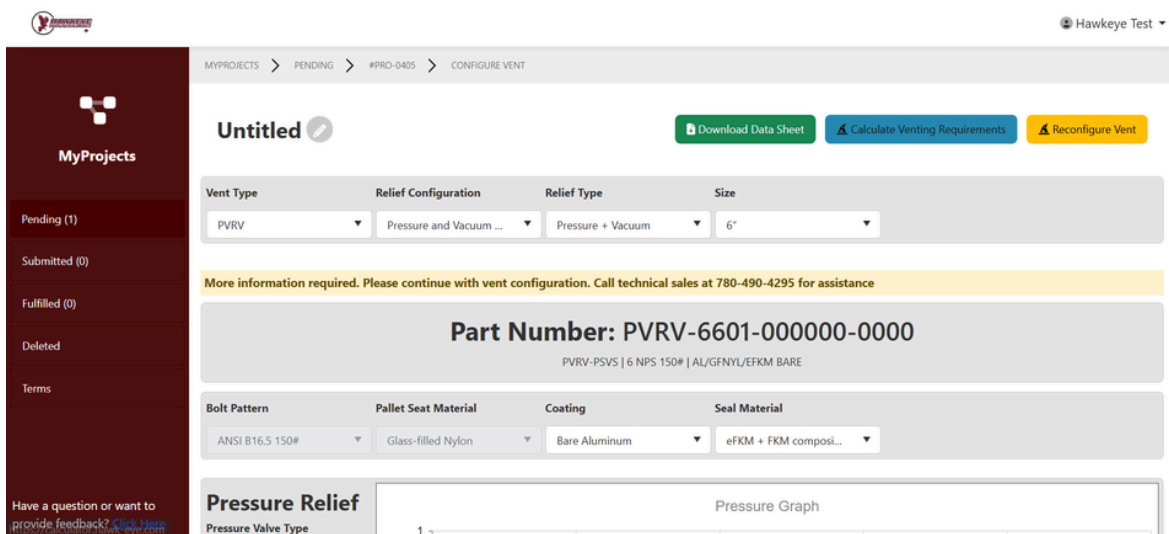
Step 9: Select the relief configuration: pressure relief, vacuum relief, or both.



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



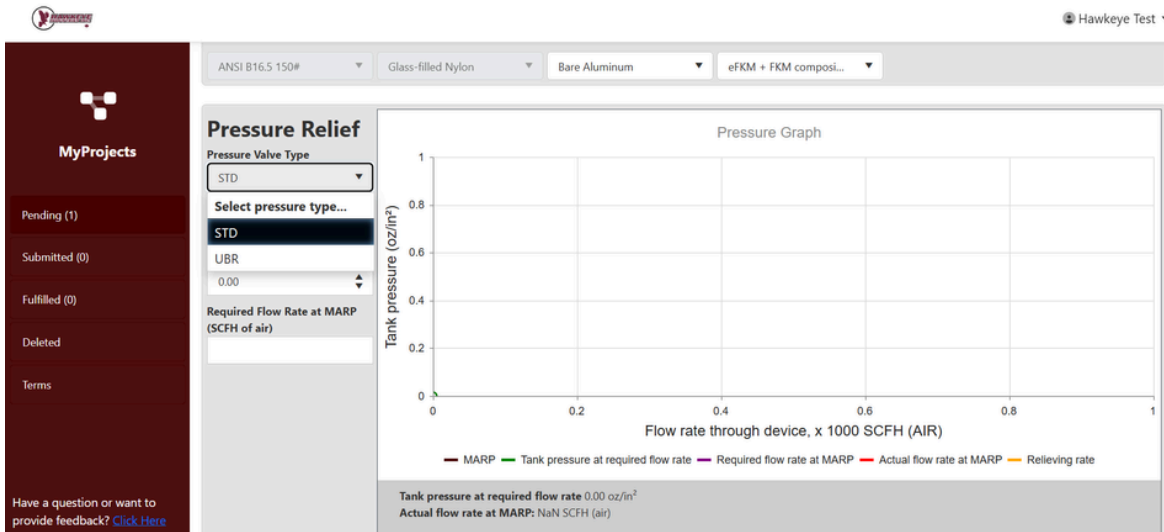
Step 11: Select the required PVRV size. If the vent size is unknown, select “Calculate Venting Requirements” to determine the required vent size.



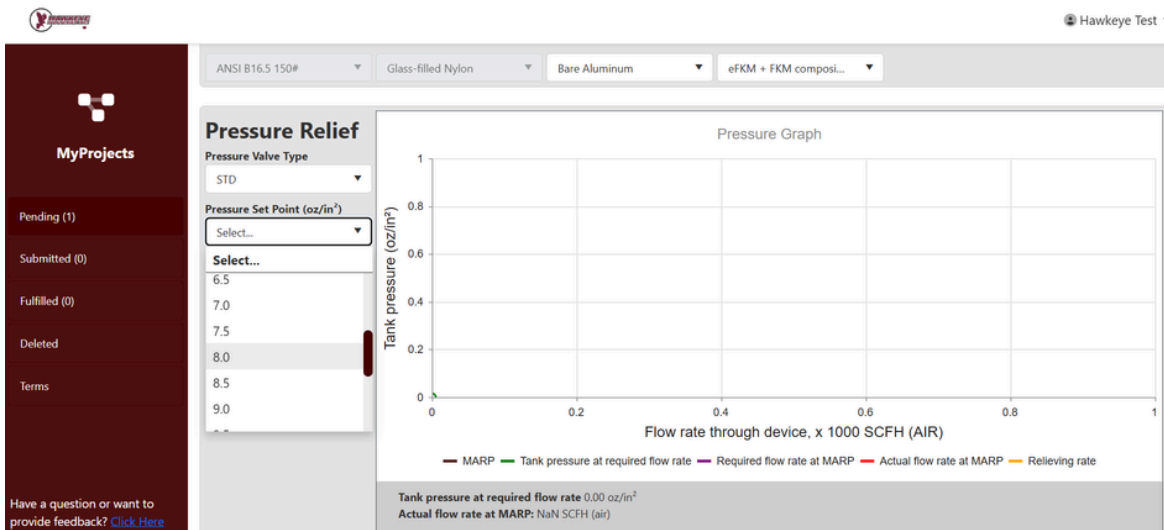
Step 12: Scroll down to view the flow curves. In this example, a 6” PVRV with a pressure and vacuum relief configuration and a vent-to-atmosphere relief type has been selected.

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

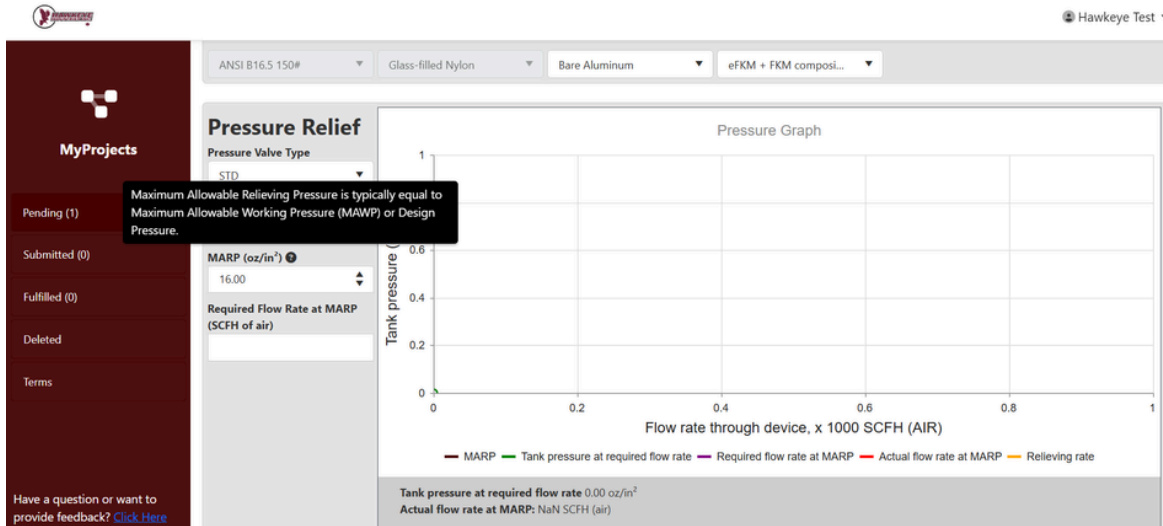
Step 14: Enter the required inputs for the pressure relief curve.



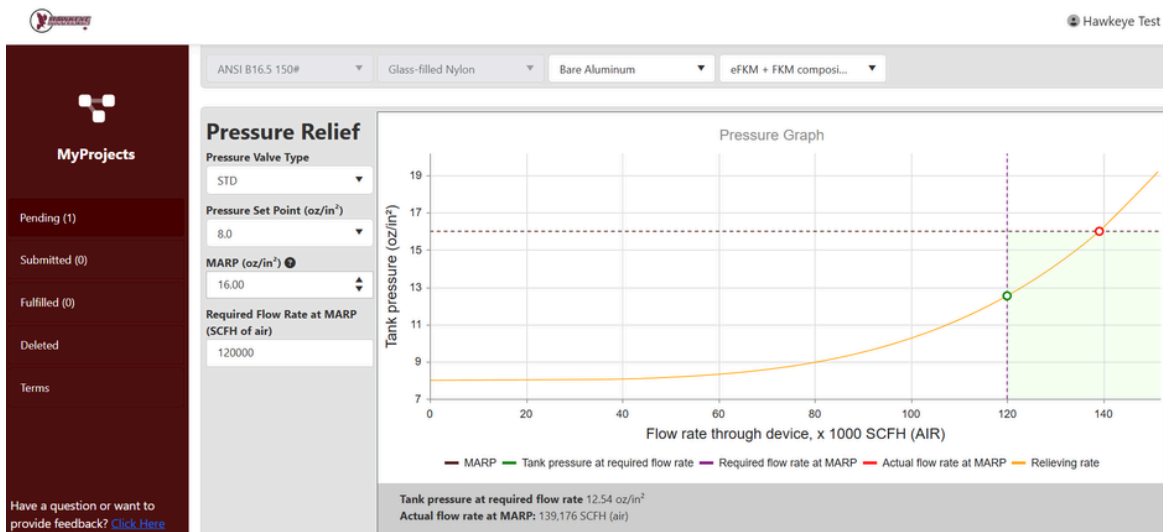
Step 15: Select the pressure vent type: Standard or UBR PVRV.



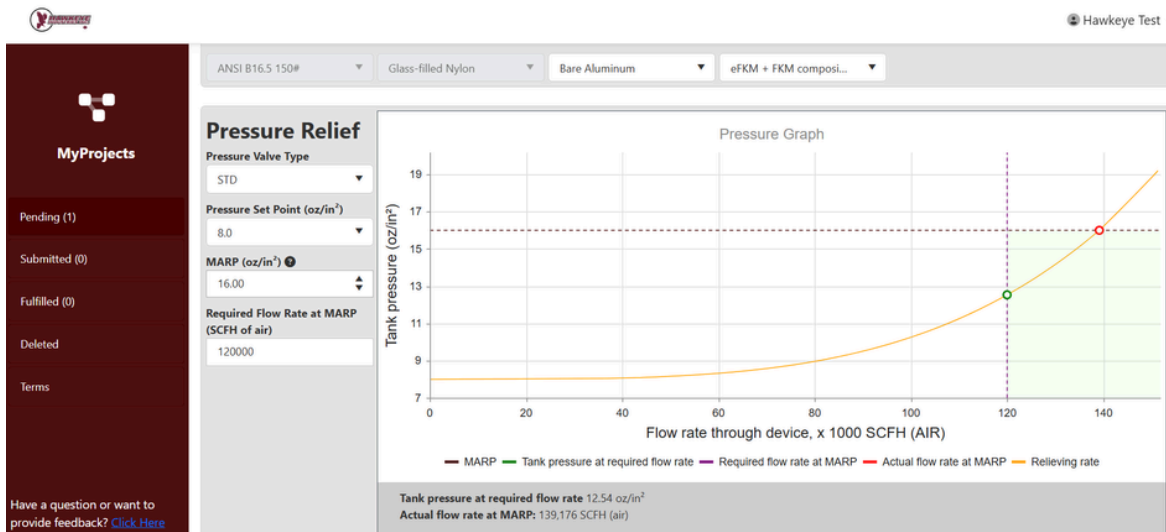
Step 16: Select the pressure set point. Standard PVRVs allow up to 16 oz/in², while UBR PVRVs allow up to 32 oz/in².



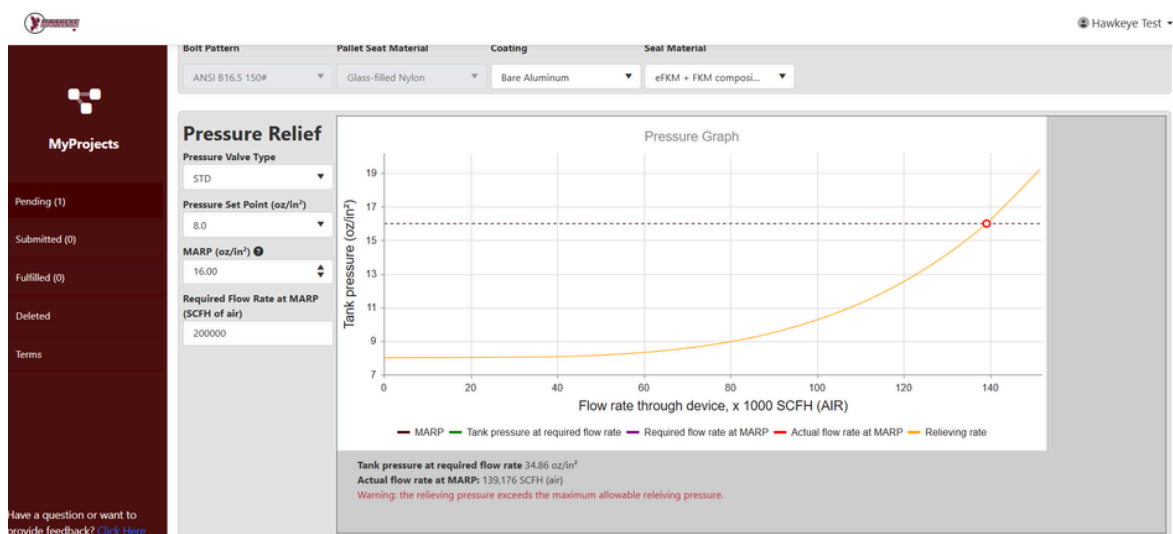
Step 17: Enter the Maximum Allowable Relieving Pressure (MARP). MARP is the highest tank pressure at which the vent must deliver its rated relieving capacity.



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



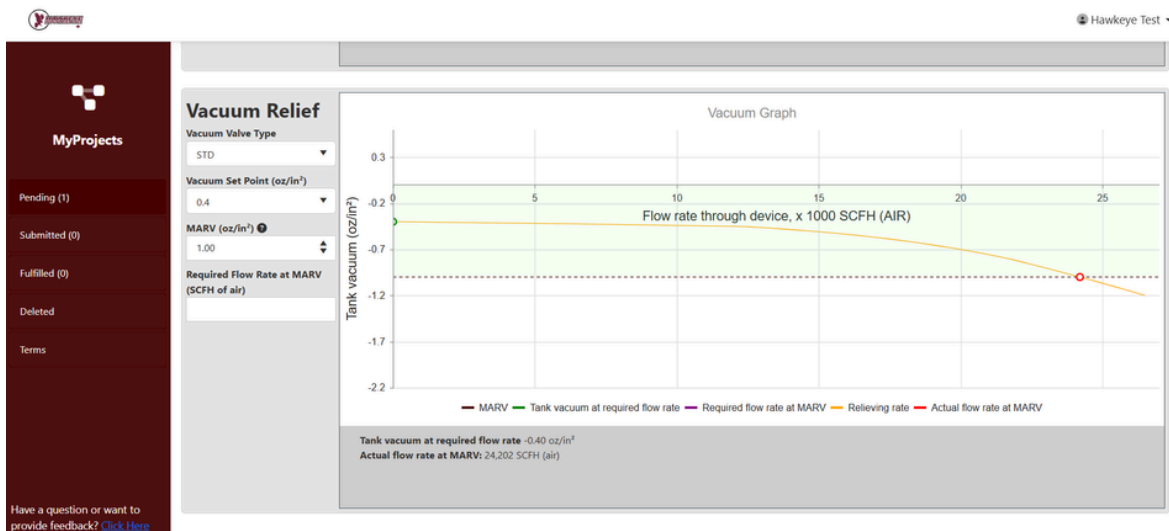
Step 19: The graph shows the actual relieving capacity at MARP. In this example, the PVRV capacity exceeds the required flow rate at MARP and is suitable for this application.



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.

MYPROJECTS > PENDING > #PRO-0405 > CONFIGURE VENT

Hawkeye Test

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Download Data Sheet Calculate Venting Requirements Reconfigure Vent

Vent Type Relief Configuration Relief Type Size

PVRV Pressure and Vacuum ... Pressure + Vacuum 6"

The vent configured below is suitable to meet the flow rate requirements provided.

Part Number: PVRV-6601-080004-0000
PVRV-PSVS | 6 NPS 150# 8 OZSI P 0.4 OZSI V | AL/GFNYL/EFKM BARE

Bolt Pattern Pallet Seat Material Coating Seal Material

ANSI B16.5 150# Glass-filled Nylon Bare Aluminum eFKM + FKM composi...

Pressure Relief

Pressure Valve Type
STD

Pressure Set Point (oz/in²)

Pressure Graph

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

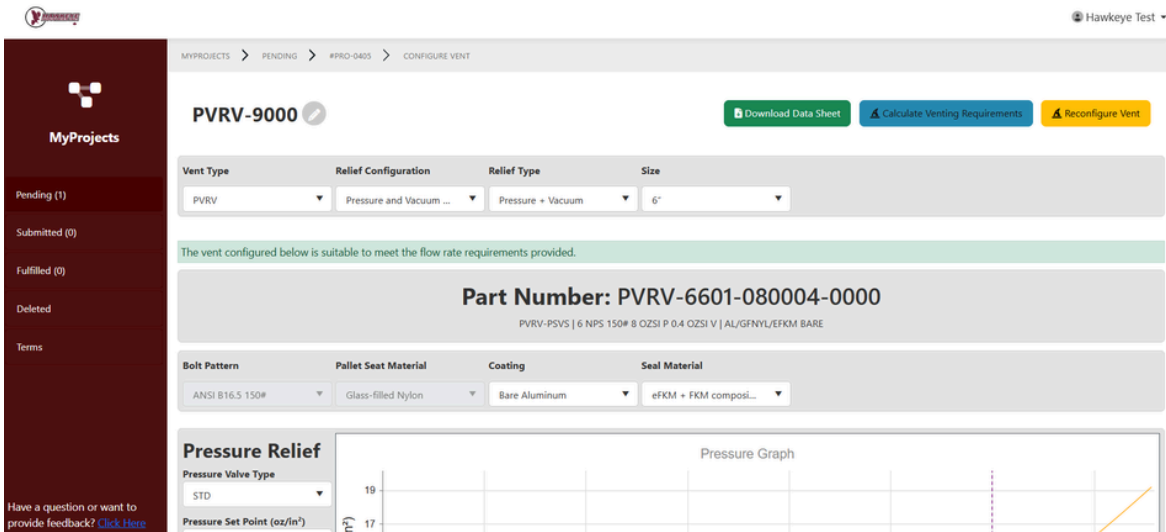
Update Name

Name

PVRV-9000

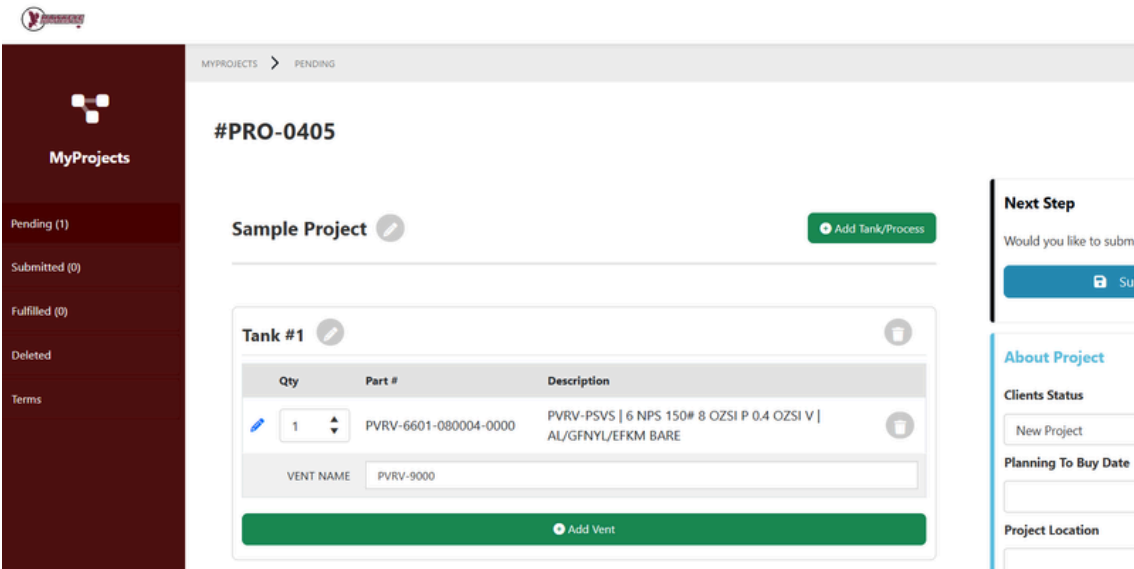
Save Cancel

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.