

Calibrating the Flow System Quick Tips

Overview

Flow paddles must be calibrated after they are installed to ensure accurate readings are obtained. For more complete information, please see the *Pit Volume Totalizer (PVT) User Guide*.

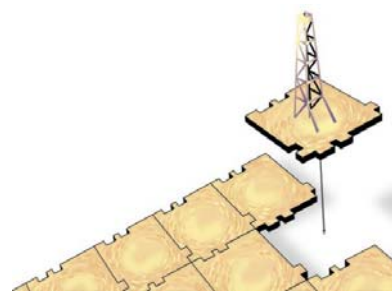
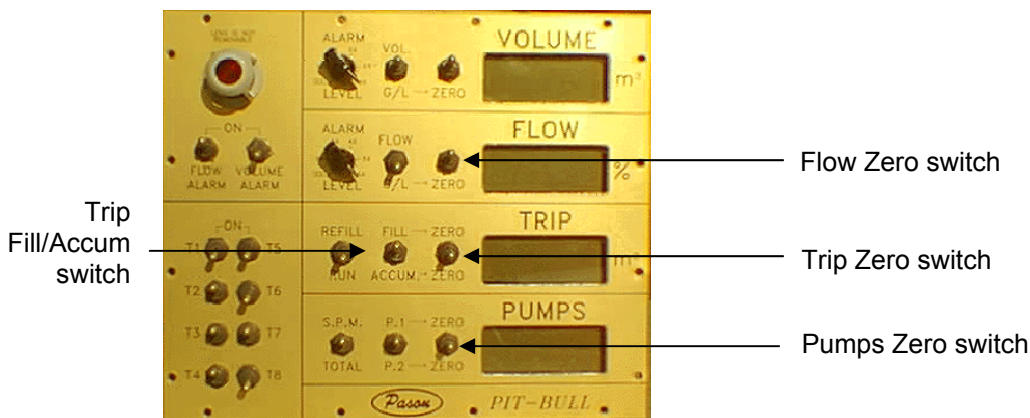
Setting the PVT to Calibration Mode

Install a calibration plug into the connector on the bottom of the PVT monitor labeled “Calibrate System”. If you do not have a calibration plug, you can use a short piece of wire with the ends bared to the conductor and bend it into a “U” shape. Insert the ends into pins C and D as shown below. The display will read “8888”, which is the calibration mode signal. Once in calibration mode, the panel switches and displays take on different functions. The flow span is usually set to read from 0% to 100%.



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Once the system is in calibration mode, the next step is to calibrate the flow zero and flow span points. Remember, the **flow zero point must be set before the flow span is set**.





For US use only



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To calibrate the flow system, follow these steps:

1. Toggle the Pumps Zero switch up or down repeatedly to select channel 10. A "10" will appear in the Pumps display.
2. Place the flow paddle arm in the bottom position (away from the body of the flow paddle, 0%), and press down the Flow Zero switch. The flow "zero" point has now been established. Do not apply force when placing the flow paddle arm in the zero position; allow it to lie on the bottom of the flow line.
3. Hold the flow paddle arm in the top position (close to the body of the flow paddle, 100%).
4. Use the Trip Zero switch to set the flow span to 100. Alternatively, you can use the Trip Fill/Accum switch. When it is in the Accum position, the numbers move up or down quickly. If it is in the fill position, the numbers move up and down slowly. The maximum flow point has now been established.

Testing the Flow System

To test that the flow paddle is calibrated correctly, move the flow paddle back and forth between the top and bottom position to ensure the values on the PVT are reading correctly. If the flow paddle arm is in the bottom position, the Flow display on the PVT should read 0, as there is 0% flow in the flow line. If the flow paddle arm is in the top position, the Flow display on the PVT should read 100, as this position indicates 100% flow in the flow line.

If the reading in the Flow display on the PVT corresponds correctly to the position of the flow paddle arm, the flow paddle has been calibrated correctly. Remove the calibration plug from the "Calibrate System" connection at the bottom of the PVT display.

