

Differential Pressure Flow Sensors

Steam Metering Industry: Universities

Application:

Steam flow at a large university over wide turn-downs.

Problem:

Steam flow rates vary based on changing demand (winter vs. summer, breaks, etc.).

Pressure/Temperature:

125# Steam

Flow Rate:

2,000 PPH to 30,000 PPH (15:1)

Pipe Sizes:

8" Pipes

Solution:

Accelabar[®] Advantages:

- Ability to accurately measure a wide range of steam flows. The Accelabar nozzle accelerates the steam velocity. The Verabar located within the nozzle accurately measures and significantly increases the differential pressure output to increase the operating range (turndown).
- No straight run requirements. Stabilization and linearization of the steam velocity profile within the throat of the nozzle eliminates the need for any upstream run.
- No piping modifications required. Other technologies require a reduction in pipe size (to increase the velocity to measurable ranges), including additional straight lengths of pipe. The Accelabar did not require a reduction in pipe size and was installed within only a 22" face-to-face dimension.



Results:

Customer comment: "This time of year (summer) the steam flow on this steam line is low. We have been checking the readings and are pleased with the results. I feel this added accuracy on the lower end will be a real plus for our billing department. Thanks for your help."

