VERIS Verabar®

Application Data

Differential Pressure Flow Meters

Fluid:	Compressed Air
Industry:	Textile – Utility Measurement
Application:	Energy savings
Specifications:	Low permanent pressure loss

Compressed air installations account for a significant portion of Verabar® gas applications. Ease of installation, documented accuracy, minimal pipe blockage and a low-maintenance design make the Verabar the best choice for compressed air flow measurement.

As an example of the diverse potential for compressed air applications, customers with Verabars in service on compressed air lines include Tampa Electric, Kansas City Power & Light, Detroit Edison (Power), Eli Lilly (Pharmaceutical), Air Liquide, Clinton Mills (Textile), Weyerhaueser (Pulp & Paper), Coors (Brewery), Kaeser Compressors, U.S. Steel and Ford Motor.

Application

Monitoring compressor efficiency, compressed air auditing, leak detection, plant distribution, usage, etc. with pressures ranging from 50 PSI to 300 PSI and pipe sizes 2” to 30”.

Problem

1) Pressure loss created by flow meters with a large pipe blockage equates to high operating costs and reduced efficiency. In many cases, orifice plates are being used to monitor compressor efficiency. There is a problem with monitoring compressor efficiency when the monitoring device itself creates a 3 PSI pressure loss.

2) Rust in pipes, residual oil particulate from compressor lubricant, moisture and bits of pipe thread sealant from threaded connections can contaminate the air and create maintenance problems for other types of meters (turbine, vortex, paddle wheel, thermal dispersion, etc.).

3) Often, it is not practical to shut down and depressurize a compressed air system to install a flow meter.

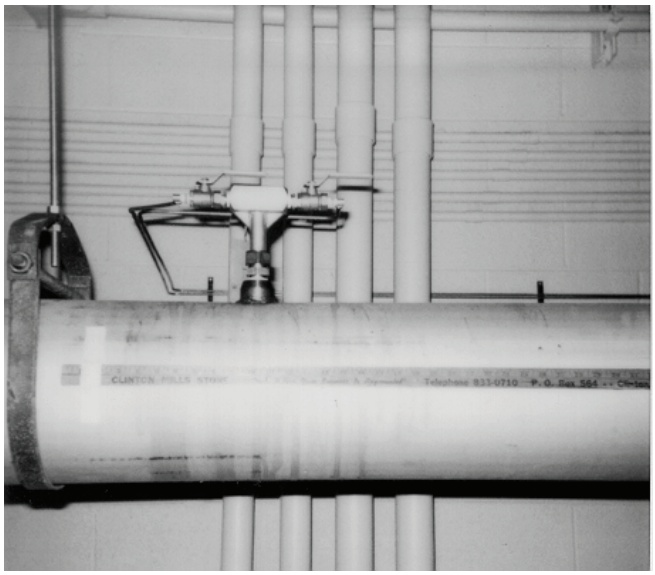
Solution

1) Since the Verabar creates virtually no pressure loss (typically 3% of the measured DP), compressor efficiency is not compromised and operating costs are minimal.

2) A Verabar with a DP transmitter is a simple installation with technology that is easily understood by plant personnel. Hot tap models can be installed on lines that cannot be shut down and depressurized.

3) The Verabar’s non-clog design with no moving parts means no down time or maintenance concerns.

4) The Verabar has been thoroughly tested and field proven in compressed air applications throughout the world. In addition, the Verabar Flow Test Report (VED-100) documents accuracy of the Verabar, which tests were verified by C.E.E.S.I., the largest independent air flow test and calibration facility in the world.



Verabar installed on 10” compressed air main header (27,500 SCFM, 95 PSI, 85°F) – one of 18 sensors in service at Clinton Mills, a large textile plant in Clinton, South Carolina

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