

## *Application Note*

### *February 2001*

Application from John K. Foreman of Moody Price, Inc.

**Industry:** Petrochemical

**Company:** Rubicon

**Interested User:** Instrumentation Supervisor.

**Application:** Petrochemical companies, among others, require the ability to monitor the flow of steam, condensate, cooling water, Methanol, and effluents. Square root type primary elements such as orifice plates, venturis, and Accutube averaging pitot tubes are often used. These applications require the use of a versatile flow indicator capable of functioning in diverse environments covering a wide range of pressures (10-1500 PSI), temperatures (0-640°F), differential pressures, and media compatibilities. Accuracy concerns also need to be addressed.

#### **Application Requirements:**

Differential Pressure Ranges: 0-100" W.C.; 0-200" W.C. & 0-500" W.C.

Construction Materials Required: Stainless Steel wetted parts & center plate.

Indicator/ Scale Legends: 6" Dial 0-10 square root flow scale reading in GPM and PPH.

Case requirements: NEMA 4 rating.

Process Connections: ½" NPT connections

Mounting: 2" pipe stand.

#### **Meriam Solution:**

##### **The 1126 Differential Pressure Bellows Gauge.**

This gauge was chosen because it was able to meet or exceed all of the requirements of Rubicon. Features important to Rubicon included: non-standard scales & ranges, NEMA 4 rating, high-pressure capabilities, and optional 0.50% accuracy (standard accuracy is 0.75% FS).

Although the 1126 gauge has an operating temperature between -60° and 200° F, it can be used with processes having higher temperatures by installing 2 ft. of uninsulated metal piping between the gauge and process for every 100° F above the 200° F gauge operating limit, allowing the media to cool sufficiently.

Competitive pricing and a reasonable delivery time also factored into Rubicon's decision to purchase the 1126.

