Accurately monitoring pressure in a gas pipeline

APPLICATION C132

Local gas utilities are regulated utilities involved in the delivery of natural gas to consumers within a specific geographic area. When the natural gas in a transmission pipeline reaches a local gas utility, many operators and technicians are required to check the gas pressure at the various ‘stops’ along the local utility transmission line. Since gas is billed by volume and that volume is calculated from their temperature / pressure formula, it is essential pressure be measured and recorded at each ‘stop.’

The Engineering Issue

• Pressure variance is rampant due to the significant accuracy errors that analog dial gauges incur under normal usage because of mechanical shock and field conditions.

• The engineer has a requirement to increase (from previous records kept) the pressure accuracy measured and recorded at each ‘stop.’

The engineer used a Cecom F16B digital pressure gauge. This Cecom gauge has 0.25% accuracy over the full pressure range, 0.1 PSI resolution, and can handle the “abuse” due to rugged and high-quality electrical and mechanical component parts.

Problem. Solved.