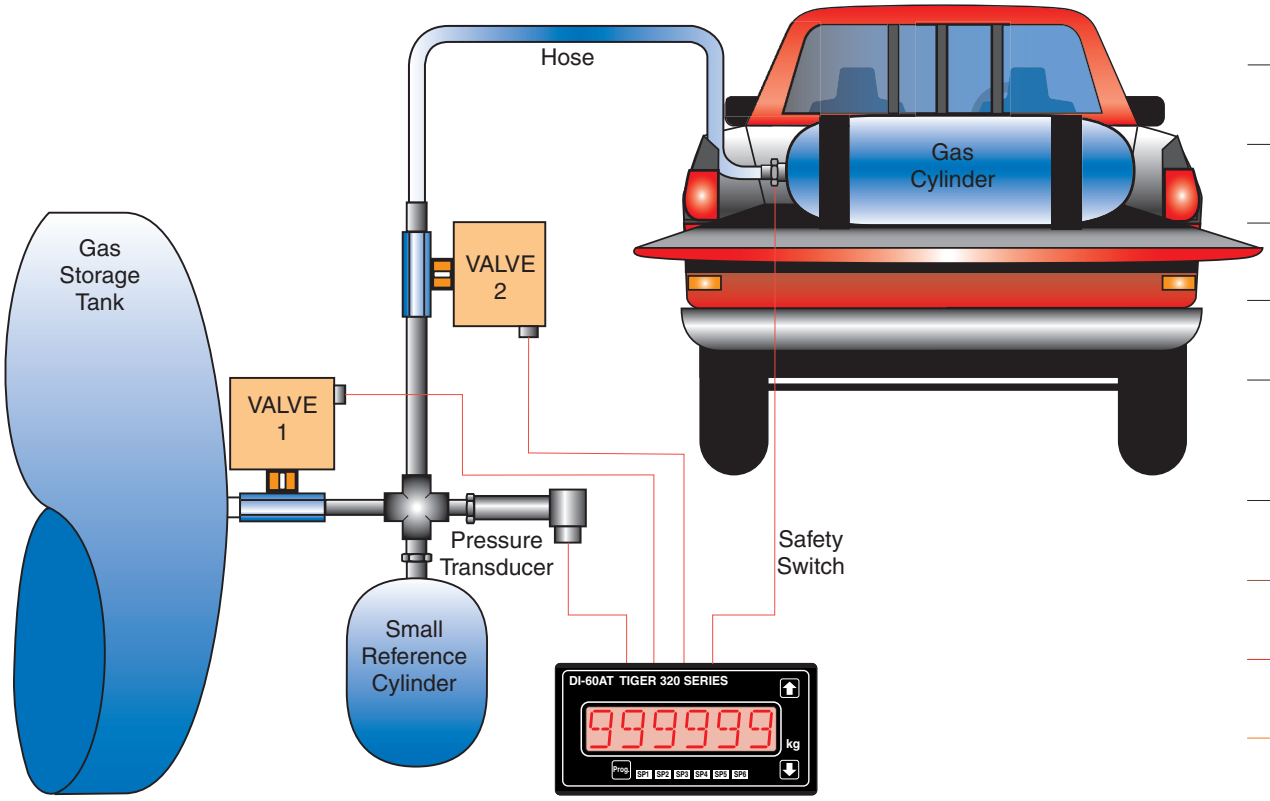
Our customer operates a gas dispenser that fills gas cylinders of unknown volume and calculates the cost in dollars.
The meter automates the control process through a macro. In the diagram below, both valves 1 and 2 are CLOSED at the beginning of the process (the default position). When the hose connects to the gas cylinder, the safety switch triggers the macro. Valve 1 OPENS, pressurizing the small reference cylinder of known capacity, and the meter stores the pressure data measured from the pressure transducer.

Valve 1 then CLOSES and valve 2 OPENS. The meter measures the pressure difference. The fill capacity is then calculated in liters by the meter from a calculation provided by the customer. Valve 1 then OPENS, filling the system and the meter calculates the cost of the fill amount in dollars. Valves 1 and 2 CLOSE and the hose is disconnected.

GAS CYLINDER FILLING SYSTEM USING A PRESSURE TRANSDUCER



OPERATIONAL DISPLAY

APPLICATION VARIATIONS

- The procedure can be applied to gases or liquids.