PRODUCT
APPLICATION
REVIEW

Industry: Food and Beverage
Technical Bulletin APP014
July 2009

McMillan Corporate Headquarters:

Post Office Box 1340
Georgetown, TX 78627-1340
United States of America

Toll-Free: 800.861.0231
Direct: 512.863.0231
Fax: 512.863.0671

http://www.mcmflow.com
sales@mcmflow.com

Flow Test Stand

APPLICATION

A tubing manufacturer supplies custom tube assemblies to a bottling and canning equipment manufacturer for use in their pneumatic controls system. For quality control the tube assemblies are tested for leaks and blockage. A technician will perform a flow test to verify that the tube assembly is free of internal obstruction.

MCMILLAN PRODUCTS UTILIZED

50D-9-D-A6-G0 Thermal Mass FLO-METER
A-115VAC Power Adapter

DESCRIPTION

McMillan Model 50D Thermal Mass FLO-METER has an integrated Liquid Crystal Display (LCD) and provides an analog output signal which is proportional to the flow rate. The maximum pressure rating is 100 PSIG. The Power Adapter connects to the FLO-METER and an AC power outlet, plug and play.

OPERATION

Regulated dry air (18-20 PSIG) flows through the needle valve, Model 50D FLO-METER and tube assembly to the atmosphere. The technician adjusts the flow to approximately 3 L/minute as per the display. The 0-20 inches/water manometer will detect a pressure increase of approximately ½ inch/water when the tube has an obstruction. If the tube assembly is not obstructed it will be moved to the next station for leak tests that do not make use of the Model 50D FLO-METER.

ADVANTAGES

McMillan Company's patented thermal mass design provides accurate repeatable results with minimal zero drift. Metal construction, compact size, integrated display and reasonable price make the Model 50D an ideal choice for this customer's needs. Units are available with NIST-Traceable calibration.

McMillan Company also offers a recalibration service. Custom configurations are available to OEM customers.

DIAGRAM
Figure 1 illustrates the flow path of the fluid system. Figure 2 illustrates the wiring of the system.

FIGURE 1 – Flow Path of Fluid System

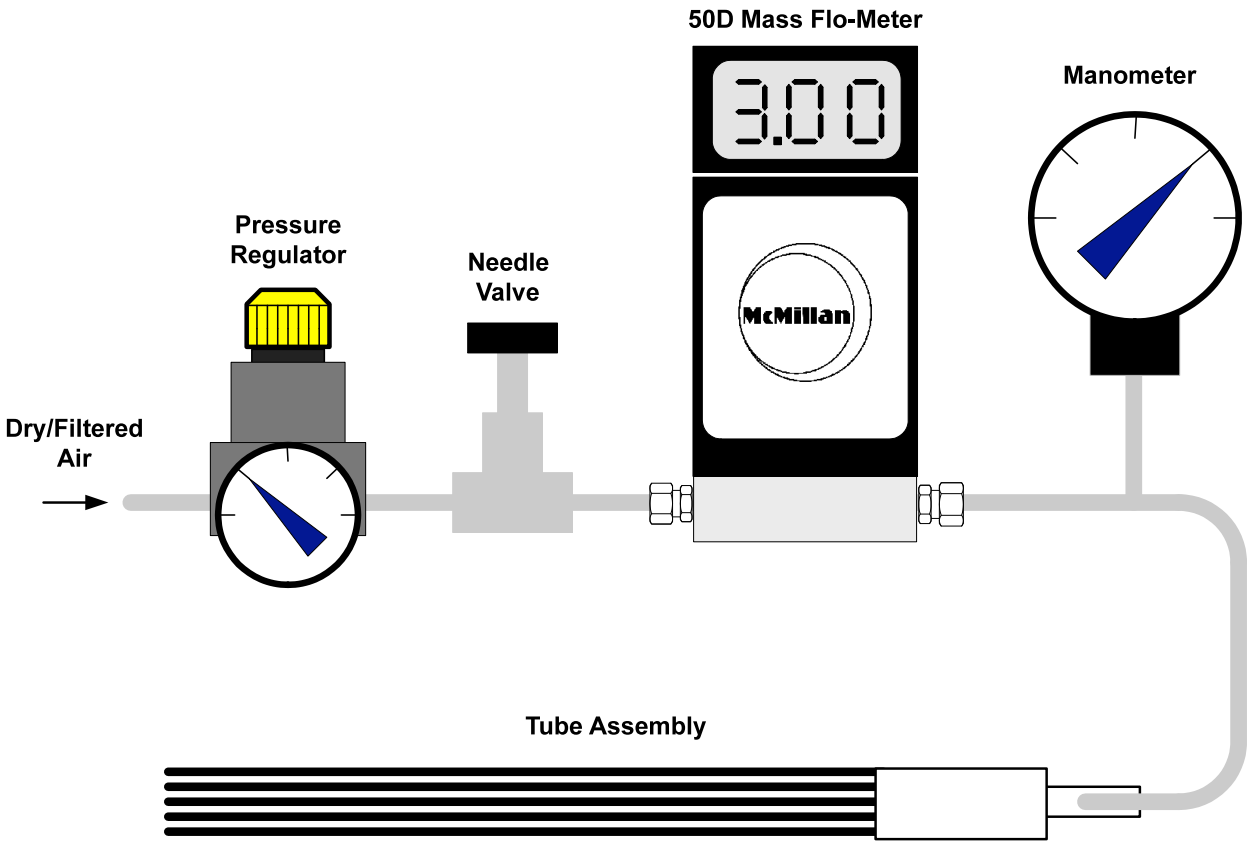

FIGURE 2 – System Wiring