



PRODUCT APPLICATION REVIEW

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Leak Test Stand

APPLICATION

A manufacturer of headlight and taillight assemblies leak tests them for porosity, cracks and seam integrity. A light assembly must be airtight to avoid contamination from moisture or dust. The test stand operator needs a local display to indicate the flow rate. Future development of the test stand will require an output signal for data acquisition.

MCMILLAN PRODUCTS UTILIZED

50D-2-A2-G0 Thermal Mass FLO-METER
A-115VAC Power Adapter Package

DESCRIPTION

McMillan Model 50D Thermal Mass FLO-METER has an integrated display and provides an analog output signal which is proportional to the flow rate. The Power Adapter Package includes a power supply, connection hub and cable assembly with pigtail (soldered wire) ends.

OPERATION

Regulated air bypasses the Model 50D to fast fill and pressurize the light assembly. Next the 3-way valve switches to the low flow channel. The display and/or the output signal are closely monitored, if the flow rate exceeds 3 sccm the assembly is rejected due to leakage.

ADVANTAGES

McMillan Company's patented thermal mass design provides accurate repeatable results with minimal zero drift. Metal construction, compact size and reasonable price make the Model 50D an ideal choice for this customer's needs. The integrated display pivots up to 45° allowing easy view of the flow rate by the operator. NIST-Traceable calibration and recalibration service are available from McMillan Company. Custom versions are offered to OEM customers.

DIAGRAM

Figure 1 illustrates the flow path of the fluid system and power adapter package.

FIGURE 1 – Flow Path of Fluid System and Power Adapter Package

