

TELEDYNE HASTINGS INSTRUMENTS

APPLICATION NOTES

GOAL: Perform leak testing, minimum and maximum flow test for Protective Breathing Apparatus

SOLUTION: Teledyne Hastings Instruments HFM-200 and HFM-300 series mass flowmeters



Tyco/Scott Health & Safety is the world's recognized leader in the design and manufacturer of **Scott Air-Pak® line of self contained Breathing Apparatus** that is utilized by Fire and Rescue organizations worldwide.

Teledyne Hastings HFM200 and 300 series mass flowmeters are used to perform leak testing, minimum and maximum flow tests for every breathing pack manufactured. They have designed special testing cells that have model heads, **to** which the breathing masks are mounted. The

Hastings mass flowmeters will then monitor leakage from the apparatus and monitor the flows delivered to the user for minimum and maximum rates at pressure (exhaling) and vacuum (inhaling). Lowest flow rates are in the neighborhood of 50 sccm of air and maximum flows of 600 slpm of air. Flow rates vary depending on the actual style of breathing pack being tested.

These tests were originally performed using rotameters, which proved to be very unreliable. **Scott evaluated several manufacturers of Thermal Mass Flow instruments before selecting Teledyne Hastings Instruments.** Hastings mass flowmeters were selected for their rapid response to flow changes, ruggedness, accuracy and reliability. **They have been** satisfied with the service each Hastings mass flowmeter has provided.

Hastings ability to provide fast service when new units are required and their responsiveness to questions has demonstrated to this customer that they have made the right decision when they standardized on Teledyne Hastings Instruments for all **its** flow measuring requirements. Teledyne Hastings and their representative, The Sales Advantage Group continue to provide excellent technical and customer support.