

## **POF030: General platform presentation**

### **Tool Set for the Developer of Respiratory Equipment**

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#### **Abstract**

Designers of respiratory protective devices need the ability to measure performance of prototypes throughout development. Measurements must predict ISO Standards and NIOSH testing. A metabolic simulator and associated instrumentation has been developed for this purpose. Capabilities include continuous real-time measurement of breathing effort, carbon dioxide analysis and temperature at the mouth for respiratory minute ventilations from 5 to 150 liters. Verification standards and instrumentation provide traceable calibration sources. The system permits measurement of carbon dioxide scrubber duration, work of breathing calculation for component comparison, oxygen source capacity and gas temperatures providing a diagnostic set of tools for evaluation of respiratory protective equipment and prototype development.