POF033: General platform presentation

Is the ISO Total Inward Leakage Test a Simulated Workplace Protection Factor Study?

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Abstract:
Globally, there are two main approaches to testing and certifying Respiratory Protection Devices (RPD).

One approach requires total inward leakage testing of RPD along with minimum performance requirements for respirator components such as pull force testing of straps and hoses, filter performance and valve leakage. The other approach focuses on minimum respirator component performance requirements such as valve leakage, filter performance and evaluation of respirator fit.

While a Total Inward Leakage test assesses the overall performance of an RPD in a laboratory setting, it may mask face seal leakage or filter penetration. ISO TC94 SC15 RPD classification is based on TIL results and consideration has been given for ISO TIL results to be the basis for the ISO Protection Levels.

This paper will explore whether ISO TIL predicts performance of the respirator in the work place and whether it could be considered a Simulated Workplace Protection Factor study.