

ISO SELECTION, USE AND MAINTENANCE: IS THERE A FUTURE FOR APFs?

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Guidance issued by regulators, such as HSE and OSHA, requires that Respiratory Protective Devices (RPD) are selected based upon their Assigned Protection Factors (APF). APFs are assigned to specific types and classes of RPD and differ greatly between countries for the same type of RPD.

The developing ISO standards on RPD have approached performance specifications with an emphasis on the requirements of the wearer rather than being RPD design based. This has resulted in a new classification scheme with a different performance range of possible RPDs to those that currently exist and to which the current APFs refer.

The ISO classification scheme has selected the measure of Total Inward Leakage (TIL) as one of the primary means for classifying RPDs. TIL has been adopted in the selection procedure, rather than APFs. However, to take account of the recognized difference between laboratory performance and workplace performance, a 'Safety Factor' has been introduced.

This is an opportune time to rethink the role of APFs and whether they continue to serve the purpose for which they were intended.

A number of questions should be asked:

- is there an alternative approach to RPD selection that does not rely on APFs such as control banding or the application of a 'Safety Factor'?
- If workplace protection factor studies are to be carried out to further develop APFs, is there a need for an internationally harmonized protocol and if so how do we develop such a protocol?

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