POF011: General platform presentation

ISO Gas Filter Testing; ...the upcoming ISO 17420-2

Lars Ronner

Presenter's affiliation:
Sundström Safety AB
Sandasgatan 14, Lagan, Sweden
ZIP Code: 34150

Email: <u>lars.ronner@srsafety.se</u>

The presentation was created by: Thomas Krügerke / MSA

Abstract:

The presentation gives an overview of the requirements for gas filters, as currently discussed at ISO/TC 94/SC 15 for the future ISO Standard for Filtering Respiratory Protective Devices. The requirements are compared with today's European Standards for gas filters. After a short introduction about the ISO approach for Respiratory Protective Devices (human factors, non-design restrictive) the following requirements are discussed:

- Gas filter types and classes
- Gas capacity
- Performance at peak air flows
- Pre-conditioning
- Marking / colour code
- Flame resistance
- Additional requirements for filters with standardized connector

While most of the requirement types already exist in today's standards, the performance at peak air flows is a new concept for testing gas filters. The concept shall close the gap that in real use gas filters are challenged with higher air flows than typically used for capacity determination in the laboratory. This reflects the ISO approach to have a classification for RPD for different work rate levels, resulting in different demands of breathing air of the wearer.