

Tested occupational safety in front of laboratory work benches

Conttest from SKAN – a practical on-site test for fume cupboards

The demands

- Confirmation and check of the laboratory hood's occupational safety
- Realistic and figurative testing
- Fast and easy test procedure, completed within 10 minutes
- Short test cycle minimising the shut down time
- Tracer test gas with high environmental compatibility

The solution

The containment test ("Conttest") determines the amount of pollutants that break out in a semi-open benches at work. In this way, the patented test creates confidence in the work safety of your fume cupboard.

It compares the concentrations of a tracer released inside of the fume cupboard to the concurrent concentrations in front of it, the place where the operator is working. The ratio between both values is called the "outbreak parameter".

An array of 12 highly sensitive sensors allows to detect and recognise unsafe conditions or malfunctions (e. g. from HVAC control, drafts, status of filters installed, etc.).

During the test run, the setup simulates dynamically in a unique way the lab operator and typical movements with a robot dummy. In summary this test allows an accurate and realistic rating of the occupational safety conditions around the work opening. Possible installations and objects in the fume cupboards are taken in consideration.

This containment test has been recently developed by SKAN AG. Therefore the results are not to be compared to any other existing test procedure.

Features

- Dynamic test situation
- Overall test cycle: 10 minutes (Including setup and documentation: < 1 h)
- Mobile and easy to transport
- Applicable to all types of fume cupboards and ductless (recirculatory) filtration fume cabinets
- Using an array of 12 highly sensitive sensors, measuring in the ppm range in real-time
- Reproducible testing of the on-site containment performance
- Comprehensible and figurative test report, directly printable

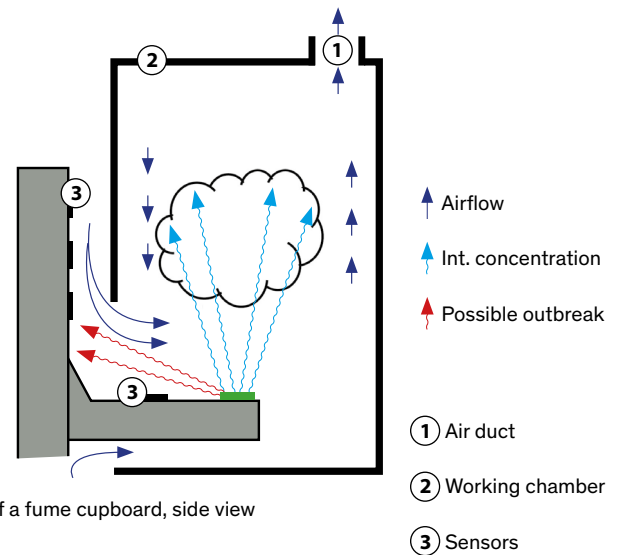
Reference to actual standards for fume cupboards

The SKAN Conttest covers a wider range of tests than the actual standard EN 14175 aims. Because its innovative procedure much more information is provided for an affordable price.

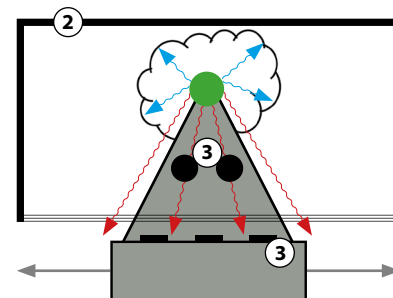
Function principle

The SKAN Conttest releases an organic solvent inside the work chamber (climate-friendly and widespread in contrast to other tracers). During the release of the tracer the test setup performs typical movements of an operator within and outside the work chamber. Sensors installed at the level of mouth, chest or abdomen on the dummy body analyse simultaneously the concentration of the tracer outbreak. This monitoring allows to qualify a potential exposure of the operator to hazardous substances.

The documented "finger-print" enables an accurate rating of the occupational health conditions and of the vital functions of the fume cupboard. If the device doesn't match the necessary requirements, follow-up services will be established to regain safe work conditions.



Test setup of a fume cupboard, side view



Test setup of a fume cupboard, top view

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