BUMP TEST CHALLENGE

Take part in the challenge and learn why bump testing saves lives.

What is a bump test?

A bump test, or function test, is the test of a portable gas detector that verifies the functionality of its sensor(s) and alarms. The test is performed by briefly exposing the instrument to a known concentration of gas and verifying that the instrument responds accordingly.

What is the importance of bump testing?

The only way to be certain that a portable gas detector will respond properly when it encounters a life threatening gas concentration is to test it with a known concentration of target gas before being used. Any time an instrument fails to respond properly during a bump test, a full calibration and any required maintenance should be completed successfully before using the instrument again.

Did you know?

Three in every 1,000 instruments used on a daily basis are likely to fail a bump test and subsequently fail to respond properly to gas if it is encountered during use[1].

The Bump Test Challenge

1. Set up an appointment with a bump test expert
2. Bump test a sample of your gas detector fleet
3. Discuss the results of the tests and learn more about why bump testing saves lives

How will your gas detector fleet perform?
Take the bump test challenge today!
It is easy and FREE.

For more information, contact your Eolas representative today.

hanley MEASUREMENT & CONTROL
Tel: 01-8833888
Email: sales@hanleycontrols.ie

[1] Data collected from more than 27,000 gas detectors in a 2009 study conducted by Dr. Raghu Arunachalam, Ph.D., who is the director of emerging technologies at Industrial Scientific, showed that three in every 1,000 detectors used on a daily basis are likely to fail a bump test.

BUMP TEST CHALLENGE

REPORT

Take part in the challenge and learn why bump testing saves lives.

Customer: _____ Date: _____

Manufacturer: _____ Model Number: _____ Serial Number: _____

LEL ☐ O_2 ☐ CO ☐ H_2S ☐

LEL TEST RESULT

PASS ☐ FAIL ☐

Possible effects of a failure

Risk of explosion if the following volumes are exceeded

Methane 5% Propane 2.1% Pentane 1.4% Butane 1.9%

Hexane 1.2% Methanol 6% Hydrogen 4%

O_2 TEST RESULTS

PASS ☐ FAIL ☐

Possible effects of a failure

23% Fire hazard

16% First signs of anoxia

10-14% Fatigue, respiration issues

< 6% Heart & respiration stops

17% Impairment of judgement

12-16% Breathing & pulse rate increases

6-10% Nausea, vomiting, unconsciousness

3-5% Less than 3-5 minutes to live

CO TEST RESULTS

PASS ☐ FAIL ☐

Possible effects of a failure

50 ppm Permissible limit 8 hrs

400 ppm Headache in 2-3 hrs

1600 ppm Headache & nausea 20 mins, collapse & death 1-2 hrs

6400 ppm Headache & dizziness 2 mins, unconsciousness & death 10-15 mins

H_2S TEST RESULTS

PASS ☐ FAIL ☐

Possible effects of a failure

10 ppm Permissible limit, eye irritation

100 ppm Coughing & eye irritation, loss of smell 2-5 mins

500 ppm Loss of consciousness, possible death 30-60 mins

hanley MEASUREMENT & CONTROL

Tel: 01-8833888

Email: sales@hanleycontrols.ie