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• Our information
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• Your information
Ref: VLAREM SDT170/

• Intervention information
Location: Our offices
Date: December 2007, January 2008, 26/02/2008
Performed by: R. Coomans - G. Haezebrouck - P. Malfliet

SDT International
Boulevard de l'Humanité 415
1190 Brussels

COMPARATIVE TESTS OF SDT 150 AND SDT 170 TANK TEST

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CONCLUSION

If the SDT 170 Tank test is used by adequately trained and experienced personnel, and in accordance with the manufacturer's user manual, the detection level will be equivalent to that of the SDT 150 Tank test.

As stipulated in our report ASLC95/1 dated 11/07/'95 it proves that:

- this US method can be used to detect leaks in tanks. A clear distinction can be made between a leak in the liquid part and in the vapour part of the tank.
- very slight leakage, in the order of a few thousandths of a millilitre an hour at low head (a few tens of centimetres) can still be very clearly detected.
Leaks in the order of 0.002 l/hour (or 2 milliliters/hour) at a head of 300 mbar can still be clearly detected in both the liquid phase and the vapour phase. This leads to conclude that the accuracy of this US method has a threshold value which is 100 times lower than the value stipulated by the EPA (United States Environmental Protection Agency).

Voor de directeur-generaal

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1. PURPOSE OF THE TESTS

- To investigate whether the SDT 170 Tank test equipment is equivalent to the SDT 150 Tank test equipment.

2. GENERAL EQUIPMENT DATA

- Manufacturer: SDT International
Boulevard de l' Humanité 415
B - 1190 Brussels
- SDT 170: * NE 170070820 V1.40 Build: 75
* SDT 170 battery: 160611521
* PCB: MC 170070722
* Calibrated on 26/11/2007
- FUTTSWBOX 170: 061070017
- Headphones: * Peltor HTM79F - 07265-BA
* No.: 2468376
- US transducers: * Type OQBP2501
* No.: 011060202
011060090

3. BASIS OF THE STUDY

- VLAREM II Sections 5.17 and 6.5
- VLAREM II Conformity Certificate AMV/30.06.95/1, drawn up by AMIMAL
- AIB-Vinçotte report with reference ASLC95/1, dated 11/07/95
- SDT 170 MTT user manual (3th edition 2006)
- EPA/530/UST-90/005 March 1990 concerning the size of the leak to be detected

4. PROVIDED DOCUMENTS

- AIB-Vinçotte report ASLC 95/1, dated 11/07/95
- SDT 170 MTT user manual (3th edition 2006)
- Lloyd's Register of Shipping report: * vzw 420264
* vzw 520055
- Bureau Veritas certificate without reference number, dated 11/10/94
- APRAGAZ: fax 376.27.07, dated 27/01/95
- Ken Wilcox Associates Inc. certificate of completion, dated 14/12/95

5. TESTS PERFORMED

- During several actual on-site tightness tests using the SDT 150 equipment, the result was compared with the result obtained for the same tightness test using the SDT 170 equipment instead.



6. REMARKS

- In order to make the SDT 170 Tank test equipment valid in Flanders for use in carrying out tightness tests on storage tanks, a new conformity certificate must be requested from the Flemish government (LNE).
SDT International will determine the extent to which this must also be done in other regions and/or countries.
- The user must successfully pass an annual hearing test.
- If the user does not have a certified quality management system, SDT International looks after training for each user and provides a corresponding training certificate.
- If any of the provided certificates expires or is revoked, this must be reported to AIB-Vinçotte Belgium.
- Any modifications to the provided equipment (including the software) must be reported to AIB-Vinçotte Belgium, which in turn will determine whether a new inspection is necessary.
- In Belgium, the provisions of the AREI (Belgian general regulations on electrical installations) remain applicable without prejudice.
- The special conditions of the ATEX certificate ISSeP05ATEX017X for the FUTTSWBOX 170 must be respected.
- It is strongly recommended to provide a system that allows the transducers to be tested on site before the start of the test.

7. INFRINGEMENTS

- None