

Acoustic testing of underground tanks and associated pipe work Peace of mind and reassurance for the operator



www.sdtultrasound.com

The steps of the control with the SDT270

- 1. The two dedicated sensors are placed in the tank. One in the liquid and the other above the surface of the liquid.
- 2. The SDT270 measures the background noise on the installation (reference value) in dBµV.
- 3. The tank is placed in a partial vacuum.
- 4. The diagnosis is established based on a comparison between the reference value and the measurement obtained on each sensor.
- 5. Depending on the operator's requirements, the measurements and sound files can be recorded and the inspection reports can be printed.
- 6. Consultation of the $dB\mu V$ values and playback of audio files are available at any time from the device memory.



Advantages of the SDT acoustic method

- No emptying and cleaning of the tank.
- No stabilization time.
- Immediate result, no further analysis required.
- Testing possible regardless of the height of the liquid (up to 80 m3).
- Widely recognized and approved method.

The method that valorizes and reassures the operator in the field

 The sensitivity of the SDT270 and its new associated sensors offer this measuring instrument unequalled sensitivity. The unit detects even the smallest perforations or "mini defects" not yet generating a significant degree of pollution.



- Testing of the tank and associated piping in a single operation.
- Completely safe, rugged and fully ATEXcertified equipment.
- No locked procedure; exceptional ease of use (unrestricted step sequencing, selection of recording durations, etc.).
- Recording of sound files and measurements in dBµV.
- Complete and irrefutable test results by consultation of records stored in memory.
- Flexible sensor included. The sensor is essential when attempting to detect and locate leaks on fittings, joints and plugs. An installation cannot be downgrated for simply a loose fitting!

In the management of data ... and printing reports

- SDT270 TankTest Reporter data management software; immediate printout of detailed, complete and tamper-proof reports.
- Unique and automatic numbering of reports; simplified data and file searching.
- Personalization of reports, with as many models as required.



SDT270	Downloaded on ∇	Last entry	Reports
270110322	2013-08-14 10:04	2013-07-23 11:55	123456789-00008 Total, Antwerpen
270110322	2013-08-14 09:53	2013-07-23 11:55	123456789-00009 Texaco, Paris
270110322	2013-08-12 18:14	2013-07-23 11:55	123456789-00015 La Pompe, Reims
270110322	2013-08-12 16:29	0001-01-01 00:00	123456789-00018 Lukoil, Gent 123456789-00027 Total 123456789-00028 Test site
270110322	2013-08-09 20:06		123456789-00007 Shell, Mons
270110322	2013-08-09 13:36		123456789-00016 Texaco, Milano
270110322	2013-08-09 13:33		123456789-00017 Shell, Tournai
270110322	2013-08-09 13:24		
270110322	2013-07-31 14:14		123456789-00014 Avia, Paris
270110322	2013-07-31 13:22		123456789-00020 DATS, Halle
270110322	2013-07-31 13:18		123456789-00019 test 123456789-00026 Lukoil, Lyon

- Connection via a standard USB port.
- Memory within a three-level data structure.
- Free license for an unlimited number of inspections.
- Warning messages announcing free hardware and software updates.







SDT training programs, a good investment!

- Companies that invest in training see the understanding and involvement of their inspectors increase significantly. The testing of underground tanks is more effective and therefore more reliable. A good training programme is a guarantee for quick return on investment.
- With more than 20 years of experience in training customers throughout the world, SDT offers collective and upon request – on-site training programs provided at the time of deliveries. Courses focus on methodology, rapid familiarization of the detector and its accessories and use of the dedicated software.

Equipment contents:

The full equipment consists of the following items, most of them contained in 2 transport cases:

- SDT 270 TankTest detector, supplied with one battery block in the unit, rubber protection and user's manual, plus:
 - Noise-cancelling headphones
 - Flexible rod with open sensor
 - Battery charger
 - TankTest Reporter software on USB key
 - USB cable
- Two 32 mm diameter ultrasonic sensors, watertight, explosion-proof and impervious to hydrocarbons
- Mechanical bush to be fitted to the manhole pane
- Camlock to connect vacuum pump to mechanical bush
- Explosion proof suction hose (5m)
- Explosion proof drain hose (5m)
- Tube of water-detection paste
- Vacuum pump with safety valve calibred to ± 250 mbar*

* explosion-proof version or not, depending on use. $\langle \xi_{x} \rangle$

SDT270 TankTest options:

- Box of conical rubber sealing plugs of various diameters.
- Three screwable one-meter long cylindrical gauges with sliding reference piece.

SDT, the undisputed leader in acoustic detection

The mission of SDT is to provide ultrasound solutions that give our customers a greater understanding about the health of their factory. We help them predict failures, control energy costs and improve product quality while contributing to the overall uptime of their assets.

Our know-how covers a wide range of applications: leak testing, detection of gaseous fluid leaks, monitoring of steam traps, monitoring of rotating machines and follow-up of their lubrication and the inspection of HV electrical equipment.

The SDT TankTest method was tested and approved

in 1995 by various licensing bodies in Belgium, France and the USA. SDT International has participated both directly and indirectly in the inspection of several thousands of tanks in Belgium and numerous countries throughout the world.



SDT International s.a./n.v.

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