SDT 170 MTT. Ultrasonic system.

Tightness control of underground tanks and associated pipe work

with data backup.

Equipment contents:

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

SDT 170 MTT detector, supplied with one battery block in the unit, rubber protection and user's manual, plus: • Headphones, noise isolated • Flexible rod with open sensor • Battery charger • Precision connection + 3 ad hoc accessories • Graphs & measurements software for transferring data from the equipment to the PC (CD ROM) • RS232 cable	1
Two 32 mm diameter ultrasonic sensors, watertight, explosion-proof and impervious to hydrocarbons	2
Intrinsically safe interface box (Switchbox), link between the sensors and the appliance	3
Mechanical bush to be fitted to the manhole panel	4
Camlock to connect vacuum pump to mechanical bush	5
Suction hose (5m)*	6
Drain hose (5m)*	7
Tube of water-detection paste	8
Vacuum pump with safety valve calibred to ± 250 mbar*	9

*explosion-proof version or not, depending on use.

EXPROOF explosion-proof equipment:

For tanks containing flammable and/or explosive liquids, the pump and the hoses are replaced by the following explosion-proof equipment:

- BUSCH ENIVAC, ATEX certified explosion-proof vacuum pump
- Explosion-proof suction and drain hoses (5 m) in antistatic rubber.

SDT TankTEST 170 MTT options:

- Box of conical rubber sealing plugs of various diameters.
- Wheeled trolley for pump.
- Three screwable one-meter long cylindrical gauges with sliding reference piece.
- Two ultrasonic sensors complete with cables protected by a VITON sheath for frequent use in petrol and for use in aggressive liquids (solvents, etc.).
- Cable for recording sounds on auxiliary device, plus "Y" connector.

Main technical features of SDT 170 MTT system

SDT 170 MTT DETECTOR

Function	Multifunction detector.
Display	LCD graphic display with backlighting.
Keyboard	Eight (8) function keys.
Ultrasonic sensor	Integrated.
External sensor	Through dedicated connector (7-pin LEMO connector).
Data logger	For tank tightness tests in data recording mode: Identification of the tank, vacuum level, test duration, measurements in dBµV. Memory capacity: 20 hours of measurement-taking or 72,000 measurements; as the device makes one measurement per second during the recording phase.
Communication	RS 232 C communication interface (19.2 kB). For tank tightness tests in data recording mode: Graphs & measurements software for data transfer from detector to PC, supplied on CD ROM.
Battery pack	NiMH (Nickel Metal Hydrate) rechargeable. Autonomy 8 to 10 hours without backlighting Recharge time : 5 to 6 hours Nominal capacity : 1.5 Ah. Life span : 500 to 1000 charge/discharge cycles Charging only with dedicated SDT charger.
Auto stop	Auto power down after time predefined by user.
Operating temperature	-10 °C to +60 °C (14 °F to 140 °F).
Housing	Extruded aluminium.
Weigh	750 g (26.45 oz) (with battery and protection).
Dimensions	225 x 90 x 40 mm (8,86 x 3.54 x 1.57 inches) (L x W x H).
Protection holster	Rubber resistant to hydrocarbons (fluor silicone).
Headphones	130 dB, noise isolating.

EXTERNAL ULTRASONIC SENSORS

Sealed sensors	Type OQBP2501.
Certification	Sensors certified in accordance with Directive 94/9/CE (ATEX).
Resistance	To hydrocarbons: Yes To hydrostatic pressure: 1 Bar.
Operating temperature	-30 to + 80 °C.(-22 °F to 176 °F).
Sensitive element	Piezo-electric (f resonance = 40 kHz).
Sensitivity	- 67 db / V / µ Bar.
External diameter	32 mm (sensor 25 mm).
Housing	Aluminium.

INTERFACE BOX (SWITCHBOX)

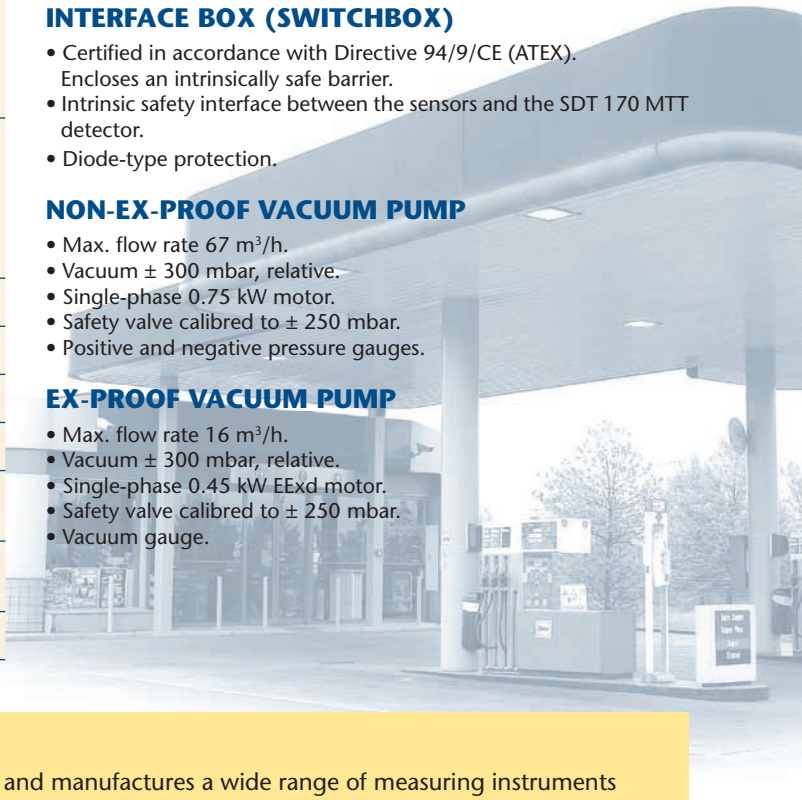
- Certified in accordance with Directive 94/9/CE (ATEX). Encloses an intrinsically safe barrier.
- Intrinsic safety interface between the sensors and the SDT 170 MTT detector.
- Diode-type protection.

NON-EX-PROOF VACUUM PUMP

- Max. flow rate 67 m^3/h.
- Vacuum ± 300 mbar, relative.
- Single-phase 0.75 kW motor.
- Safety valve calibred to ± 250 mbar.
- Positive and negative pressure gauges.

EX-PROOF VACUUM PUMP

- Max. flow rate 16 m^3/h.
- Vacuum ± 300 mbar, relative.
- Single-phase 0.45 kW EExd motor.
- Safety valve calibred to ± 250 mbar.
- Vacuum gauge.



SDT, undisputed leader in ultrasonic detection
The undisputed leader in its field, SDT International designs and manufactures a wide range of measuring instruments for the ultrasonic detection and evaluation of various physical parameters.

Wide range of applications
SDT International's expertise covers a wide range of applications such as tightness tests on large and small volume and underground tanks, leak detection on any pressurized circuit, production quality control, and the detection of wear and anomalies in the predictive maintenance of mechanical installations.

The success of SDT International is based on its philosophy and willingness always to respond to customer problems with the most efficient and cost-saving solutions.

SDT®

The Precision of Ultrasonics

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