

Intertek

ETL SEMKO



1. **EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3. EC-Type Examination Certificate Number: **ITS04ATEX82808X**

4. Equipment or Protective System: **ST, TE, TD and Sultan Series Ultrasonic Transducers**

5. Manufacturer: **HAWK MEASUREMENT SYSTEMS PTY LTD**

6. Address: **15 – 17 MAURICE CRT, NUNAWADING, VIC 3131, AUSTRALIA**

7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8. Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Intertek Report Ref 04013369B Issue 1 dated December 2004

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN50014: 1997 +A1 & A2, EN50028: 1987 and EN50281-1-1: 1998, except in respect of those requirements referred to at item 18 of the Schedule.

10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11. This EC Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12. The marking of the equipment or protective system shall include the following:-



II 2 GD, EEx m II IP 68

T5 for Tamb -20°C to +65°C

T6 for Tamb -20°C to +50°C

R M Adams
Certification Manager
13th December 2004

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
Tel: + 44 (0)1372 370900 Fax: +44 (0)1372 370977
<http://www.uk.intertek-etlsemko.com>
Registered No 3272281 Registered Office: 25 Savile Row London W1X 1AA

This certificate may only be reproduced in its entirety and without any change, schedule included and is subject to Intertek Testing and Certification Conditions for Granting Certification.

13. **Schedule**

14. **EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS04ATEX82808X**

15. **DESCRIPTION OF EQUIPMENT OR PROTECTIVE SYSTEM**

THE HAWK ULTRASONIC TRANSDUCERS are designed to facilitate the continuous level measurement of solids and liquids in sumps, silos and similar storage vessels.

The transducers are fully encapsulated and are enclosed in thermoplastic housings.

They emit and receive the short bursts of ultrasonic energy which allows their respective remote amplifier type (not included in this assessment) to determine the product distance.

All transducer types except the TD series can have an internal preamplifier encapsulated within the same housing. Optionally, the preamplifier can be ordered in a separate remote housing which can be located nearby, or in a safe area.

The ST series Ultrasonic Sonar Transducers are usually mounted submerged in a liquid to monitor settled and suspended solids in a sump or tank. The Sultan, TE and TD series Ultrasonic Transducers are usually mounted vertically above the product being monitored. A TE series transducer is equivalent to a TD series transducer with an internal preamplifier.

16. **REPORT NUMBER**

Intertek Report Ref 04013369B Issue 1 dated December 2004

17. **SPECIAL CONDITIONS FOR SAFE USE**

The units are supplied with a permanently connected factory fitted cable. The free end of the cable shall be appropriately connected.

The units shall not be installed where they are subject to direct sunlight.

18. **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSR'S)**

The relevant EHSR's have been identified and assessed in Intertek Report Ref 04013369B Issue 1 dated December 2004

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
Tel: + 44 (0)1372 370900 Fax: +44 (0)1372 370977
<http://www.uk.intertek-etlsemko.com>
Registered No 3272281 Registered Office: 25 Savile Row London W1X 1AA

This Certificate is the property of Intertek Testing and Certification Ltd
and is subject to Intertek Testing and Certification Conditions for Granting Certification.

19. DRAWINGS

Document No.	Document Title	Issue	Date
HAW_D_SD-ATEX-Exm	Schedule of Model Numbers for Exm	A02	11/11/2004
EXM-ATEX-LABL	Ex m Compliance Label	A06	11/11/2004
HAW_A_SD-ST-1	ST Transducer Type 1 Construction Overview	A01	01/09/2004
HAW_A_SD-ST-2	ST Transducer Type 2 Construction Overview	A03	11/06/2003
HAW_SD-OV-ST	ST Series Transducer	01	16/11/2004
HAW_A_SD-TD-XM1	Generic Transducer Assembly TD, TE and Sultan Series	A01	09/09/2004
HAW_A_SD-TD-XM6	Sultan 2" Transducer Assembly	A01	20/02/2004
HAW_A_SD-TD-XM5	Sultan 2" Transducer Assembly With Side Cable Entry	A01	10/09/2004
HAW_SD-OV-SULT	Sultan Transducer	01	16/11/2004
HAW_SD-OV-SULTSMT	Sultan Smart Transmitter	01	16/11/2004
HAW_A_SD-TD-XM3	Generic 2" Transducer Assembly TD and TE Series	A01	09/09/2004
HAW_SD-OV-TE	TE Series Transducer	01	16/11/2004
HAW_SD-OV-TD	TD Series Transducer	01	16/11/2004

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
Tel: + 44 (0)1372 370900 Fax: +44 (0)1372 370977
<http://www.uk.intertek-etlsemko.com>
Registered No 3272281 Registered Office: 25 Savile Row London W1X 1AA

This Certificate is the property of Intertek Testing and Certification Ltd
and is subject to Intertek Testing and Certification Conditions for Granting Certification.