



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 03ATEX1127X** Issue: **2**

4 Equipment: **MSDI Micro-Set Sphere Detector**

5 Applicant: **KROHNE Oil & Gas (UK) Ltd.**

6 Address: 70 Carwood Road
Sheffield
South Yorkshire
S4 7SD
UK

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

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 50014:1997 (amendments A1 and A2)

EN 50018:2000

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment 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 and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2 G

EEx d IIB T6 (Ta = -40°C to +60°C)

Project Number 51A18800

C. Index 13

C Ellaby
Certification Officer

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 03ATEX1127X
Issue 2

13 DESCRIPTION OF EQUIPMENT

The MSDI Micro-Set Sphere Detector comprises a detector tube containing an encapsulated reed switch, which is rated up to 2 A at 250 V d.c. The detector tube is fitted into a housing, which comprises four main components; a lower detector housing, detector plunger, spring and top housing. The lower detector housing connects to the associated pipe wall and the top housing connects to a suitably certified terminal enclosure. The lower and top housings are secured together by two M8 x 25 hexagonal socket head screws. The detector plunger and spring are contained within the interface between the lower and top housings. The movement of detector plunger over the detector tube operates the reed switch.

Variation 1

This variation introduced the following change:

- i. The change of company name from Skeltonhall Limited to Skeltonhall Systems Limited.

Variation 2

This variation introduced the following change:

- i. The change of company name from Skeltonhall Systems Limited to KROHNE Oil & Gas (UK) Ltd.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report No.	Comment
0	5 June 2003	R51A9253A	The release of prime certificate.
1	16 May 2007	R51A16585A	This Issue covers the following changes: <ul style="list-style-type: none">• All previously issued certification was rationalised into a single certificate, Issue 1, Issue 0 referenced above is only intended to reflect the history of the previous certification and has not been issued as documents in this format.• The introduction of Variation 1.
2	15 August 2008	R51A18800A	The introduction of Variation 2.

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

15.1 The product shall be terminated with a suitable enclosure that has been certified by a notified body and provides protection for the free end of the permanently connected, un-terminated cable.

15.1 The product shall be earthed in accordance with the latest edition of EN 50014.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900

Fax: +44 (0) 1244 681330

Email: info@siracertification.com

Web: www.siracertification.com

Certificate Annexe

Certificate Number: Sira 03ATEX1127X
Equipment: MSDI Micro-Set Sphere Detector
Applicant: KROHNE Oil & Gas (UK) Ltd.



Issue 0

Number	Sheet	Rev	Date	Description
9691	1 of 1	K	12 May 03	Pre-assembly details of flameproof sphere detector "micro-set"
D1234/1349	1 of 1	6	26 Feb 03	Micro-set detector top & bottom housing labels

Issue 1

Number	Sheet	Rev	Date	Description
D1234/1349	1 of 1	7	15 May 07	Micro-Set Detector Top & Bottom Housing Labels

Issue 2

No new drawings were introduced.

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