



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 12ATEX2083X** Issue: **1**

4 Equipment: **ULTRACORR-2 Ultrasonic Transmitter**

5 Applicant: **Rohrback Cosasco Systems**

6 Address: **11841 East Smith Ave
Santa Fe Springs
California
90670
USA**

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:

IEC 60079-0:2011 Ed. 6 IEC 60079-11:2011 Ed. 6

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 2G
Ex ib IIC T4 Gb
Ta = -40°C to +70°C

Project Number 29789

A C Smith
Certification Manager

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SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The ULTRACORR-2 is battery-powered, portable instrument that measures pipe and vessel wall thickness for non-intrusive corrosion and erosion monitoring. The instrument is intended for connection to a piezo-electric ultrasonic transducer manufactured by Rohrback Cosasco Systems, typically a model UST2, which provides periodic time- and date-stamped measurements of wall thickness. The ULTRACORR-2 sends the results via a low power wireless channel to a remote device.

The ULTRACORR-2 is powered from two, non-rechargeable, AA cells, which are intrinsically safe and may be replaced in the hazardous area. Only cells with part number 095818 or 095820 from Rohrback Cosasco Systems may be fitted. Apart from the cells, the circuitry is completely encapsulated within a plastic enclosure. A flying lead terminates in a plug-and-socket connector, which is used to connect the ULTRACORR-2 to the ultrasonic transducer.

For the purposes of the assessment of external equipment, the following worst case parameters may be used. Note: Uo, cannot occur at the same time as the Io and Po.

	Combined parameters
Uo	126 V ac
Io	60 mA
Po	173 mW
Ci	2.42 nF
Li	0
Co	2.79 nF
Lo	9876 µH

Variation 1 - This variation introduced the following changes:

- i. The 095820 battery pack was introduced and recognised in the Product Description and the Special Condition for Safe Use. Whilst this is a direct replacement for the original 095818 battery pack, for the purpose of back compatibility, reference to the 095818 battery pack will be retained in the certificate.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	20 April 2012	R27101A/00	The release of the prime certificate.
1	04 April 2013	R29789A/00	The introduction of Variation 1.



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- 15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)
- 15.1 The cells in the battery pack are intrinsically safe and may be replaced by the user, however, only RCS P/N 095818 or 095820 cells supplied by Rohrback Cosasco Systems may be used; in addition, provided care is taken to prevent the cells being damaged, they may be changed whilst in the hazardous area. Cells with P/N 095820 are also compatible with units certified under previous issues of the certificate.
- 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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Certificate Annexe

Certificate Number: Sira 12ATEX2083X
Equipment: ULTRACORR-2 Ultrasonic Transmitter
Applicant: Rohrback Cosasco Systems



Issue 0

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
725121	1 of 1	-	04 Apr 12	Parts list
725123	1 to 13	A	04 Apr 12	Artwork
725124	1 to 2	-	04 Apr 12	Schematic
725125 -1	1 of 1	-	04 Apr 12	Marking
725126	1 to 2	-	04 Apr 12	General assembly
725127	1 of 1	-	04 Apr 12	Sector diagram

Issue 1

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
725125 - 1	1 of 1	A	13 Mar 13	Marking
725126	1 to 2	A	13 Mar 13	General assembly

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