



1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 13ATEX1030** Issue: **1**

4 Equipment: **370XA Gas Chromatograph**

5 Applicant: **Rosemount Analytical, Inc.**

6 Address: **Emerson Process Management
10241 West Little York
Suite 200 Houston
Texas 77040
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:

EN 60079-0:2009 EN 60079-1:2007

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

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 d IIB+H₂ T6 Gb
Ta = -20°C to +60°C

Project Number 29816

C Ellaby
Deputy Certification Manager

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SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The 370XA analyzer is a high speed gas chromatograph (GC) which measures multiple hydrocarbon streams compositions and concentrations. The analyzer is housed in a proprietary flameproof enclosure, which is divided into two compartments. The upper compartment is mainly composed of analytical components and electrical hardware and the lower compartment primarily contains the electronic printed circuit board assemblies and associated hardware. The two compartments are isolated by a threaded bulkhead and potted seals.

Upper Compartment: The upper compartment contains the analytical components of the GC. The analytical assembly includes the columns, detectors, pneumatically operated switching valves, solenoids, and some of the supporting electronic hardware. The assembly is temperature controlled through an RTD and electrical heater. Insulation is used to isolate the heated space from the outer enclosure. The analytical components and electrical hardware interface with the lower compartment using wiring that is fed through the bulkhead using potted seals. The entire upper compartment is contained mechanically inside the dome and mating bulkhead.

Lower Compartment: The lower compartment contains the analytical PCBAs and user interface. The user interface assembly interfaces with the electronic PCBAs using operating rods which penetrate the casting. Each of the operating rods uses a retaining ring as a mechanical retention method. A glass window is embedded within the casting using epoxy. The sheet metal assembly behind the operating rods and the glass window acts as the mechanical retention device for the window. An overlay is attached to the outside of the enclosure covering the operating rods and glass window. The overlay is attached using an adhesive backing. The lower compartment contains a tubing feed-thru assembly for connection of the gases required for operation. An adapter fitting is used to interface between the tubing feed-thru assembly and casting wall. A threaded side cover is provided for internal access of the lower compartment. Three M32 entries are provided for external field connections.

Variation 1 - This variation introduced the following changes:

- i. The introduction of an alternative cement for the sealing of the display window.
- ii. Drawing 7R00011 was amended to clarify dimensional data and correct the 'O' ring part number reference.
- iii. The correction of the scheduled drawing number from 7P00006 to 7R00006 and to recognise a minor change to the marking label layout.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	02 April 2013	R29816A/00	The release of the prime certificate.
1	18 May 2015	R70024197A	The introduction of Variation 1.

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- 15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)
None
- 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 13ATEX1030
Equipment: 370XA Gas Chromatograph
Applicant: Rosemount Analytical, Inc.



Issue 0

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
7P00006	1 of 1	B	02 Apr 13	ATEX Certification Tag
7R00011	1 to 8	A	02 Apr 13	Flamepath/IP Detail, 370XA GC

Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
7R00006	1 of 1	C	28 Apr 15	ATEX Certification Tag
7R00011	1 to 8	D	28 Apr 15	Flamepath/IP Detail, 370XA GC

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