Total Marketing France
LE SPAZIO
562 AVENUE DU PARC DE L'ILE
92000 – NANTERRE
TEL: 01.41.35.40.00 – FAX: 01.41.35.73.73

STATION SERVICE
AIRE DE RESSONS EST

AUTOROUTE A1

60490 RESSONS-SUR-MATZ

ICPE

CERTIFICATS ATEX APPAREILS DISTRIBUTEURS

DATE: 14/11/2018	CONTROLE: S. ABADEZ
ECHELLE:	DESSINE: C. DA COSTA

058967	00.13.1	

REP	DATE	MODIFICATIONS	DESSINE PAR	CONTROLE PAR

PAC INGÉNIERIE
PILOTAGE ASSISTANCE CONSULTING INGÉNIERIE

sira
Certification Service

RATEX 012 (0)

1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: Sira 04ATEX9170U

4 Component: Vapour Recovery System Modules

5 Applicants: Tokheim UK Ltd and Tokheim Sofitam Applications

6 Address: Unit 3 Baker Road
West Pitkerro Industrial Estate
Dundee DD5 3RT
Scotland

Route de Soliers
14540
Grentheville
France

7 This component 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 component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of component intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number R53M11448A.

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

EN 13617-1:2004

10 The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any special conditions for safe use are listed in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.

12 The marking of the component shall include the following:

Ex II 1/2 G

Project Number 53M11448
Date 1 November 2004
C. Index 09

D R Stubbings BA MIEE
Certification Manager

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England
Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330
Email: exhazard@siratc.co.uk
Sira Certification Service is a service of Sira Test & Certification Ltd

SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE Sira 04ATEX9170U

13 **DESCRIPTION OF COMPONENT**

The vapour recovery system module is designed to fit into the hydraulic cabinet and frame of existing, liquid fuel dispensers and are intended to recover fuel vapour emitted from the nozzle during dispensing and return it to the storage tank. They comprise:

- a vapour pump, with associated flame arresters, powered by a motor, both of which are suitably certified and rated
- a filter unit
- suitably certified and rated control valves
- copper pipework and associated joints
- a splitter unit fitted to the outlet pipe

The vapour recovery system module is configured to suit the associated dispenser such that existing dispenser zoning is not compromised. The module requires a vapour recovery hose to EN 13483 and a suitably certified vapour recovery nozzle to be fitted.

Where pipework and/or cabling passes through existing vapour barriers, the characteristics of the barrier are maintained by using suitably rated cable glands.

The modules are controlled by: **VFM (Vapour Flow Module)** - signals from the existing pulser and an in-line vapour meter are processed by electronics mounted in the dispenser head to control the activation and flow of the vapour system. An in-line damping vessel is fitted to maintain system accuracy.
ECVR (Electronically Controlled Vapour Recovery) - signals from the existing pulser are processed by electronics mounted in the dispenser head to control the activation and flow of the vapour system.

Design Options

- the following devices may be fitted to the vapour return line, dependent on local regulations:
  - shear valve
  - non-return valve
  - manual isolation valve
  - flame arrester assembly
- two modules may be powered from a single motor
- a vapour line pressure gauge may be fitted

14 **DESCRIPTIVE DOCUMENTS**

14.1

Drawing No.	Sheet	Rev.	Date	Title
900704-035	1 to 9	A	16 Aug 04	Vapour recovery systems - compliance details
900704-036	1 to 3	A	16 Aug 04	System hardware.
900704-037	1 of 1	A	16 Aug 04	System schematics
900704-038	1 of 1	A	16 Aug 04	Component test rig.
900704-042	1 of 1	A	02 Sep 04	Marking plate

14.2 Report number R53M11448A

Date 1 November 2004

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England
Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330
Email: exhazard@sirato.co.uk
Sira Certification Service is a service of Sira Test & Certification Ltd

SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE Sira 04ATEX9170U

15 **SPECIAL CONDITIONS FOR SAFE USE**

15.1 The units shall be installed with suitably certified liquid fuel dispensers with the following modified fittings:

- vapour recovery hose to EN 13483
- vapour recovery nozzle to EN 13617-2

15.2 Any pipework, joints and modifications to vapour barriers within the associated dispenser shall maintain compliance with the requirements of the equipment certificate; the existing equipment zoning shall not be compromised as a result of the fitting of this component.

15.3 The installation of this component shall be installed such as to not obstruct or compromise the existing ventilation of its associated dispenser.

15.4 When fitted in a dispenser, the electrical supply to this component shall not compromise the safety and control functions of the equipment, cognisant of the dispenser's rating and overload values.

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 report number R53M11448A.

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.

17.3 The electrical circuit of each unit shall be subjected to the routine electrical tests required by Annex A.9.2, A.9.3 and A.9.4 of EN 13617-1:2004.

Date 1 November 2004

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England
Tel: +44 (0) 1244 670900 Fax: +44 (0) 1244 681330
Email: exhazard@sirace.co.uk
Sira Certification Service is a service of Sira Test & Certification Ltd

1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 06ATEX9389X** Issue: **3**

4 Equipment: **Quantium 510 (500T*n*) Liquid Fuel Dispenser**

5 Applicant: **Tokheim UK Limited** **Tokheim Sofitam Applications**

6 Address:

Unit 3 Baker Road
West Pitkerro Industrial Estate
Dundee
DD5 3RT
UK

Route de Soliers
14540
Grentheville
France

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 13617-1: 2004

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
EN 13617-1

Project Number 22589
C. Index 09

C Ellaby
Certification Officer

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

13 **DESCRIPTION OF EQUIPMENT**

The Quantium 510 (500T*n*) -Type A is a hose cassette, multi-product liquid fuel dispenser, rated at 440 V, 3 phase for dispensing petrol and diesel on a garage forecourt. The equipment comprises a fabricated steel frame clad with steel panels to form a hydraulic housing, hose cassette and display/electronics enclosure.

The hydraulic housing contains up to five hydraulic circuits, each comprising an electrically driven pumping unit/metering unit, interconnecting pipework, electrically actuated flow control valves and hoses. The outlet pipes pass out of the housing into the cassette where they are connected to outlet hoses suitable for petroleum dispensing. The hoses are retained by a spring retractor arrangement within the cassette. Hoses are fitted with suitable dispenser nozzles and, optionally, dry break couplings. The nozzles are located in suitable boots fitted on either side of the cassette housing and actuate proximity switches as they are removed or replaced.

Fuel vapour is isolated and vented from the hydraulic circuit by means of a vapour separator and flame arrester arrangement. Engineered gaps between the external panels and louvre openings provide ventilation for the hydraulic housing. The display/electronics enclosure is mounted above the hydraulic housing and is in a non-hazardous area that is created by head positioning and the use of vapour barriers. Cables enter the unit via a cable duct and pass through the vapour barriers. All electrical components in the hazardous zones are suitably certified and the cabling is also appropriate for use in fuel dispensers, as specified in the schedule drawings.

All electrical and mechanical components are suitably certified, apparatus, and cabling is suitable for petroleum dispensing, as specified on the schedule drawings. The electrical circuit and enclosure metalwork is suitably earthed.

The dispenser operates at a flow rate of 3 m^3/h (nominal) and may dispense up to two discrete products with only one product being dispensed from each side at one time. The dispenser may be attendant operated, attended self-service or unattended with remote or local operation.

The Quantium 510 (500T*n*) - Type B, as the Quantium 510 (Type A) but with modified panelwork to enable an alternative payment terminal to be fitted.

The Quantium 510 (500T*n*) - Type C, as the Quantium 510 (Type A) but with modified panelwork, ventilation and cabling arrangement to enable an alternative payment terminal to be fitted.

Variation 1: This variation introduced the following changes:

i. The use of the alternative type designation Quantium 500T*n* was recognised.

Variation 2: This variation introduced the following changes:

i. The electronics were permitted to remotely control an automotive LPG dispenser as detailed in Sira 07ATEX9275X.

Variation 3 - This variation introduced the following changes:

i. The option to use the TQC calculator was endorsed.
ii. The dispenser was allowed to be used with FAME based bio-diesels.
iii. The use of the electronics to remotely control an Ad-Blue dispenser was recognised.
iv. A new model, the Q510E Dispenser, was introduced; minor modifications of the dispenser framework were required to form this model.
v. The Special Condition for Safe Use clause 15.2 was amended to reflect the latest technical knowledge.

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

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	27 February 2007	R51M16068A	The release of the prime certificate.
1	24 October 2007	R59M17064A	The introduction of Variation 1.
2	23 November 2007	R59M16787B	The introduction of Variation 2.
3	15 July 2010	R22589A/00	The introduction of Variation 3.

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

15.1 Where a dispenser is supplied without hoses and/or nozzles, they shall be fitted in accordance with:

Hoses: EN 1360 or EN 13483
Nozzles: EN 13012.

15.2 When used for dispensing ethanol, the ethanol content shall not exceed 90% with minimum water content.

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.

17.3 The electrical circuit of each unit shall be subjected to the routine electrical tests required by clause 6.2.1 of EN 13617-1:2004.

17.4 The hydraulic circuit of each unit shall be subjected to the routine hydraulic tests required by clause 6.2.2 of EN 13617-1:2004.

17.5 Components or apparatus specified for use with the dispenser defined as suitably certified shall be selected with due regard to the latest current standards and technical information.

17.6 The manufacturer shall assess the suitability of parts used in the construction of the fuel containment system for long-term suitability to ethanol blended fuels. Due regard should be placed on the use of corrosion inhibitors in the fuel mixture.

17.7 When used for dispensing ethanol blended fuels the manufacturer shall give due consideration to the correct selection of supplementary fittings (safe breaks etc.). Where such fittings are not provided as part of the assembly, suitable guidance shall be provided in the equipment instructions.

17.8 The Stage II vapour recovery system, when fitted to the dispenser, shall maintain the requirements listed in Certificate No Sira 04ATEX9170U.

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 06ATEX9389X**

Equipment: **Quantium 510 (500T*n*) Liquid Fuel Dispenser**

Applicant: **Tokheim UK Limited**
Tokheim Sofitam Applications

Issue 0

Drawing No.	Sheet	Rev.	Date	Description
900704-003	1 of 1	A	08 Dec 00	Drip Tray Sealing
900704-004	1 to 8	B	28 Aug 06	Hydraulic Components
900704-005	1 to 5	A	08 Dec 00	Circuit Diagrams
900704-006	1 of 1	B	28 Aug 06	Energy Isolation
900704-007	1 to 2	B	28 Aug 06	Nozzle Boots
900704-008	1 to 3	A	08 Dec 00	Hydraulic Schematics
900704-009	1 to 2	B	04 Jun 06	Pumping Units
900704-010	1 to 2	A	08 Dec 00	Meters
900704-021	1 of 1	A	08 Oct 02	Modified EPZ Pumping Unit
900704-040	1 to 5	A	04 Jun 06	Pumping Unit Option
900704-048	1 to 6	A	19 Oct 04	Quantium 510 Type B - Alternative 'Wincor' Payment Terminal Arrangements
900704-053	1 of 1	B	04 Jun 06	Nozzle Holder Assembly
900704-055	1 to 12	B	28 Aug 06	Quantium 510 Type C - Alternative 'Radiant' Payment Terminal Arrangements
900704-064	1 of 1	1	04 Jun 06	Test Rigs
900704-065	1 to 32	A	11 Dec 06	Quantium 510 Liquid Fuel Dispenser Arrangement and Details
900704-066	1 to 7	1	28 Aug 06	Equipment Marking
900704-074	1 to 2	A	07 Dec 06	Ethanol Dispensing Details

Issue 1

Drawing No.	Sheet	Rev.	Date	Description
900704-065	1 to 32	B	02 Aug 07	Quantium 510 (500T*n*) Liquid Fuel Dispenser Arrangement and Details

Issue 2

Drawing No.	Sheet	Rev.	Date (Sira Stamp)	Description
900704-065	1 to 33	C	18 Nov 07	Quantium 510 liquid fuel dispenser arrangement and details
903111-028	1 to 6	A	18 Nov 07	Quantium 510 controlling Quantium 510LPG dispenser - Type B

Issue 3

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
900704-065	1 to 33	D	15 Jun 10	Quantium 510 Dispenser Range
900704-083	1 to 2	A	15 Jun 10	Dispensers For Biodiesels Based On FAME
900704-085	1 to 4	A	15 Jun 10	Tokheim Quality Calculator (TQC)
900704-089	1 to 4	A	15 Jun 10	Q510 Petrol/Diesel Dispenser Controlling Ad-Blue Dispenser
900704-100	1 to 5	A	15 Jun 10	Quantium 510 Range Type 'E' Model

Sira Certification Service
Rake Lane, Eccleston, Chester, CH4 9JN, England

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Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com