



IECEX PUBLICATION

**IEC System for Certification to Standards relating to Equipment for use
in Explosive Atmospheres**

**Guidance for Applications from Service Facilities seeking IECEx Certification,
IECEX 03A**



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IECEX 03A

Edition 2.1 2019-07

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Guidance for Applications from Service Facilities seeking IECEX Certification, IECEX 03A

INTRODUCTION

This document provides guidance for applicants seeking IECEX certification of facilities that provide services to the Ex industry according to the requirements of the following Standards:

- IEC 60079-10-1
- IEC 60079-10-2
- IEC 60079-14
- IEC 60079-17
- IEC 60079-19

It shows the steps and processes required for service facilities to gain an IECEX Service Facility Certificate.

In this document,

- organisations that provide services covered by the Scopes of the Standards listed above are called “Service Facilities”
- “IEC 60079-##-##” denotes any one or combination of the above listed Standards as relevant
- “OD 31Z-P” denotes the relevant IECEX Operational Document according to the document purpose (‘Z’) and associated ‘Scheme’ (‘P’) (refer to the Bibliography in Section 8 for details)

Note The details of the process are given on other IECEX documents. These will be referred to in the Bibliography in Section 8 of this IECEX Guide.

Document History

Date	Summary
August 2008	Original Issue (Version 1)
Jan 2017	Edition 2.0 issued in accordance with ExMC Decision 2016/32 and outcomes of September 2016 ExSFC Meeting
July 2019	Edition 2.1 prepared to expand content to relate to all elements of the IECEX Certified Services Facility Scheme

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Guidance for Applications from Service Facilities seeking IECEX Certification, IECEX 03

1 Overview

This guide has been prepared to assist Service Facilities understand that the process of achieving an IECEX Service Facility Certificate is rather straightforward.

Gaining an IECEX Service Facility Certificate provides the organisation with an International Statement that:

- The Service Facility performs work meeting the rigorous requirements of IEC 60079-10-1, IEC 60079-10-2, IEC 60079-14, IEC 60079-17 and IEC 60079-19 as relevant and the IECEX System requirements, including personnel competency requirements of the IECEX; and
- The Service Facility is operating a dedicated quality management system, meeting the specific IECEX requirements; and
- The Service Facility is under on-going surveillance by an Internationally assessed and recognised IECEX Certification Body

As proof of this achievement, the International IECEX Service Facility Certificate is on FULL public display via the IECEX website, which shows the Service Facility's scope of Ex techniques and capability.

1.1 Who do you apply to?

Applications for an IECEX Service Facility Certificate, under the IECEX Certified Service Facility Scheme, are lodged directly with IECEX Certification Bodies (ExCBs) whom themselves have been successfully accepted according the Rules of Procedure of the IECEX System.

A full and up to date listing of ExCBs approved to operate under the IECEX System is maintained on the IECEX website <http://www.iecex.com>.

1.2 Preparing an application

The Service Facility must be able to satisfy the following general requirements. When the organisation is confident that the requirements have been met, then application can be made for certification. In readiness for the application, a Service Facility may decide to apply for a "pre-assessment" review with an IECEX Certification Body, prior to the formal application being lodged.

In preparing an application to be submitted to an ExCB, the Service Facility needs to be confident that the following is in place:

- a) Confidence that work practices meet the requirements of IEC 60079-10-1, IEC 60079-10-2, IEC 60079-14, IEC 60079-17 and IEC 60079-19 as relevant and also those requirements specified in the relevant IECEX Operational Document OD 315-P
- b) Development of QA system covering service facilities of the product (ISO 9001 and IECEX Operational Document OD 315-P
- c) Confidence that staff involved in providing the services within the scope of certification have the qualifications and experience necessary to perform work using specified explosion protection techniques
- d) The relevant application documents from the ExCB duly completed

1.3 Making the application

The application for IECEX certification begins by contacting an ExCB. An up to date listing of Certification Bodies approved by the IECEX to issue IECEX Service Facility Certificates is located on the IECEX website <http://www.iecex.com>.

An applicant organisation is free to choose any ExCB, listed on the IECEX website for the IECEX Certified Service Facility Scheme, to lodge their application with. The ExCB may or may not be located within the same country as Applicant organisation.

IECEX Operational Document OD313-P is the IECEX Operations Manual that details each of the steps that an ExCB undertakes when processing applications from applicant organisations seeking IECEX Service Facility Certification.

The checklist of application information in OD313-P is of assistance. The following information is required to be sent to the ExCB:

- a) Letter requesting IECEX certification of the Service Facility
- b) Exact details of the organisation and the addresses where it carries out work
- c) Whether the company has an established quality management system
- d) Organisational chart and quality manual

The ExCB will estimate the time and cost to complete the certification project.

Refer to the flowchart in OD 313-P It covers the process from the workshop's viewpoint, and shows the typical activities needed to become a Certified Service Facility. This guide provides a summary of the process and does not add to the content of OD 313-S

1.4 Scope of Service Facility certification

A Service Facility will have a Scope of operation. The Scope will refer to the explosion protection technique, and the type of equipment for which it will provide certified services. In addition, the size/power of the equipment will be listed.

The Scope is defined by the type of work normally performed by a Service Facility, and also, the capability of the organisation in terms of maximum size of equipment and the test facilities required to provide the certified services.

The required Scope of services to be covered by IECEX certification needs to be defined when a Service Facility applies to the ExCB for Certification.

2 Service Facility Quality Assurance (QA)

The basic QA standard for IECEX certification is ISO 9001. This standard needs to be met by a service facility applying for IECEX certification of a workshop. While IECEX does NOT require that a Service Facility separately holds ISO 9001 Certification, this may be beneficial as a culture of QA compliance may exist throughout the organisation.

Where ISO 9001 certification is held, some of the ExCBs also hold national accreditation to issue ISO 9001 Certification. This may be more convenient for the applicant because all certification work is done by one Certifying Body.

Where ISO 9001 Certification is not held, the ExCB will assess compliance to ISO 9001 as part of their assessment to OD 314-P

NOTE 1: Advice on Quality system implementation must not be given by the ExCB. This must be done by persons/organisations which are independent of the Service Facility Certification process.

NOTE 2: The QA system needs to be maintained and audited at regular intervals. See Operational Document IECEX OD 025.

3 OD 314-P Additional requirements to ISO 9001

The requirements of ISO 9001 apply to any organisation whether manufacturer or service provider. In the IECEx System, there are additional requirements for quality assurance. The extra requirements ensure that work performed during the provision of certified services is carefully controlled (see IECEx OD 314-P for additional quality assurance requirements).

Material, processes and the competence of responsible personnel (both supervisors and operatives) all need to be adequately proven in order to maintain the IECEx Certification

The additional requirements are intended to ensure that no part of the process of providing a service can lead to unclear certification status. OD 314-P clarifies those clauses of ISO 9001 which are key to maintaining certification status of equipment. Examples include competence of personnel, auditing, process measurement and traceability of materials.

NOTE All QA requirements (ISO 9001, OD 314-P) are focussed on assuring that the service being provided remains within certification restraints. The QA system is expected to prevent any deviations in the process which may affect certification.

4 Staff competence

Ongoing certification relies heavily on the competence of personnel to ensure that the process does not compromise certification of equipment. The Service Facility needs to provide evidence of the competence of personnel (responsible persons).

Competence requirements affect every part of the provision of certified services and these can include, but is not limited to, the following activities:

- Reporting on condition of equipment (before and after repair/overhaul),
- Repair and overhaul activities,
- Testing, use of test equipment, and
- Recommendation that the product can be returned safely to service

Applicants need to ensure that at least one competent person is available for each Ex technique listed in the Service Facility's Scope. This person must oversee processing and final release of product. Qualifications and experience may come from any of a number of means.

5 Routine testing

Where any testing of Ex equipment is part of the manufacturer's instructions, these instructions should be available in the documentation supplied with the product when it was purchased, or specified in the applicable standards. Testing equipment needs to be available and appropriate to the tests required.

Applicants need to show that the test process is adequate for the work performed. There is no set list of equipment, but the Service Facility must be able to show that tests specified by the manufacturer can be carried out.

Subcontract work may include testing, but there needs to be a reason for use of a subcontractor. Reasons include specialised test, infrequent need for the test, high cost of test equipment etc.

6 Assessment

The assessment is a two stage activity, first a Documentation Review and second a Site Assessment. ExCBs (IECEX Certification Bodies) assess the Service Facility at a formal audit. The audit will follow the processes given in IECEX Operational Document OD 313-P The process is very fair and seeks evidence that:

- Confirms that services are provided in accordance with IEC 60079-##-## and OD 315-P
- The Quality system meets the requirements of OD314-P

A Facilities Audit Report (FAR) is issued following successful assessment of the Quality system.

ExCBs are authorised bodies who have been accepted as competent to assess and certify either test laboratories (ExTL) or Service Facilities. They can also assess and certify Quality systems to ISO 9001. It may be convenient for a Service Facility to engage the same ExCB to assess the Quality system and the repair and overhaul operation.

Re-assessment shall be repeated every three years.

6.1 Surveillance audit

The process of assessment needs to be maintained. This is done through Surveillance audits. An FAR is used to report on surveillance audits.

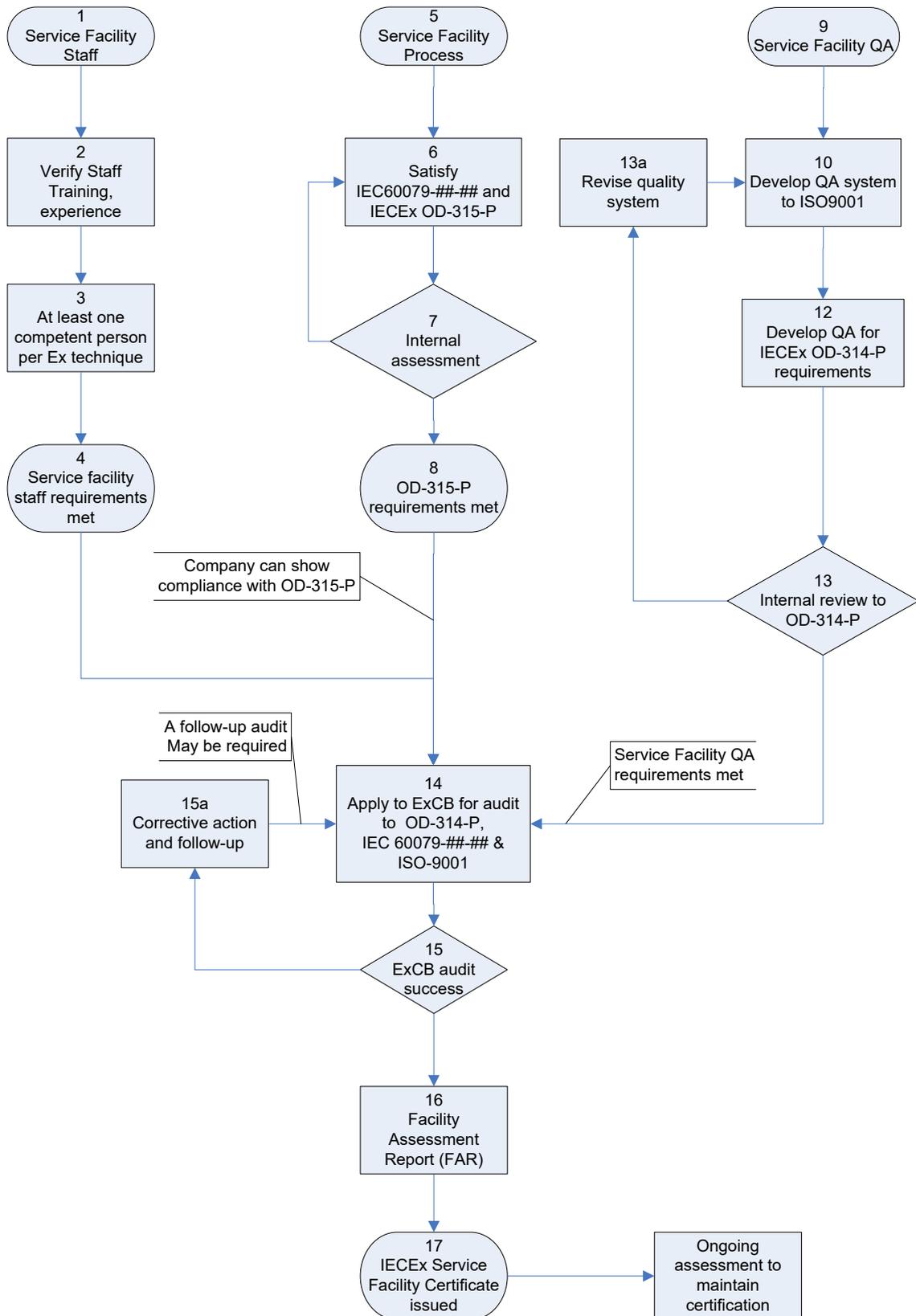
6.2 Preliminary assessment

Prior to the assessment, the Service Facility may request that an ExCB conducts a preliminary assessment. The purpose of a preliminary assessment is to check that a Service Facility is ready for the official assessment. This type of assessment does not have formal non-conformances, but items of concern may be raised which should be corrected prior to the official assessment.

7 Process for Application to an IECEX Certification Body (ExCB) for certification

Refer to the following diagram and explanatory notes Table.

Guide to IECEx Service Facility Certification As per OD-313-P



Step	Service Facility activities for becoming an IECEx Certified Service Facility	Related Documents	By Whom	Notes/Comments
1	Service Facility Staff	Training records	Service Facility	A list of staff directly involved in repair and overhaul is prepared
2	Verify experience of staff	Personnel records, certificates, in-house training	Service Facility	Compile records of qualification (or experience since first qualification). Can include short courses
3	Competent Persons (Responsible persons)	National and internationally recognised training	Service Facility	There needs to be at least one Responsible person competent to cover the explosion protection techniques used within the Service Facility
4	Competent person requirements met		Service Facility	
5	Service Facility Process	Controlled documents	Service Facility	These documents are necessary for consistent performance from the repair process
6	Requirements of OD 315-P and IEC 60079-19	Work instructions, Procedures Special processes	Service Facility	The Responsible person should verify that requirements have been met
7	Internal assessment of process controls		Service Facility	
8	OD 315-P requirements have been met		Service Facility	
9	Service facility QA	All company quality documentation	Service Facility	The goal is to meet ISO 9001 and OD 314-P While holding ISO 9001 Certification by an accredited Registrar or Body is useful, this is not necessary as the ExCB can assess the ISO 9001 requirements
10	Develop ISO 9001 system	Basic QA to ISO 9001	Service Facility	May be separately assessed and certified.
11	ISO 9001 system complete		Quality system certifying body	Assumes that the system has been assessed by third party. If the system is not separately certified, then the ExCB assessors will include the basic ISO 9001 requirements during its assessment
12	Develop QA for OD 314-P	QA system documents	Service Facility	
13	Internal review to OD 314-P		Service Facility	The additional QA requirements have been met
14	Apply to ExCB to be a Certified Service Facility	Quality Manual etc See OD 313-P for process	Service Facility applies to ExCB	Competent persons, QA system, work instructions, equipment, etc All should be reviewed against Scope of operations.

Step	Service Facility activities for becoming an IECEx Certified Service Facility	Related Documents	By Whom	Notes/Comments
15	ExCB audit	IEC 60079-##-## OD 315-P OD 314-P OD 313-P	ExCB audit personnel	Qualified auditors come and examine the Service Facility for compliance with 60079-19 and operational documents
15a	Correction of non-conformances encountered at audit		Service Facility	All must be corrected before a Service Facility Certificate can be issued
16	Facility Assessment report issued	FAR	ExCB	
17	IECEX Service Facility Certificate issued		ExCB	The FAR is reviewed for compliance with Scheme rules, scope and correction of any outstanding matters
	Ongoing assessment			Once issued, the Service Facility must maintain its systems and personnel to ensure that surveillance audits do not receive non-conformances.

8 Bibliography of Currently published IECEx Publications

This Guide is intended to provide only basic and introductory information – more detailed information can be found in the following Rules of Procedure:

- IECEx 03-0, IECEx Certified Service Facilities Scheme Part 0: General Rules of Procedure
- IECEx 03-2, IECEx Certified Service Facilities Scheme – Part 2: Selection of Ex equipment and design of Ex installations – Rules of Procedure
- IECEx 03-3, IECEx Certified Service Facilities Scheme – Part 3: Ex installation and initial inspection – Rules of Procedure
- IECEx 03-4, IECEx Certified Service Facilities Scheme – Part 4: Ex inspection and maintenance – Rules of Procedure
- IECEx 03-5, IECEx Certified Service Facilities Scheme – Part 5: Repair, overhaul and reclamation of Ex equipment – Rules of Procedure

and the supporting IECEx Operational Documents outlined in the following Table:

	Selection and Design “Scheme”
OD 313-2	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 2: Selection of Ex equipment and design of Ex installations Assessment and Certification of Service Facilities providing selection of Ex equipment and design of Ex installations related services – Procedures.
OD 314-2	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 2: Selection of Ex equipment and design of Ex installations Quality Management System requirements for IECEx Service Facilities providing selection of Ex equipment and design of Ex installations related services.
OD 316-2	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 2: Selection of Ex equipment and design of Ex installations Assessment Procedures for IECEx acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEx Certificates to Ex Service Facilities providing selection of Ex equipment and design of Ex installations related services.
	Installation and Initial Inspection “Scheme”
OD 313-3	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 3: Ex installation and initial inspection Assessment and Certification of Service Facilities providing Ex installation and initial inspection service – Procedures.
OD 314-3	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 3: Ex installation and initial inspection Quality Management System requirements for IECEx Service Facilities providing Ex installation and initial inspection service.
OD 316-3	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 3: Ex installation and initial inspection Assessment Procedures for IECEx acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEx Certificates to Ex Service Facilities providing Ex installation and initial inspection service.

	Inspection and Maintenance “Scheme”
OD 313-4	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 4: Ex Inspection and Maintenance Assessment and Certification of Service Facilities providing Ex installation related services – Procedures.
OD 314-4	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 4: Ex Inspection and Maintenance Quality Management System requirements for IECEX Service Facilities providing Ex installation related services.
OD 316-4	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 4: Ex Inspection and Maintenance Assessment Procedures for IECEX acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEX Certificates to Ex Service Facilities providing Ex installation related services.
	Repair and Overhaul “Scheme”
OD 313-5	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 5: Repair, overhaul and reclamation of Ex equipment Assessment and Certification of Service Facilities involved in the repair, overhaul and modification of Ex equipment – Procedures.
OD 314-5	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 5: Repair, overhaul and reclamation of Ex equipment Quality Management System requirements for IECEX Service Facilities involved in the repair, overhaul and modification of Ex equipment.
OD 315-5	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 5: Repair, overhaul and reclamation of Ex equipment Additional Requirements for IECEX Service Facilities involved in the repair, overhaul and modification of Ex equipment.
OD 316-5	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX System) IECEX Certified Service Facility Scheme – Part 5: Repair, overhaul and reclamation of Ex equipment Assessment Procedures for IECEX acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEX Certificates to Ex Service Facilities involved in the repair, overhaul and modifications of Ex equipment.

NOTE: Publications using the same structure above are planned for a ‘Scheme’ for Area Classification services

9 Example IECEx Certified Service Facility Certificate

		IECEX CoC	
Certified Service Facility			
INTERNATIONAL ELECTROTECHNICAL COMMISSION			
IEC Certification Scheme for Explosive Atmospheres			
Certificate No.:	IECEX BAS S0001	Issue No.:1	Certificate history: Issue No. 1 (2012-7-6) Issue No. 0 (2008-10-20)
Status:	Current	Date of Issue:	2012-07-06
Applicant:	Sulzer Dowding & Mills Lower East Street Middlesbrough Cleveland TS2 1QQ United Kingdom		
Type of Service:	Repair and Overhaul according to IEC 60079-19		
Type of Protection:	Flameproof Enclosure "d" Increased Safety "e" Type of Protection "n"		
Scope of Service:	Repair and Overhaul of Rotating Machines and Enclosures		
Locations covered by this Certificate:	As Above United Kingdom		
Facility Audit Report:	GB/BAS/FAR08.0001/00 GB/BAS/FAR08.0001/01 GB/BAS/FAR08.0001/02 GB/BAS/FAR08.0001/03		
<i>This certificate is issued as verification that the Service Facility and associated locations were assessed and found to comply with the IECEx Scheme requirements, relating to the type and scope of service listed above. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 03 and Operational Documents as amended.</i>			
Approved for Issue on behalf of the IECEx Certification Body:	R. S. Sinclair		
Position:	General Manager		
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