

IECEX AND ATEX PRODUCT CERTIFICATION

SGS can deliver a full certification package covering all types of explosion protection for both gas and dust hazards.

PRODUCT CERTIFICATION SCHEME

SGS is the leading internationally recognised certification body for explosion protected equipment, delivering IECEX and ATEX certification to customers around the globe.

TYPE EXAMINATION

This relates to the comparison of the design specification of a product against the requirements of a standard specification. It will include a physical examination of a sample and the performance of any tests which may be necessary. The results are recorded in a report. (For more detail see our publication BAS-PS-004.)

PRODUCT VERIFICATION

Each individual manufactured product is compared against the standard or design specification. This is achieved by SGS Baseefa carrying out a physical examination and possibly the performance of tests when the standard calls for routine tests. (For more information see our publication BAS-PS-005.)

PRODUCT QUALITY ASSURANCE

This is the comparison of a manufacturer's quality management system against the relevant general requirements in the ISO 9000 series

of standards. It also covers the more specific requirements of a quality system standard for particular products (ISO/IEC 80079-34), backed by a system of regular auditing and surveillance of samples.

A Quality Assurance Notification (ATEX QAN), or Quality Assurance Report (IECEX QAR) is a time-limited document, subject to renewal at defined dates, dependent on continuing audit and surveillance. (For more information see our publication BAS-PS-006.)

ELECTRICAL PROTECTION

- Ex d – Flameproof
- Ex p – Pressurised
- Ex e – Increased Safety
- Ex i – Intrinsic Safety
- Ex q – Powder Filled
- Ex o – Oil Filled
- Ex n – Non Sparking
- Ex m – Encapsulation
- Ex t – Protection by Enclosure Dust
- Ex op – Optical Radiation

NON-ELECTRICAL PROTECTION

- Ex h - generic identification of non-electrical protection, incorporating:
 - c - Constructional Safety
 - b - Control of Ignition Sources
 - k - Liquid Immersion
- Ex d, Ex p and Ex t may also be used as protection for non-electrical equipment



Images supplied by Cooper MEDC and Hawke International

FOR MORE INFORMATION CONTACT:

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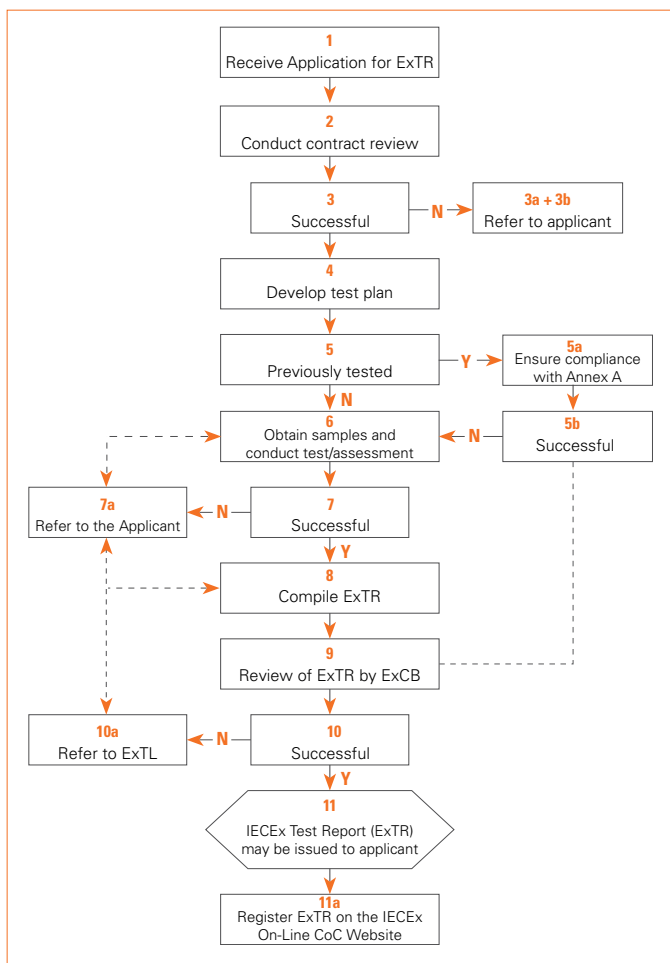
Ex e, Ex q, Ex m, Ex n, Ex t and Non-Electrical Protection: David Brearley

Ex i, Ex op: Maurice Powney

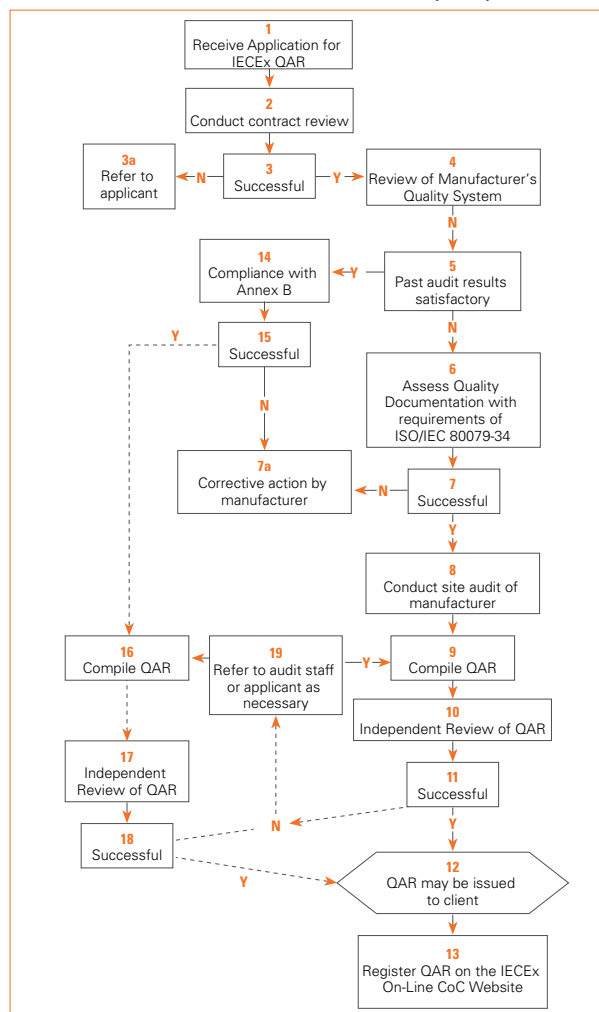


PRODUCT CERTIFICATION SCHEME

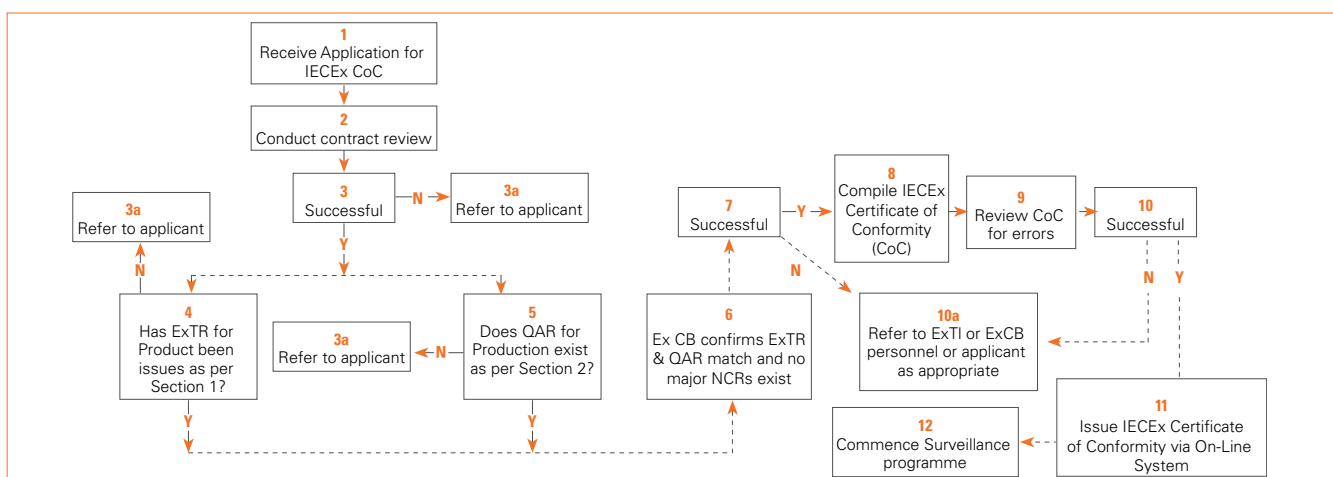
PROCESS FOR ISSUING IECEX TEST AND ASSESSMENT REPORT (ExTR)



PROCESS FOR ISSUING IECEX QUALITY ASSESSMENT REPORT (QAR)



PROCESS FOR ISSUING AN IECEX CERTIFICATE OF CONFORMITY



Note: For added detail of each stage in the flowcharts, please refer to IECEX Operational Document OD 009 available at <http://www.iecex.com/operational.htm>.