GUIDE TO VERIFICATION SERVICES

This document gives an overview of the Verification Services provided by SGS Baseefa Ltd.

CONTROL OF PRODUCTION

It is an essential part of many product certification schemes that type examination and control of production are integrated to give assurance that manufactured products (as well as the design) comply with the requirements of the specified standard.

Under the requirements of the ATEX Directive (as well as many other EU Directives) the proper integration of the two aspects is broken and they are treated separately, possibly even involving different European Notified Bodies.

Since most of the work of SGS Baseefa Ltd is concerned with ATEX and IECEx, we have split our services accordingly. However, we remain of the opinion that the best guarantee of obtaining conforming product is that a single Notified Body (ATEX) or Certification Body (IECEx) should take responsibility for both the design and the production aspects, thus avoiding the potential problems of a split in that responsibility.

This guide is concerned with control of production, using direct Product Verification techniques, where a Notified Body or Certification Body undertakes the responsibility of inspecting each manufactured product to confirm compliance with stated requirements.

ATEX has two modules, Product Verification and Unit Verification, whereas IECEx has combined the two aspects in a single activity with the title Unit Verification.

ATEX PRODUCT VERIFICATION

The object of Product Verification is to provide assurance that the manufacturing process results in each manufactured product being in compliance with the certified design specified in a Type Examination Certificate. Making compliant product is the responsibility of the manufacturer, but assurance of compliance is provided by independent verification of critical features of the manufactured product. This verification will either be performed by our staff or by others acting on our behalf and under our direct supervision. On successful completion, a Product Verification Certificate is issued, listing each compliant product by serial number.

ATEX UNIT VERIFICATION

The object of Unit Verification is to provide assurance that single items of manufactured product comply with the requirements of specified standards. In this case, there is no separate Type Examination Certificate and the Unit Verification Certificate combines aspects of both a Type Examination Certificate and a Product Verification Certificate.

For most purposes, particularly if it is anticipated that more than one item of equipment will eventually be produced, it will be appropriate to follow the path of separate type examination and verification. However, for complex single items of equipment, it may be advantageous to follow the path of Unit Verification since the drawing requirements can be reduced. The need is to describe the manufactured product, not to provide drawings showing manufacturing tolerances for future production.

We suggest that if you are contemplating the route of unit verification, you discuss the implications with us before proceeding too far.

IECEX UNIT VERIFICATION

For true Unit Verification, we issue a single ExTR covering both the Type Examination and the Verification of the equipment identified by serial number. This leads to the issue of an IECEx Unit Verification Certificate for the equipment identified by serial number.

For Product Verification, where there may be a requirement to make more items of the identified equipment, we issue two ExTRs. The first covers the Type Examination aspects relevant to certification. The second covers the Product Verification aspects relevant to certification. In this case, the Type Examination ExTR can be used again in association with further Verification ExTRs. We issue an IECEx Unit Verification Certificate, identifying the relevant equipment by serial number, one certificate corresponding to each Verification ExTR.

In the remainder of this document, we refer only to Verification. This should be taken to include the relevant aspects of both Product Verification and Unit Verification.

THE VERIFICATION PROCESS

The process of verification will vary considerably, depending on the nature of the equipment under production and the relevant standards or protection concept(s). However, it will follow the following principles:

1. We are verifying that each produced item, individually, complies with the specification laid down in the ATEX Type Examination Certificate and its associated documents, or with the relevant IECEx ExTR and its associated documents. Therefore each and every produced item must be subject to the process.
2. Where the full verification cannot be performed on the completely manufactured item (for example, after encapsulation), it will be necessary to perform the appropriate part of the verification process during production.
3. Because the verification process is invoked as an alternative to a quality system approach, it will only be possible to make limited use of your quality records.
4. Although most of the activity will relate to the checking of physical dimensions, there may be a need to perform tests on some items. (For example, the overpressure test for flameproof enclosures.)
5. The person performing the verification will record the results of the verification process as it progresses. Optionally, we can prepare a summary report, to accompany the ATEX Verification Certificate. A report is always produced for IECEx. We will retain the full records.
6. On successful completion of the verification exercise, we will prepare a Verification Certificate or Unit Verification Certificate, identifying the verified product by type and serial number(s). Where appropriate, the application of marking to the product will normally be supervised by us, or on our behalf.
7. When verification is to take place other than at our Buxton laboratory, the use of measuring equipment supplied by others may be relevant, but only if we are able to satisfy ourselves with regard to the calibration status and fitness for purpose of such equipment.

QUOTATION AND ORDER

An application form for verification services is available that should assist you to provide us with the information we need to prepare a quotation. Use of the form is not obligatory, but we will need to have the equivalent information in some other way.

Based on the anticipated schedule of availability of product and our assessment of the work required to verify each product, we will prepare our quotation.

If you wish to set up a scheme for a routine verification activity, please talk to us and we will make specific arrangements.

Assuming that verification is completed as anticipated, the quotation will allow for the issue of an appropriate Verification Certificate (or Certificates). In the event that there are problems with compliance that requires us to perform additional work, or to perform a repeat examination, we will provide a further quotation.

The options for payment are similar to those for type examination work and, for verification at the time of type examination, may be integrated with the payments for type examination

CONTACT INFORMATION

To learn how SGS Baseefa can help you exceed customer expectations, visit www.sgs.co.uk/sgsbaseefa or contact baseefa@sgs.com for more information.