

Information on the Conformity Assessment Procedures for Pyrotechnic Articles under Directive 2013/29/EU

General information

The Bundesanstalt für Materialforschung und -prüfung (BAM) is a notified body under the Directive 2013/29/EU for all applicable modules B, C2, D, E, G, and H. BAM is entitled to conduct the conformity assessment procedures for all pyrotechnic articles of categories F1-F4, T1-T2 and P1 - P2 including pyrotechnic articles for automotive purposes. Within the conformity assessment procedures, the latest versions of the applicable standard series are the preferred testing and assessment principles:

- EN 15947 series (Pyrotechnic articles – Fireworks, Categories F1, F2 and F3)
- EN 16261 series (Pyrotechnic articles – Fireworks, category F4)
- EN 16256 series (Pyrotechnic articles – Theatrical pyrotechnic articles)
- ISO EN 14451 series (Pyrotechnic articles – Pyrotechnic articles for vehicles)
- EN 16263 series (Pyrotechnic articles - Other pyrotechnic articles)
- EN 16265 (Pyrotechnic articles – Other pyrotechnic articles - Ignition devices) and
- EN 16264 (Pyrotechnic articles – Other pyrotechnic articles – Cartridges for powder actuated tools)

Costs

Testing and other services of BAM are subject to payment which is charged according to the ordinance on fees to the Explosives Act in conjunction with the ordinance on fees of BAM. Time spent on testing and costs for materials will be charged in accordance with the legal prescriptions. The current hourly rate of the division 2.5 of BAM is 161 €. Flat rate agreements are beyond what BAM can offer.

From the above information it is not possible to specify the actual costs for conformity assessment procedures. The following gives some indications on costs valid for EU type-examinations for pyrotechnic articles.

EU type examination procedure (module B)

Application

An application for EU-type examination must include (refer to 2013/29/EU Annex II, Module B no. 3):

- (a) the name and address of the manufacturer;
- (b) a written declaration that the same application has not been lodged with any other notified body;
- (c) the technical documentation. The technical documentation shall make it possible to assess the pyrotechnic article's conformity with the applicable requirements of this Directive and shall include

an adequate analysis and assessment of the risk(s). The technical documentation shall specify the applicable requirements and cover, as far as relevant for the assessment, the design, manufacture and operation of the pyrotechnic article. The technical documentation shall contain, wherever applicable, at least the following elements:

- (i) a general description of the pyrotechnic article;
 - (ii) conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.;
 - (iii) descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the pyrotechnic article;
 - (iv) a list of the harmonized standards applied in full or in part, the references of which have been published in the *Official Journal of the European Union* and, where those harmonized standards have not been applied, descriptions of the solutions adopted to meet the essential safety requirements of this Directive including a list of other relevant technical specifications applied. In the case of partly applied harmonized standards, the technical documentation shall specify the parts which have been applied;
 - (v) results of design calculations made, examinations carried out, etc.;
 - (vi) test reports;
- (d) the specimen's representative of the production envisaged. BAM may request further specimens if needed for carrying out the test program;
- (e) the supporting evidence for the adequacy of the technical design solution. This supporting evidence shall mention any documents that have been used, in particular where the relevant harmonized standards have not been applied in full. The supporting evidence shall include, where necessary, the results of tests carried out in accordance with other relevant technical specifications by the appropriate laboratory of the manufacturer, or by another testing laboratory on his behalf and under his responsibility.

Costs can be estimated to range from 1000 € to 2000 € for each certificate. The range of figures is related to the differing complexity of articles, required number of items, product families, assessment of results.

The figures are based on a rough estimate and former certifications and are applicable where no extraordinary problems occur. They all are based on the hourly rate and the respective working times.

BAM applies as general guidance the administrative decisions and documents produced as a result of the work of the notified body coordination group (forum) under 2013/29/EU, e.g. regarding:

- grouping of articles in product families,
- guidance for conformity assessment procedures, and
- contents of certificates documentation and technical data sheets.

These procedures are published on the homepage of the European Commission:

http://ec.europa.eu/enterprise/sectors/chemicals/documents/specific-chemicals/pyrotechnic-articles/index_en.htm

Monitoring of quality control modules

An application on the assessment of quality control in accordance with one of the modules (see Art. 17 of the Directive) is the pre-requisite for periodic inspection visits. The application will apply to a range of, or perhaps to all, products of the manufacturer, where the list of products under supervision is either placed in an Annex to the contract or is part of the quality management handbook. The costs per audit are based on the invested time (before, during and after the audit), travelling costs (e.g. flights/trains and hotel) as well as the travelling times considering the hourly cost rate.

Further information

Certificates are usually issued in German or English language or partly bilingual (German and English). The English translation is, however, unofficial and in case of discrepancies between the German certificate and its translation, only the German version is legally binding. In the case a certificate is issued, you will receive the certificate attesting conformity with the requirements of the directive, the two annexes (identification, suitable instructions), a test report including technical annex, and an assessment report.

In case of further general questions please address these to:

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