"Explosive Mixtures" Information Sheet 2020

Preliminary Remarks

The contents of this information sheet are determined by consultation between two German exhibition companies:

Deutsche Messe AG, Hanover NürnbergMesse GmbH

It forms the basis for the handling and use of explosive mixtures at the exhibition venue, and supplements points 5.2.1 and 5.2.2 of the 2020 Technical Guidelines.

Explosive mixtures

Flammable liquids, gases and dust constitute hazardous materials as defined in s. 2 (1) of the German Hazardous Substances Ordinance (Gefahrstoffverordnung, GefStoffV). The handling of such hazardous materials can sometimes result in the formation of dangerous explosive mixtures with the potential to cause personal injury and material and environmental damage.

The requirement to assess the risk of explosion when using materials of this nature is imposed at a European level by Directive 1999/92/EC, and is therefore not restricted to Germany alone. Directives 2006/42/EC (Machinery Directive) and 2014/34/EU (ATEX Directive) establish the fundamental requirement for the manufacturers of plant and machinery to perform a risk assessment in respect of explosion protection. But because exhibitors function not only as manufacturers but also as operators for the purpose of their exhibition activities, they must also observe the provisions of Directive 1999/92/EC. This has been transposed into German law in the form of the Workplace Safety Ordinance (Betriebssicherheitsverordnung) and the Hazardous Substances Ordinance (Gefahrstoffverordnung), which must therefore be applied to exhibition activities as above.

Explosion protection document

On the basis of s. 6 (9) of the Hazardous Substances Ordinance, a hazard assessment in respect of explosion protection must be drawn up (i.e. an explosion protection plan and documentation). The explosion protection plan is used to determine whether there is a risk of formation, and ignition, of dangerous explosive mixtures, and which protective measures must be put in place accordingly. The method of implementing the protective measures set down in the explosion protection plan is then described in an explosion protection document in accordance with s. 6 (2) of the Hazardous Substances Ordinance.

If wood processing machinery is displayed at the exhibition, and an elevated build-up of dust or wood chips can be expected as a consequence, the provisions of German Social Accident Insurance (DGUV) Information Sheets 209-083 and 209-045, on the installation of automatic spark extinguishing systems, must be observed. In justified exceptional circumstances (e.g. if only a limited presentation of the system is given), the requirement to install a spark extinguishing system may be waived subject to written approval by NürnbergMesse (see point 4.2).

It is the responsibility of the exhibitor to draw up the explosion protection document, including confirmation that the required protection measures have been correctly organized and implemented. DGUV Information Sheet 209-045 (Annex 3.1) may be used as a guide. This template is identical for all exhibitors, to ensure that a uniform and comparable basis for assessment is established. Differing assessments are not recommended, since this may increase the time and effort needed for processing and incur additional costs for the exhibitor.

The template of the explosion protection document, completed in full by the exhibitor in either German or English, must be submitted to NürnbergMesse GmbH, together with the necessary accompanying documents, in good time, no later than one month before the start of construction.

Explosion safety check

Based on the documentation made available by the exhibitor, a check of explosion safety is then performed as required by s. 15 in conjunction with Annex 2 para 3 no. 4.1 of the Workplace Safety Ordinance. The requirement for the above explosion safety check applies regardless of the size of the plant or the length of time the plant is in operation. The explosion safety check must be performed at a general level, i.e. comprehensively and without exception, before the plant is operated.

It must be noted that the explosion safety check is performed on the basis of the documentation submitted and the plant as constructed. If explosion protection documents are not completed in full or contain errors, if accompanying documents are missing or contain errors, and if any of the Annexes are incomplete, this may seriously impact on the testing process, as a result of which operation of the plant in question will be prohibited.

Because NürnbergMesse GmbH would like to enable all exhibitors to operate their equipment, it urgently recommends that they make the required documentation available in full and observe all deadlines. The sooner the required documents are made available and the equipment is set up, the earlier any defects or inconsistencies can be detected and rectified.

Your attention is expressly drawn to the fact that explosion safety testing is chargeable, and is performed by a third party, not NürnbergMesse GmbH. Additional costs will be incurred if subsequent testing is required as a consequence of failing to observe deadlines or insufficient cooperation on the part of the exhibitor. For reasons of data protection, exhibitors are advised that explosion protection documentation is passed to a service provider tasked with performing the checking process.