



Focus on IFA's work

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OMEGA hazardous substance software

Problem

Parallel to air and material sampling, a range of company, exposure, sampling and measurement data are recorded in the measurement system for exposure assessment of the German Social Accident Insurance Institutions (MGU). They are required for analysis of the samples for the purpose concerned and for providing an analysis report. The prevailing plant conditions must be recorded in a manner such that uniform assessment and interpretation of the measurement results is assured. All recorded data are documented in the MEGA exposure database in order to make them available for anonymized evaluations. Comparability of the results is assured by the fact that the data are measured and recorded uniformly and systematically within the MGU.

Activities

By means of the OMEGA hazardous substance software developed within the IFA using Windows, Delphi and Firebird, the data are recorded by the measuring services of the accident insurance institutions, whose activities are focused within the MGU. The software is also employed in the MGU laboratories for the recording of measured values and generation of analysis reports. It is available for both networks and PCs.



Input form of the OMEGA hazardous substance software (in German)

Results and Application

The software comprises the following features:

- recording of company, exposure, sampling and measured data, including plausibility checks;
- recording of further data in the course of measurement programmes (e. g. measurement programme 9124 concerning indoor measurements in accordance with the measurement strategy for office workplaces);
- lists of substances, reports, and outline lists;
- Data interchange by USB stick or extranet (corporate network of the accident insurance institutions (CNUV), data transfer to ASCII)

- retrieval in code lists, online help, MGU documents;
- process monitoring, monthly and annual analyses, management of sample carriers;
- analysis reports, generation of a preformatted MGU measurement report;
- archiving of the data;
- transfer of completed procedures to the MEGA exposure database.

The OMEGA hazardous substance software constitutes an essential element of quality assurance within the MGU. Contributory elements are checks for plausibility and completeness and information on assessment in the form of indexes and text modules within the analysis reports. The user is supported by menu-guidance and comprehensive help features.

Each year, the software is used to process data on approximately 23,000 samples and partly more than 130,000 analyses. About 235 software installs were in use in 2016. A condition for use is attendance by the staff concerned at the G1 hazardous substance seminar on the measurement and assessment of hazardous substances (introductory seminar for authorized MGU staff) and a two-day training course including initial installation of the OMEGA hazardous substance software in the IFA.

Area of Application

Measurement services within the MGU, laboratories within the MGU including the IFA

Additional Information

- IFA-Arbeitsmappe Messung von Gefahrstoffen. Code 3610 ff. Ed.: Deutsche Gesetzliche Unfallversicherung (DGUV), Sankt Augustin. Erich Schmidt, Berlin 2011 – loose-leaf ed. www.ifa-arbeitsmappedigital.de/3610
- BGMG Measurement System for exposure assessment of the German Social Accident Insurance Institutions. 5th updated edition. Ed.: Deutsche Gesetzliche Unfallversicherung (DGUV), Sankt Augustin 2009
- MGU Das Messsystem Gefährdungsermittlung der UV-Träger. 7. Aufl. (in German) Hrsg.: Deutsche Gesetzliche Unfallversicherung (DGUV), Sankt Augustin 2013

Expert Assistance

IFA, Division 1: Information technology – Risk management

Literature Requests

IFA, Central Division