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len en waar nodig het effect van beheersmaatregelen doorrekenen.

- Alle werkzaamheden met schoonmaakmiddelen zijn in kaart gebracht. Dit maakt het uitvoeren van een risicobeoordeling veel eenvoudiger, want een gebruiker kan volstaan met de keuze van een voor hem/haar herkenbare schoonmaakmethode, de mate van verdunning en enkele blootstellingvragen.
- De branche heeft een eigen productendatabase ontwikkeld, waarmee gebruikers de benodigde productgegevens eenvoudig en snel kunnen binnenhalen.
- Tijdens het uitvoeren van een risicobeoordeling corrigeert de Stoffenmanager Schoonmaak voor de mate van verdunning. De berekening van de gevaarseigenschappen van het

verdunde product verloopt via de rekenregels van de preparatenrichtlijn.

De demonstratie staat vooral stil bij de nieuwe mogelijkheid om tegelijkertijd de risico's door blootstelling via de huid en via de ademhaling te beoordelen.

Conclusie

De Stoffenmanager Schoonmaak laat zien dat het opnemen van branche-eigen handelingen en producten het voor de gebruiker eenvoudiger maakt om de Stoffenmanager toe te passen. De opname van het huidrisico maakt de risico-evaluatie completer, maar verhoogt de complexiteit.

ATEX manager: development of a web-based tool to support companies in controlling explosion risks (ATEX regulations)

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Introduction

ATEX is the name of the framework for controlling explosive atmospheres and the standards of equipment and protective systems used in them. It is based on the requirements of the European Directive 99/92/EC (also known as ATEX 137, regarding protection of workers potentially at risk from explosive atmospheres) and the European Directive 94/9/EC (also known as ATEX 95, concerning equipment and protective systems intended for use in potentially explosive atmospheres). Both guidelines have the objective to control the risk of potentially explosive atmospheres. Until now only a small part of the Dutch companies have taken measures to comply with the ATEX regulations. Especially in SME's management of explosion risks is observed to be poor.

To assist companies in controlling explosion risks a web-based tool (ATEX manager) is developed that will enable users to determine explosion risks and take preventive measures in a systematic approach. Development of this tool is part of a program initiated and funded by the Dutch Ministry of Social Affairs and Employability (the "VAST" programme). As part of this program the web-based tool called "Stoffenmanager" was developed, a tool for prioritisation of risks of chemicals in the workplace. The ATEX manager will be integrated with the Stoffenmanager.

Methods

In the Netherlands the animal fodder industry has already developed an instrument (on paper) for controlling explosion risks in the workplace. Based on this approach, an electronic version of this instrument will be built, to be used specifically in this sector. In a second step this tool will be

transformed to a generic version for use by companies in other industry sectors.

Basically the tool will consist of the following parts:

- a module for data entry of flammable substances/products and classification of these substances/products in categories on the basis of critical parameters like Minimal Ignition Temperature, Minimum Ignition Energy, smoldering temperature and flashpoint;
- a module to classify explosive atmospheres into zones and to determine the size of the zone, on the basis of source characteristics, location, ventilation and good housekeeping;
- a module for actual explosion risk assessment per defined explosive zone.

For each of the defined explosion zones risk assessments for chosen scenarios (operational conditions, ignition sources, presence of workers, equipment characteristics, location, etc.) will be made in a semi-quantitative way by combining a score for the likelihood of an explosion and a score for the adverse effects of an explosion into a risk score.

Results

The version of the ATEX manager for the animal fodder industry will be available in January 2007 and shall be demonstrated during the Symposium. After finalizing the specific version of the animal fodder industry, a generic version will be built to service all industry sectors. This instrument will be available in April 2007.

Conclusions

Until now assessing explosion risks and giving guidance on control measures to be taken has been the field of experts. The ATEX manager incorporates part of the knowledge of experts and enables firms to perform an ATEX assessment at least partly by themselves. If this is a viable approach and will result in a larger percentage of companies taking the proper measures to control explosion risk, has to be evaluated after the tool has become operational as a web-based instrument.