

Section: Logistics real estate

Environmental and Human Protection FLUMilog, A First in Europe

Working toward the creation of a national reference for environmental protection and risk prevention for logistics buildings, a working group has been forged to launch a campaign of fire tests and develop applicable methodology. The project has been christened Flumilog and federates several partners, including Ineris, CNPP, CTICM, ArcelorMittal, SCMF, Afilog and GSE. The project currently seeks to determine the distances at which a warehouse fire impacts the environment, a basic element of environmental impact studies.

The development work leading to this calculation method has been performed by the Ineris, CNPP and CTICM laboratories, recognized for their fire engineering expertise. They have analysed the currently applied calculation methods and the latest international research results to develop a theoretical model which is currently being validated by a medium- and large-scale real test program.

This test program has started with the mid-scale test which took place on 18 September 2007 in a 100-m² GSE-built warehouse, deliberately set on fire to study the influence of the fire load on flame geometry and to validate, by experimentation and measurements, the calculation model for the distances of the fire's thermal effect.

Three large-scale tests on an 800-m² platform are scheduled by late 2007 to study the influence of the scale factor.

This method of calculating the thermal effects will enable better design and dimensioning of storage-dedicated infrastructures, in particular the heat screens, optimise logistics platform layout on the land, simplify the preparation and processing of operating authorisation files, and improve safety.

The results will be used to improve regulations in 2008.

To perform its large-scale testing, Flumilog is actively seeking new partners to participate in the funding and performance of the research work, which will improve environmental and human protection and safety, and simplify the compulsory administrative authorisations logistics professionals must obtain to operate a platform.

Information on the Flumilog partners:

Ineris: Founded in 1990, INERIS is a public institution with industrial and commercial activities under the auspices of the Ministry of Ecology, Development and Sustainable Development. The INERIS mission is to carry out or have carried out research on the prevention of the risks to human health and safety and to property and the environment generated by business activity. INERIS is also mandated to provide all services which help companies adapt to these objectives.

Le CNPP: The CNPP is a risk control and prevention expert which seeks to develop, distribute and assess knowledge and expertise in personal safety, tangible and intangible asset safety and environmental safety, in every business and type of surroundings. CNPP expertise lies in the fields of risk management, quality and general safety, environmental risks (technological, accidental and health risks), fire and explosion, vandalism and occupational health and accident risks.

CTICM: CTICM is a private institution in the public interest, with the objective of promoting improvement in techniques, participating in improving yield and ensuring quality in the steel construction industry. Set up in 1962, CTICM has developed internationally acknowledged expertise in the field of structure fire behaviour and the use of highly effective digital simulation models. CTICM is a leading participant in European research programmes, and in the French "Fire Safety Engineering" project. With the creation of the EFECTIS group, which has laboratories in France, the Netherlands, Norway and Spain, CTICM has become the European leader in the field of fire tests and fire engineering research.

ArcelorMittal: Arcelor Mittal, number one in iron and steel, with 320,000 employees in over 60 countries, has merged the top two steel producers in the world, Arcelor and Mittal Steel.

SCMF: The French Steel Construction syndicate (Le Syndicat de la construction Métallique de France), the only national employers' organisation which represents the business, is above all a think tank and action centre for steel construction professionals. For over one hundred years, it has served as the focal point for construction and related environmental issues.

AFILOG: Afilog is a non-profit association which brings together players from the various logistics professions to discuss and solve their concerns related to the real estate approach and the operation of logistics platforms. A centre for dialogue between politicians, public authorities and local groups, Afilog seeks to provide greater awareness of logistics, to adapt regulations to reflect the changes in this major business area, and to promote best practices, with special emphasis on sustainable development.

GSE: GSE is an Engineering firm which created the General Contractor concept in the 1970's, forging an original approach which brings together every skill required for total turnkey real estate projects within the scope of a single guaranteed price and delivery contract. This concept has gained increased market share over the years due to its relevance, innovative vision and finely honed solutions it provides the corporations GSE has built for on the international scale. GSE builds 80% of its projects in the logistics sector, with the construction of 1 million m² per year. Active in 17 countries, GSE has recently opened its latest subsidiary in Russia, and plans strong international development with the creation of new subsidiaries and expanded staff by late 2008.