



Metal Structures Centre consolidates knowledge in Flanders

OCAS, UGent and BIL join forces in world class research centre

The research centre for the application of steel (OCAS) signed an agreement with the Ghent University (UGent) and the Belgian Welding Institute (BIL) about the erection of a Metal Structures Centre (MSC) at the Zwijnaarde Technologiepark. This new research centre will coordinate, consolidate and further develop the knowledge and competencies on the design, the use and the evaluation of the behaviour of steel structures of OCAS (a joint venture between ArcelorMittal and the Flemish Region), the Ghent University and the Belgian Welding Institute. As part of the "Steel friendly Flanders (Staalvriendelijk Vlaanderen)" project, MSC will develop specific know-how for the construction of cost-efficient and sustainable steel structures for energy generation (thermal power works, temperature resistant materials, windmills, etc.), energy transport (high pressure pipelines, ships, etc.) and energy storage (reservoirs). This know-how will particularly contribute to the development of competitive products showing a high added value to reinforce economy. The new centre of expertise will be operational by the middle of 2011 and comprises an important strengthening of a full offer with regard to material related research: well over 200 scientists and engineers performing research into the design, the production and the use of a large range of materials, with a focus on metals. This initiative will furthermore increase and revive the attractiveness of education in rather traditional university disciplines such as metallurgy, material's science and mechanical construction.

Unique research centre for sustainable energy technology

The Metal Structures Centre core competences guarantee the integrity of steel structures for energy, such as pipelines. Labo Soete of the Ghent University is world wide recognised as market leader in the development of safety criteria for welded constructions and the testing of full scale steel structures and pipelines. The Belgian Institute for Welding (BIL) is a driving force in the development of new welding methods for pipelines and the study of weldability of modern steel grades for energy pipes, tubes, pressure vessels, wind towers and shipbuilding. OCAS is a global R&D centre active - amongst other - in research on pipelines for petrol and gas transport, heavy plate for offshore constructions, high-grade energy pipes and the development of efficient electrical steel grades featuring extremely low losses.

This significant investment emphasizes the confidence in steel as a sustainable material for the future. The cross-exchange of existing knowledge and available equipment of Labo Soete, BIL and OCAS creates an important lever and contributes to the potential of applied industrial research in Flanders. Thanks to the utilization of the synergetic advantages, the Metal Structures Centre can develop into a leading laboratory in the field of performance and cost-effectiveness.

Knowledge embedding in Flanders

The Metal Structures Centre is part of the objectives to concentrate all research activities of material's science of the Ghent region at the Technologiepark. This geographical concentration of scientists and research infrastructure on the Zwijnaarde site will lead to a knowledge centre with international fame, aiming at breakthrough technologies of materials, their use and industrialisation.

The ultimate objective is to provide the full range of material technology: from modelling and nano-scale simulation, over planning and use of materials, to the integration in their application and the testing of final constructions. This enables both the University as well as the industrial partners to materialise a unique offer "from nano- scale to large scale real size structural testing".

In brief: the proposed collaboration will be a source of creativity and a cradle of innovation.

