

BIEVRES, FRANCE, October 03, 2013 **/24-7PressRelease/** -- Designed for structural engineers and professionals in the construction industry, GRAITEC Advance Structural BIM solution provides a complete environment for the development, design and production of all drawing and materials for steel, concrete, and wood structures.

GRAITEC Advance is a unique solution provider in the BIM field since it allows users to complete the entire structural process in a consistent environment, from finite elements analysis, to design according with the latest norms (Eurocodes, ACI, AISC...) and automated documentation production required for the fabrication: drawings, bills of materials and NC files.

GRAITEC Advance consists of three main structural software solutions: Advance Design, Advance Steel, Advance Concrete, completed with Advance CAD. The "BIM GRAITEC" main characteristic feature is related to its capability to perform structural analysis and fabrication documents under the same concept. More than 10000 users, working daily with GRAITEC Advance, are involved in the design process of various structures such as towers, stadiums, civil engineering works, industrial buildings, stairs, etc.

For Francis Guillemard, CEO of the GRAITEC Group: "An accelerated growth of over 30% in the last two years and more than 10000 new users who joined our community means that GRAITEC Advance is the reference of the BIM Structural field. An innovative, technology, that helps engineers and construction professionals, to design and build their projects within time constraints and increasingly stringent quality."

ADVANCE STEEL 2014: TAPERED BEAMS & IMPROVED ERGONOMICS

Advance Steel is specifically designed for steel professionals who require an easy-to-use 3D, powerful structural steel detailing software for automating drawing production, BOMs and NC files.

Among all new functionalities of version 2014, two major developments stand out: significant enhancement of tapered beams in Advance Steel and the continuous investment in the ergonomics and ease of use refinements of Advance Steel.

ADVANCE STEEL 2014: WELDED TAPERED PLATE BEAMS

On a continuous growing market

in the emerging countries that invest more and more in their infrastructure, the use of tapered elements for steel structures increased, especially for portal frames having large spans. However, without dedicated tools to complete large and complex steel projects, the design process can take longer. Advance Steel 2014 provides valuable assistance to all designers with a very comprehensive set of features: a new object, "tapered beam", which allows the user to define elements having a variable cross section, including the possibility to combine different constraints on each segment (fixed or variable lengths, parallel flanges or not, etc.).

Moreover, the user has the possibility to define tapered elements having a hollowed cross section with many options: continuous web or flanges, automatic welding features, etc.

All automatic connections work together with this new object - tapered beam. Thus, with Advance Steel 2014 users will obtain quickly all required drawings, BOMs and NC files for these steel members.

ADVANCE CONCRETE 2014: PERFORMANCE & ENHANCED PROFESSIONAL EXPERTISE

Advance Concrete is specifically designed for structural engineers and reinforced concrete detailers who require professional and easy-to-use 3D BIM software for automating drawings creation.

With increased performance, Advance Concrete 2014 improves the user efficiency experience, especially when it is used on its integrated CAD platform. It also provides several functional changes in response to user requests.

ADVANCE CONCRETE 2014: IMPROVED PERFORMANCE Two of the key features of Advance Concrete (Multi File data storage and multi CAD platform) have been at the heart of version 2014. Performance and robustness have been brought in these two areas: the time to create new views and updating of existing views, has been largely optimized. More improvements in performance, which are very significant, are available: faster reinforcement elements renumbering in complex cases faster "3D Copy" feature which allows the users to copy the 3D reinforcement of an element in all corresponding views with its identification, symbols and associated dimension lines. Lastly, required corrections were made in Advance Concrete, with the target to deliver more stability and significantly higher robustness for

Advance Concrete 2014.

ADVANCE DESIGN 2014: BIM AND EXTENDED DESIGN

Advance Design is specifically dedicated to structural engineers who require a professional and easy-to-use BIM solution for structural FEM simulation and optimization according with specific design standards (Concrete, Steel or Wood).

Advance Design 2014 has many new features and improvements, mainly focused in two directions: BIM and the enrichment of design capabilities.

ADVANCE DESIGN 2014: BIM SIMPLIFIED EXCHANGES In a context where all structural designers are increasingly receptive to the BIM concept and its associated gains in terms of productivity and safety, Advance Design 2014 provides a set of new features designed to facilitate the BIM exchange in the design offices structure or between the architects and the design offices. The model which is used for structural simulation by the engineer can be a variation of the geometrical model produced by the architect which, in the end, can be significantly different: the elements are coplanar, intersecting axes, the elements extremities which are too close are merged, small details of the facade are not modeled, etc.

Advance Design 2014 offers a range of tools that allows the engineer to greatly simplify the processing of geometrical models into analytical models.

The principle: a first audit function identifies non-intersecting axes or nodes which are too close and presents an interactive list of errors. The software then provides automatic adjustment features (magnetic modes, quick projection onto a plane, axis adjustment, etc.) which facilitate the correct geometrical conversion of the models provided from different partners.

After the calculation of the structure, when the elements are optimized, Advance Steel and Advance Concrete can retrieve all changes which took place in Advance Design (synchronization mechanism) and update the assembly plans or fabrications drawings. With Advance Design 2014, the aim is to enable the engineer to save a significant amount of

modeling time by reusing the information through BIM expertise, while keeping in control the necessary adjustments to achieve the analytical model.

About GRAITEC

Founded in 1986, GRAITEC is a major software developer for civil engineering offering a Building Information Modeling (BIM) system that automates the entire structural process. Used by more than 40,000 professionals worldwide, GRAITEC solutions have helped in creating outstanding projects: Cœur Defense tower, Stade de France stadium, Cairo Subway, Düsseldorf International Airport, Băneasa Shopping City in Bucharest, Milano Fair, etc. The GRAITEC Group has more than 260 employees working in 14 companies (France, Germany, Italy, United Kingdom, Czech Republic, Romania, Russia, Singapore, India, Canada and USA). GRAITEC also manages an international network of more than 40 resellers. For more information, please visit <http://www.graitec.com>