ADVANCE Design 2010
SP2
What's new

GRAITEC ADVANCE

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This service pack of ADVANCE Design 2010 includes 400 improvements and several corrections.

The most significant improvements are:

General application

- Correction of a problem: the model was not completely displayed when the "Structure" in the Pilot was double clicked.
- Correction of a problem: the "Loads auto-scale" function was canceling the linear loads on which the "Cut" command was previously applied.
- Correction of a problem: the "Compact" option did not function for models which had capital letters in their name.
- Correction of a problem of the automatic defined epure when creating an arbitrary cross section.
- Correction of a problem: the "Cut" function applied on windwalls was affecting all the windwalls of the model.

Finite elements calculation

- Improvement of the allocated memory for the models with a significant number of loads (punctual, linear or planar).

Post processing

- It is possible to post-process (through the calculation report) the masses and the inertia center position of each floor of the building.
- The tables of absolute concomitant envelopes and signed concomitant envelopes of the envelope effort on the supports are functional.
- Correction of a problem: the crash that occurred during the save of an analysis model view.
- A crash during the temporal analysis was eliminated.
- The "Section stresses" function gave incorrect results for a clip angle with bending.
- Correction of a problem: some of the efforts diagrams were disappearing when updating a saved view.
- The size of the databases during the launch of several successive analyses was optimized.

BIM

- The load case number is written in the BIM file, together with the name and the nature of the load case.
- The BIM export saves the load combinations.

Documents

- A new tab, “Other Documents”, was added in the “Report Generator”. It allows the insertion of external documents (for example, connection reports created using ADVANCE Steel).
- Correction of a problem that made the generation of the “Modal masses and seismic accelerations” table impossible in certain conditions.
- At the creation of the result tables, it is possible to display a column which contains the name of the load case.

Import / Export

- The incorrect cross sections (with one or more null dimensions) are impossible to import.
- The compound cross sections can be exported to EFFEL Structure.
- When importing in an ADVANCE Design model (which has no defined load cases) a model from EFFEL Structure, the load combinations defined in EFFEL Structure are also imported.
- Correction of a problem: the crash when analyzing a model imported from EFFEL Structure.

Eurocode 1

- The snow accumulations are modeled by default as planar loads, instead of a sequence of linear loads.
- Table 7.4a of EN 1991-1-4 has an error which was generating an incoherent wind load for certain corners of the roof. The error had been corrected in the current version of ADVANCE Design.
- Correction of a problem: a crash occurred when the wind and snow loads were automatically generated on a complex model.
- Correction of a problem: the “Description of climatic loads” table contains information regarding the snow loads.
- In the earlier version, some of the accidental loads combinations were not generated.

Eurocode 3

- In the current ADVANCE Design version, the sections torsion is verified in conformity with Clause 6.2.7 of EN 1993-1-1.
- The shape sheet provides more information about the cross section flexure.
- Correction of a problem that occurred when selecting the buckling curves for the steel elements stability analysis.
- The optimization of linear elements with tubular cross section is possible.
- The automatic optimization of “I” shaped profiles has been improved.

Eurocode 8

- The automatic calculation of damping has been improved.

Snow and Wind 2009

- Correction of a problem where creation of custom pressure or wind speed was impossible in certain conditions.

BAEL

- Implementation of the “Loads application date” parameter, with the following options: “More than 50% loads applied before 90 days”, “Majority of the loads applied before 28 days”, “Another case”.

CM66

- Correction of a problem: the shear stress verification did not appear in the shape sheet document.