What's New

ADVANCE DESIGN

2021.1.1

GRAITEC

Improvements and corrections

The **hotfix 1** to **Advance Design 2021.1** includes the following corrections:

Loads

- **Fix**: Correction of the default value of the Shape parameter K (available on the property list of the wind load cases family) for the selected French National Annex to EN 1991-1-4 (Wind). [20539]
- **Fix:** Correction of the problem with the lack of possibility to edit the behavior coefficient for modal analysis (K) if the RPS2011 standard was set for seismic calculations. [18941]
- **Fix**: Correction of the problem with non-working option for activating orthogonal directions for seismic combinations according to Canadian NBC2015 code. [21118]
- **Fix**: Correction of the problem with non-working button for export of load combinations to Excel in the case of US/CAN codes.
- **Fix**: Correction of problems with the load combination wizard in the case of the Canadian code.

Timber Design

- **Fix**: Correction of the problem with displaying in a report with the shape sheet different results of the verification of deflections than on the shape sheet dialog. The problem was visible on timber or steel elements that were recalculated on the selection. [21131 (Support 18817)]

Steel Design

- **Fix**: Correction of the problem of showing incorrect strength in the EC3 shape sheet for steel elements, for super elements made of two materials. [20972]
- **Fix**: Correction of the problem with the lack of chain optimization (showing results from the first iteration) when optimizing steel elements. [21037]
- **Fix**: Correction of the problem with missing data on the table with suggested shapes for steel elements for superelements. [20999]
- **Fix**: Correction of the problem with displaying many error messages about a missing node under the intermediate constraint point in case of superelements. [20548 (Support 18195)]
- **Fix**: Correction of the problem with incorrect type of internal forces used for classification of steel sections (according to the Canadian code CSA S16) if bending and axial efforts exist. [21075]
- **Fix**: Correction of the problem with incorrect effective area of rectangular HSS on calculations according to the Canadian code CSA S16. [21075]

Reinforcement Design

- **Fix**: Correction of the problem with hidden option for punching verification in the Calculation settings for the selected Canadian CSA code. [21103]
- **Fix**: Correction of the problem with unexpected program termination when the punching shear check for North America codes is set. [#3930]

RC Design modules

- **Fix**: Correction of the problem with incorrect export of loads to RC Beam module from the Advance Design model in case of gaps in numbering of load cases. [21101 (Support 18785)]

- **Fix**: Correction of the problem of automatic assignment of the ductility class in RC Design modules, despite disabled seismic settings in templates. The issue was visible for RC beams, RC columns and RC walls opened or exported from the Advance Design model. [20797 (Support 18450)]

Other

- **Fix**: The 'Tolerance for vertical elements' parameter, available on the Advance settings of the Display settings dialog is now saved with the model. [21080]
- **Fix**: Correction of the problem with blinking cursor when moving over the view of the structure and the related problem with fast graphic selection using the window. [20907,21032 (Support 18554,18676)]
- **Fix**: Correction of a problem with temporary blocking of the cursor that sometimes occurs after using panning or rotating the view. [21124,21031 (Support 18741,18676)]
- **Improvement**: Von Mises stresses (Sv) are added to the 'Envelopes of envelopes of linear element stresses' report table. [20993]

Envelopes of envelopes of linear elements stresses (local coordinate system)								
Env.	*Load case*	*Mesh No.*	*Node No*	*Sxx(MPa)*	*Sfxx(MPa)*	*SMxx(MPa)*	*Sxy(MPa)*	*Sxz(MPa)*	*Sv(MPa)*
Max(Sxx)	2	1.1	1	32.74	-0.03	32.77	-0.34	0.58	32.81
Min(Sxx)	2	1.1	1	-32.79	-0.03	-32.77	-0.58	0.34	32.81
Max(Sfxx)	2	1.4	9	4.04	0.10	3.94	0.12	0.11	4.06
Min(Sfxx)	2	2.3	8	-5.30	-0.38	-4.92	-0.18	0.06	5.33
Max(SMxx)	2	1.1	1	32.74	-0.03	32.77	-0.34	0.58	32.81
Min(SMxx)	2	1.1	1	-32.79	-0.03	-32.77	-0.58	0.34	32.81
Max(Sxy)	2	1.4	9	4.04	0.10	3.94	0.12	0.11	4.06
Min(Sxy)	2	1.1	1	-32.79	-0.03	-32.77	-0.58	0.34	32.81
Max(Sxz)	2	1.1	1	32.74	-0.03	32.77	-0.34	0.58	32.81
Min(Sxz)	6	3.1	9	-2.36	-0.04	-2.32	0.00	-0.30	2.42
Max(Sv)	2	1.1	1	32.74	-0.03	32.77	-0.34	0.58	32.81
Min(Sv)	1	1.1	3	-0.17	-0.12	-0.05	0.00	-0.01	0.18