

RSX

Framework

The english version of the RSX manual will be available in Q3/4 2021. Until then please have a look on the [german version](#).

The program "framework" has been completely redeveloped and is now available to all customers under the program code RSX. The additional options steel and wood and concrete are available for the design.

Easy handling

- Assistant for parametric writable systems
- Fast and secure input via tables
- Direct input via Interactive graphics
- Unlimited undo / redo over all features - this feature allows you to work fluently without queries from the program

Excel & DXF

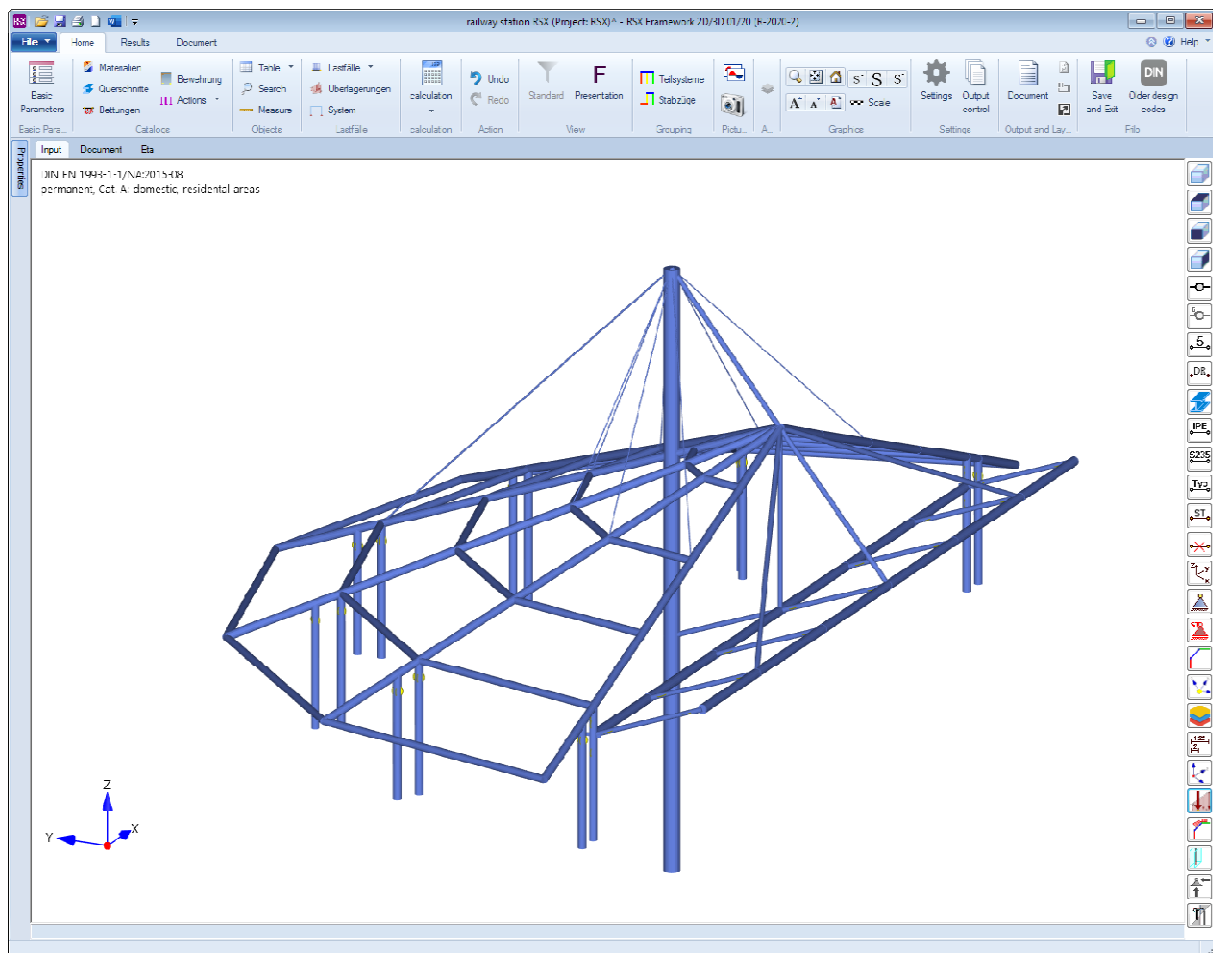
- Basic geometrical data can be read via Excel and DXF
- Powerful functions for all properties and loads directly in the context-sensitive graphics

Cross section database

- Extensive database for cross sections included
- Self-defined cross sections in all variants
- Integration of cross sections from the program Q3 with graphical depiction

System input

- Input of the geometrical dimensions via table or via import of an Excel table
- Bars are entered via projections, with the properties of new members already predefined - by this means the finished system can then be brought to the desired values with just a few mouse clicks
- The various possibilities of selecting elements or entire objects by click, rectangle or cumulatively allows a time-saving processing of properties as a group



Subsystems

For a better overview of large systems, members can be structured in subsystems. Each subsystem can be switched invisible or can be set inactive in the background.

Calculation

All common calculation methods implemented.

- Theorie 1. und 2. order
- Analysis of bifurcation points for buckling loads
- Analysis of eigen vibrations and failure of bars under different conditions
- Considering bar- and bedding failure
- Automatic superposition that works reliably even with a relatively large number of load cases

Calculation options: the standard calculation is done with automatic superposition and dimensioning. Before calculating additional calculation options are displayed and can be adjusted.

After a calculation with dimensioning, RSX changes to the result representation and displays the elastic / plastic utilization from the maximum values of all superpositions.

BTII+ Interface for steel

For an precise definition of the proof of stability, there is the interface to the program Lateral Torsional Buckling Analysis BTII+. This requires the additional option RSX-ST or the license for the BTII+ program.

Output / results

- Extensive graphical evaluation options.
- Clear results in graphic shape and a compact output with the most important data.
- Variable output scope.

Additional options

RSX-M-S Material Steel

RSX-M-H Material Timber

RSX-M-B Material Concrete

RSX-3D 3D-Calculation

With this option you can calculate three-dimensional systems.

RSX-P Load entry with panels

RSX-ST Stability

As an additional option to RSX, automatic verification of stability is also available.

With automatic stability verification, the proof of lateral buckling and lateral torsional buckling is determined for each individual bar with the load and the internal edge forces from the decisive superposition. The bar is held non-sway at both ends with a fork support.

RSX-DY Dynamic

The option RSX-DY allows the calculation of the dynamic eigenvalues and eigenmodes. For this calculation, the loads can be provided with an option "Mass". Loads without the "mass" option are not taken into account in the calculation. The first 10 eigenvalues are calculated per load case - this number can be set.

