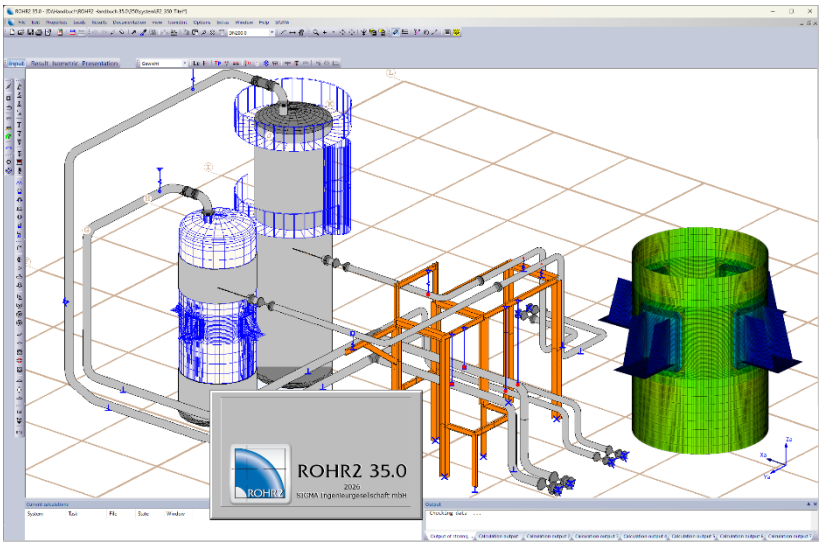
ROHR2

Program System for Static and Dynamic Analysis of
Complex Piping and Skeletal Structures

ROHR2 35.0
April 2026
New Features and Improvements

The program system ROHR2 with its additional modules is checked and modified continuously within the scope of the maintenance agreement.
The program release ROHR2 35.0 replaces the ROHR2 34.1 release.
This document shows the improvements and enhancements of the program release ROHR2 35.0:



Overview

- New components introduced: heat exchanger, platform and ladder
- Lug analyses according to EN 13480-3 can be carried out directly in ROHR2, if the corresponding PROBAD module has been licensed.
- Enhanced import capability for CAD data.
- REVIT interface added.
- The ROHR2fesu FE analysis is completed by the component bracket.
- Completely revised help functions and documentation of the stress analysis dialog.
  The context sensitive help now shows detailed information about the currently selected standard.

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ROHR2 35.0, Modifications and Improvements in detail

Update of stress codes

Title	Content, keywords and source	Edition
ASME B31.1	Power Piping ASME Code for Pressure Piping, The American Society of Mechanical Engineers, New York	2024
ASME B31.3	Chemical Plant and Petroleum Refinery Piping ASME Code for Pressure Piping The American Society of Mechanical Engineers, New York	2024
ASME B31.8	Gas Transmission and Distribution Piping Systems ASME Code for Pressure Piping The American Society of Mechanical Engineers, New York	2025
ASME CL1	NB-3600 "PIPING DESIGN" in ASME-BOILER AND PRESSURE VESSEL CODE SECTION III SUBSECTION NB CLASS 1	2025
ASME CL2	NC-3600 "PIPING DESIGN" in ASME-BOILER AND PRESSURE VESSEL CODE SECTION III SUBSECTION NC CLASS 2	2025
ASME CL3	NC-3600 "PIPING DESIGN" in ASME-BOILER AND PRESSURE VESSEL CODE SECTION III SUBSECTION ND CLASS 3	2025

General

- Saving and loading have been sped up, especially for large models. saving, only the *.r2w project file is written; *.inp data for the respective tasks is written only for calculating, but only for the tasks that are actually being calculated. As before, all input files can be saved via an additional menu item under “File.”.
- The positions of dialog boxes are now always saved relative to the main window
  -> After moving the main window, the positions remain relative to the main window.

User interface in general

- The help function for the Stress Analysis dialog has been completely revised.
  Detailed information about the selected calculation standard is now displayed..
- Management of client and contractor data is now supported.
  CSV files are available as “databases” for clients and contractors, in which frequently used data can be stored. New placeholders for this data have been added to the report.
- The corrosion allowance is now “c0” in accordance with EN 13480-3 and no longer “c2”
- The corrosion allowance can be assigned to selected regions.
- The Segments Parameters dialog has been expanded to include additional information on soil restraint.
- Additional function in the Segment dialog to display material properties and allowable stresses for all temperatures defined here.
- Access to the Material dialog is now also available via the context menu (right-click)
- Calculation data is now displayed in the Segment dialog.
- List data:
  - Added a list of all types of support constructions
  - Added a list of stiffening rings
  - Boundary conditions: Coordinate system directions can be displayed
- Component names: The text from the code is now displayed as the description.
- Soil restraint data can now also be used as text macros.
- Soil restraint: Expansion cushions are now managed as separate objects.
  This eliminates the need for additional definition of soil restraint data for areas with expansion cushions.
- Supports can be saved in the database via a dialog box.
- Online help is now displayed in the default browser.
- In the single line display, you can now select the information to be displayed for each segment.
- Free text can now also be assigned to all or selected nodes in the highlighted area (similar to text templates).
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Components

- New component “Heat Exchanger” (primarily for PROBAD export)
- New component “Platform” (stability analysis for vessels)
- New component “Ladder” (stability analysis for vessels)

Loads

- Wind loads: a selection for roughness acc. to the standard (DIN 1055, EN 1991) was added

Calculation

- The internal pressure analysis now is processed by the PROBAD calculation core.
- HotTapping: an additional option for the linear calculation of the pre-run was added (only thermal and pressure expansion), to avoid having to model any installation supports that may be required
- Equivalent pressure are flanges: Determination of the additional forces can be done according to EN13480-3 (default starting with ROHR2 35.0) or EN1591
- Calculations can be suspended.
- For soil restraint pipes, the check of limit states according to EN 13941 can be optionally disabled for each load case.
- f a stress analysis is not performed for the entire model or if materials are user-defined, a corresponding message is displayed.

Extreme Value Calculation

- The option "support mass" was added for the sections.
- The manual superposition has been simplified.
- A detailed explanation of the superposition operators has been added to the dialog box.
- Individual superposition data records can be copied and pasted using the clipboard.

Lug analyses

- Lug analyses according to EN 13480-3 can be carried out directly in ROHR2, if the corresponding PROBAD module has been licensed.

Results representation

- The results of the spring design are now displayed directly in the spring dialog box.
  Travel positions are indicated by an additional symbol.
- The results of the spring design are now also displayed in the list.
- The results of the expansion joint analysis are displayed directly in the component dialog box.
- Lifting supports and hangers with compressive loads can be marked with an icon in the results mode.
- In the results mode, an overview of the maximum utilizations for all equations in the current stress analysis can be displayed.
- Display of the associated coordinate system for boundary condition and segment results
- In the beam model, the maximum utilizations of the substructures can be displayed; ROHR2fesu equations are available.
- The list of results for support loads now includes additional icons for the utilization of allowable loads (similar to flanges).

Documentation/ Calculation Report

- Report generation has been switched to the docx format.
  Existing report templates in RTF format are still supported.
- The full report for substructures has been revised:
  There is now a template for the full report and specific templates for the sub-reports, which are then inserted into the full report.
  This now makes it possible to generate a continuous table of contents and to insert additional, general content at the top level on a one-time basis.
- Changes to the global data in report.cfg (formatting of text modules for the report) are automatically merged into the local data in report.cfg.
- The initialization of report data has been significantly accelerated.

Interfaces

- CAD Data –Import generally:
  - A mapping function for standard designations has been added; for standard flanges with missing nominal pressure data, the system now searches for a nominal pressure class that matches the mass.
  - The “Branch” component is now taken into account.
  - A reinforcement pad on tees and branches is now taken into account.
  - For pipe joints, the mass is taken into account.
  - For pipe dimensions, any specified pipe class is now always taken into account as information (even if no pipe class data was considered).
- PCF Import:
  - The flange type is set based on SKEY.
  - For COUPLING and CLAMP, pipe joints are imported based on SKEY.
  - TEE-ST_ON and TEE-STUB are now transferred as branch components.
- Export CII: When exporting to the CII format, the version can be specified (11.0, 5.3, or 4.5).
- A Revit interface has been added.

ROHR2fesu

- The bracket component has been added.
- Internally, separate stress analyses are performed for each substructure. Specific settings for analyses can now be configured directly within the substructure.
- Only one analysis for membrane stresses is now performed; local areas are determined automatically (if possible).
- It is now possible to export support structures support feet, lifting lugs, supports skirts, and lugs from the beam model.
- When exporting tees and branches from the beam model, reinforcement pads and internal projections are now taken into account.

ROHR2iso

- The distances for dimensioning with volume display are now measured from the outer edge of the pipe.
- Substructures are included in the part list.

Licensing

- If you encounter licensing issues, you can generate a report from the License Manager and, if desired, send it to Support. The report can be viewed under Help Info

Additional functions

- ROHR2 allows to convert pipe classes from *.r2pc (ROHR2press) to *.pcex
- Automatic conversion to internal supports:
  - Angulating supports with a non-vertical support direction are optionally taken into account.
  - Selected changes can be reverted in the dialog box.
- A “Generate supports on grid” function has been added; multiple grids can be generated and managed.
- Export of the presentation mode in GLTF-Format.

Development, Sales and Support

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