

Release Notes

RTpipe - Buried pipes



Version 18.0

Build	Module	Description	ID
16.05.18	Design	When generating the interface file for the design with NaZwei it could happen, that the file path was read-only (installation directory) and that this caused the termination of the design.	12609
24.04.18	Input	A user-defined elastic modulus - differing from the specification in the DWA-A 127 with $E4 = 10 \cdot E1$ - can be specified for the soil below the embedment.	12517
11.04.18	Analyses	The implementation of the partial safety concept for the design of the pipes will be included in the newly revised DWA-A 127, which is why it has been implemented. The approach of the safety concept as well as the values of the partial safety factors can be modified by the user.	12464
20.03.18	Input	Wrong coefficients of the young's modulus were set for the pipe type 4.0 (cast iron pipe) in the automatic calculation of the characteristic pipe values according to ATV-A 127.	12406
28.02.18	Analyses	In addition to the modifications to the guideline DWA-A 127, also the current extension for the design of fluidized soils has been included. Besides the extension of the load and calculation approaches for temporarily, self-compacting infilling materials (ZFSV), also new analyses have been added for these pipes. These include the analyses for the flowability and the tendency to segregate as well as analyses for the self-compaction and a possible re-excavation.	11233
28.02.18	Analyses	For the fatigue, respectively, service strength analysis the admissible stress can/must be specified in the pipe special cases now. A required safety of 2,0 in the fatigue strength analysis is additionally checked in the case of a train load. Table 22 of the DWA-A 161 (admissible stress range) is only decisive for the load case train load and is thus considered automatically.	9909
28.02.18	Calculation	The embedment condition B0 can now be selected and calculated for arbitrary trench cross-sections.	12017
28.02.18	Design	An arbitrary user-defined limiting stress for the tensile bending strength (adm.Beta.BZR) can be specified for steel pipes under "Special cases", without internal reductions of this admissible stress.	12150
28.02.18	Design	An error message is now issued, if the bending moment can not be absorbed in one of the three examined cross-sections. In these cases, no convergence is possible with the selected reinforcement layout for the incorporation of the design stress resultants.	12019
28.02.18	User interface	When opening older files with the ATV-A 127 as standard, the additionally required specifications according to DWA-A 127 now have default values in order to enable a calculation.	12096

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Version 17.0

Build	Module	Description	ID
13.07.17	Input	The range of values of the partial safety factors for permanent and variable actions has been extended for the consideration of the increased safety level from the regulations of the DWA-A 142.	11578
13.07.17	Input	The modulus of deformation of the natural soil (E3) can now be specified by the user without automatically comparing it with the filling soil (E1) or the supporting / restraining soil (E2). For doing so, the user-defined value of E3 has to be entered with a negative sign.	11577
13.07.17	Analyses	When using the new design guideline DWA-A 127, the admissible equivalent pipe stress has been issued too low by the power of ten.	11575
20.03.17	General	Now, also the earth covered pipes have been adjusted to the requirements of the European standards for the calculation and design. The following enhancements for the guideline DWA-A127 have been made: <ul style="list-style-type: none"> • Introduction of the safety concept with partial safety factors for the action effects and resistances according to European standard • Update of the material coefficients according to DIN EN • Adjustment of the traffic loads to DIN EN 1991 with up-to-date load models • Extensions for railroad and plane loads • Newly composed internal force calculation • Revision of the stress and strain analyses • Additions in the fatigue analyses • Revision of the stability analyses • Additions for glass-fiber reinforced plastic pipes • Adjustments to the newest standard generation of Eurocodes and the ability to run under Windows®10 • Analyses for circular and egg-shaped pipes with/without a base • Varying wall thickness in the abutment, crown and base • Fatigue analysis according to DIN for calculated stresses in the cracked state for traffic or plane loads with $2 \cdot 10^6$ or for railroad loads with 10^8 load cycles as default • Calculation of the filling loads as well as traffic loads for standard vehicles, railroad traffic and design airplanes • Consideration of soil stresses from dead load as well as from the filling loads depending on the covering / pipe diameter 	10861
20.03.17	User interface	The partial safety factor γ_{a,s_fat} was limited to a maximum of 1.4, instead of 2.0.	10919

Version 16.0

Build	Module	Description	ID
10.02.16	General	Program modifications for the compatibility with Windows 10 .	9527
10.02.16	Design	Table 6.3 DE in the national annex of DIN EN 1992-1-1/NA is to be used for the fatigue strength curve in the fatigue analysis for reinforced concrete pipes under DIN 1045-1 and DIN EN 1992-1-1. The line "geschweißte Stäbe und Betonstahlmatten (welded bars and reinforcing steel mesh)" is valid.	9627

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Version 15.0

Build	Module	Description	ID
14.04.15	Calculation	Was a calculation process terminated unexpectedly then it was still active in the background and no further calculations could be started. The process could only be closed via the task manager. With every start of a calculation a possibly open calculation process is automatically stopped.	8587
14.04.15	Output document	The result list did not contain any page breaks after the call up of the function "Direct call up of RTpipe file".	8441
04.03.15	Calculation	A *.ror file can now be called and calculated directly from the graphical user interface. With this it is still possible to edit and calculate a *.ror file outside of the user interface with an editor.	7862
04.03.15	Calculation	After a change of the loading type and an anew calculation, the program no longer reacted to inputs until the RETURN key was pushed. The window "Prompt", which usually appears after a calculation, was invisible.	8535

Version 14.0

Build	Module	Description	ID
03.09.14	Input	During the second calculation of a project (Calculation -> Calculation + List), sometimes the error message <i>Open error of file _ROHR.lis</i> was displayed. This has been corrected, so that multiple calculations are now possible.	8319
03.09.14	Output document	The result list always issued the line "Input file: _ROHR.ROR" and not the correct file name.	8320
03.09.14	Output document	For reinforced concrete pipes with relatively thin wall thickness and single-layer reinforcement layout (i.e. with small statically effective thickness), a too small statically required reinforcement was printed when using newer reinforced concrete standards (from DIN 1045-1 and EC2 standards). Double-layered reinforced concrete pipes, however, were generally calculated correctly.	8292
03.09.14	User interface	The steel grades and concrete qualities were no longer displayed and couldn't be set anymore after switching from, for instance, double layer to single layer in the dialog "Reinforcement reinforced concrete pipes".	8322
17.01.14	General	The graphical input is opened when double-clicking the input file (*.ror).	7468
17.01.14	General	The installation of ROHR is carried out independently and no longer together with DURO.	7345
17.01.14	User interface	Editing the input data via the data types can be started directly from the graphical interface. This functionality was only available via the navigator so far.	7470
17.01.14	Input	When entering "-" for the stress resultant factor in the input line EINB this factor was imported incorrectly. The stress resultant factor and the possible driving can now only be specified in the dialog, when the bedding requirement B2 or B3 is set.	7284

Version 13.0

Build	Module	Description	ID
06.11.13	General	Program maintenance and support	7276
03.04.13	General	Now, the release notes are available in English .	6446
03.04.13	General	Program modifications for the compatibility with Windows 8 .	6357
03.04.13	Design	The reason for the error message <i>Freigabeverletzung beim Zugriff auf <Pfad>\Rohr.lis</i> has been resolved.	6587
03.04.13	Design	The text of the admissible stresses has been adjusted in the printout of the short term analyses.	6090