

# ROHR2

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

## ROHR2 Update 30.3c, July 2009 New Features and Improvements

The update of the Program System ROHR2 by software releases is an essential component of the maintenance agreement. The software is developed continuously. The adaptation to the current version of the implemented norms and databases has highest priority for the user. These are the significant changes and enhancements of ROHR2 since Service Release 30.3b/ December 2008:

### ROHR2 30.3c, Changes and Improvements, detailed

#### ROHR2win

- The input of point loads of the type deformation breaks/local rotations is now independent of the line topology.
- The CII import interface has been revised.
- The function 'Extras - determine length of the selected segments' displays now also the mass of the selected region.
- Soil restraint: the discretization in the bend regions was optimized
- Static earth quake with characteristic curves for accelerations:  
If only a part of the system is loaded a warning is printed out now.
- Assigning spectra to selected regions: the spectra combination is now assigned to the anchor points at shock absorbers and visco dampers, too.
- the automatic generation of the topology was optimized
- User defined names for structural sections are now checked for validity after inserting the name.
- The data bases for tee's reducers, bends and caps were extended with data from EN 10253-2
- The internal pressure analysis for bands acc. to AD 2000 B1 was implemented

#### ROHR2

- RR-Task/Spring Hanger Design:  
The default hanger length now has been decreased to 100.001 m
- RR1-/RKD-Task:  
Now the hanger table will be printed in the .out file (similar to RRN-Task).
- RKE-Task (dyn. earthquake): CQC: Run Time has been optimized.
- RRH-Task: Automatic purification in RRH-Task adjusted.
- RSR-Task (Stress analysis):  
Corrections in KTA 3211.2 A2/A3:  
In the equations (8.5.81) of level A,B,C and D (S2,S2C and S2D with SIF) now the RP02 stress limitation of Equation (8.5.80) is deactivated (see chapter 8.5.3.3, 8.5.3.6 und 8.5.3.7).
- Stress analysis due to FDBR, EN13480:  
The allowable stresses in the equation considering the range the factor  $Y$ -Modulus\_Warm/  
 $Y$ \_Modulus\_Cold now will be taken as a maximum from the range load cases.

## ROHR2 30.3c, Manual modifications

### **ROHR2stress manual**

- 1.1 Stress rules - Overview
- 3.2.9.1. Correction
- 11.1.1 Equation corrected
- 11.1.2 Equation corrected
- 11.2.3 SPI Parameter P
- 21.2.3 SPI Parameter P
- 22.2.3 SPI Parameter P
- 23.2.3 SPI Parameter P
- 24.2.3 SPB Parameter P
- 32.2.1 RSR Parameter VERS
- 33.2.3 SPB Parameter P
- 34.2.3 SPI Parameter P
- 35.2.3 SP8 Parameter P
- 41.2.3 SPB Parameter P
- 42.2.3 SPB Parameter P
- 43.2.3 SPB Parameter P
- 44.2.3 SPB Parameter P
- 71.2.3 SPB Parameter P
- 72.2.3 SPI Parameter P
- 74.2.3 SPB Parameter P
- 75.2.3 SPB Parameter P
- 76.2.3 SPI Parameter P

### **ROHR2win manual**

- 4.2.20.3 Nozzle, corrected
- 4.12.8 Info

### **ROHR2basic manual**

#### **r2basic manual part 1:**

- 10.9.11.2 AR, ARK revised.
- 11.1.5 Internal pressure, bending
- 32 Joukowsky, revised

#### **r2basic manual part 2:**

- 71.2.1 RRE addition

### **r2install Document**

- 7. Unlocking of expired licenses, Network licenses

### **ROHR2 Tutorial**

- Tutorial completely revised

Find changed pages on the program CD or on the ROHR2 FAQ page.

The following feature list includes details about program development and enhancements of ROHR2. Please contact us for more information or a program offer.

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