

# RFEM 5

Powerful, Easy, and Intuitive

Enjoy  
Structural  
Analysis

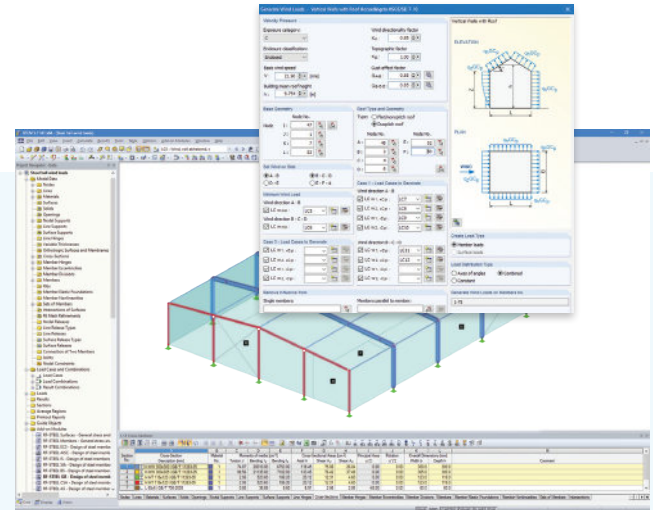
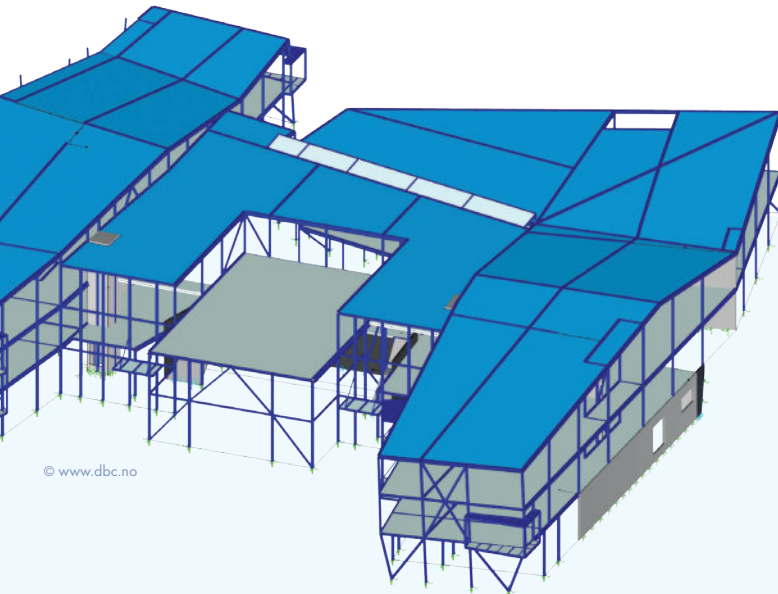
## 3D Finite Element Analysis Software for All Industries

- Concrete structures
- Steel structures
- Timber structures
- Aluminum structures
- Glass structures
- Tensile membrane structures
- Laminate structures
- Dynamic analysis
- Bridges
- Power plants
- Tanks and silos
- Piping systems
- Mechanical engineering
- Industrial engineering



Software for Structural  
and Dynamic Analysis

# RFEM - Powerful & Intuitive 3D FEA Software

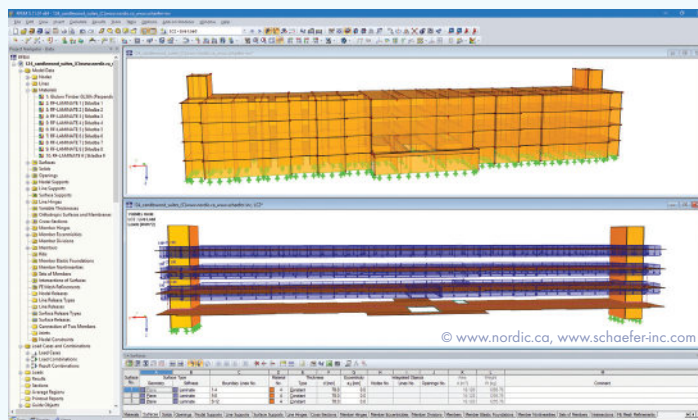


## ▲ Universally Applicable

- Structural analysis of structures consisting of steel, concrete, timber, CLT, aluminum, glass, or combined materials
- Current USA, Canada, and international design standards
- Static and dynamic analysis
- Linear and nonlinear analysis

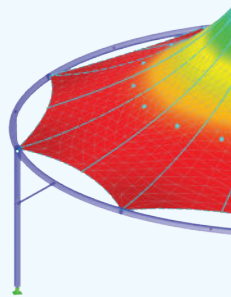
## ▲ Useful Generation Tools

- Structure generators including loads (e.g. continuous beams, frames, 3D halls)
- Wind and snow load generators according to the USA and other international standards
- Parametric input of frequently recurring systems



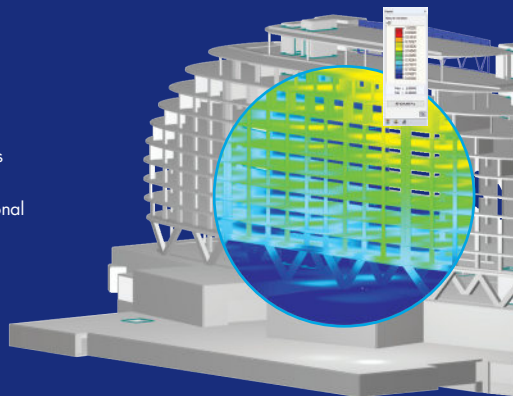
## ◀ Intuitive Graphical User Interface

- Quick induction into the software
- Quick and efficient structure and load data input
- Graphical or tabular model input
- Direct import/export of data tables to Microsoft Excel
- High-quality visualization of the structure and loads

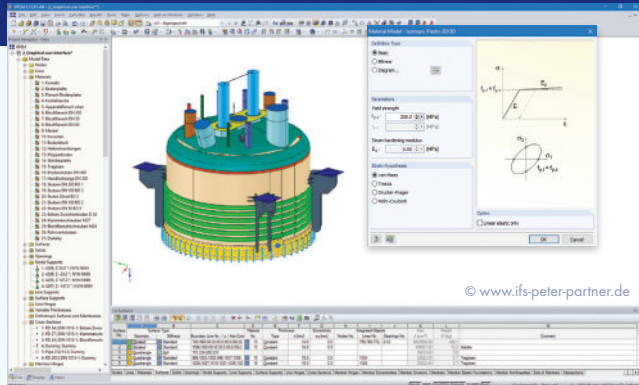


# Dynamic Analysis

- Analysis of natural frequencies
- Seismic design according to USA, Canada, and international standards
- Linear and nonlinear time history analysis
- Multi-modal response spectrum method

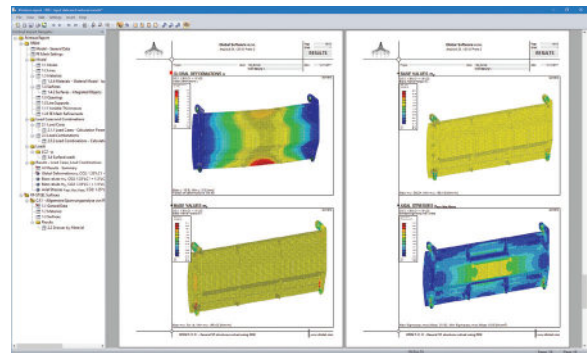
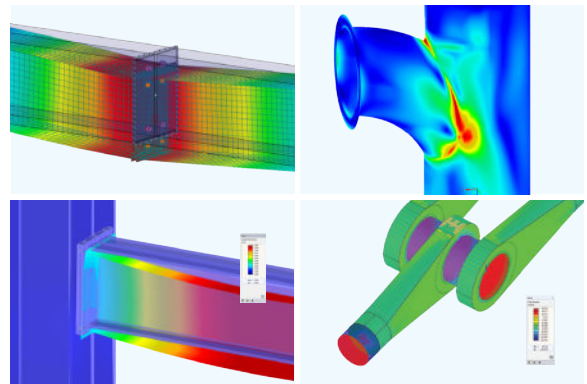


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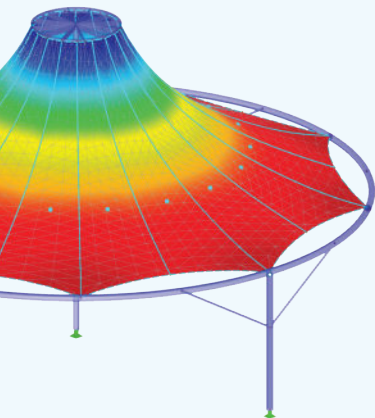
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## Surfaces and Solids



## Modeling Supporting Structures

- Member, surface, and solid elements
- Support, member, and release nonlinearities
- Couplings and eccentricities for members and surfaces
- Nonlinear material models (plastic, thermal-elastic, etc.)



## Form-Finding and Generation of Cutting Patterns for Membrane Structures



## Powerful Printout Reports

- Interactive table of contents
- Manual or automatic printout (mass print) of graphics
- RTF or PDF file export
- Global printout templates
- 13 languages available (independent of the input language)

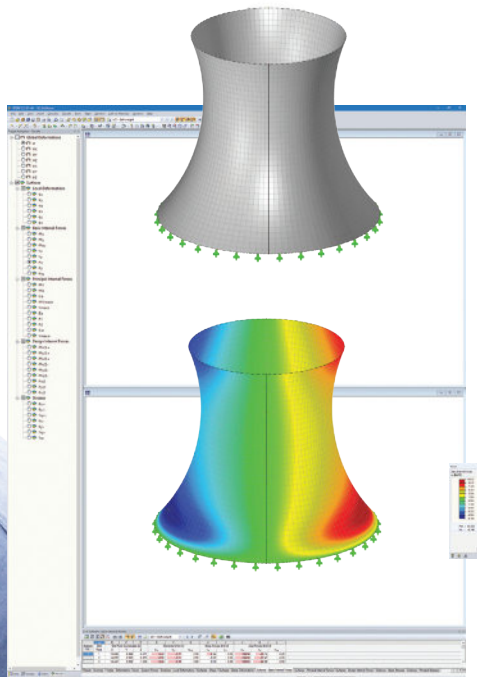


## Multiple Member and Surface Types

Member Type	Surface Type
<input type="checkbox"/> Beam	<input type="checkbox"/> Standard
<input type="checkbox"/> Rigid	<input type="checkbox"/> No membrane tension
<input type="checkbox"/> Rib	<input type="checkbox"/> Orthotropic
<input type="checkbox"/> Truss	<input type="checkbox"/> Glass
<input type="checkbox"/> Tension	<input type="checkbox"/> Laminate
<input type="checkbox"/> Compression	<input type="checkbox"/> Rigid
<input type="checkbox"/> Buckling	<input type="checkbox"/> Membrane
<input type="checkbox"/> Cable	<input type="checkbox"/> Membrane - Orthotropic
<input type="checkbox"/> Cable on Pulleys	<input type="checkbox"/> Null
<input type="checkbox"/> Result Beam	
<input type="checkbox"/> Definable Stiffness	
<input type="checkbox"/> Coupling Rigid-Rigid etc.	

## Colored Result Display on Rendered Model

- Freely adjustable range of values
- Animation of deformations, surface stresses, and internal forces
- Adjustable font sizes and colors

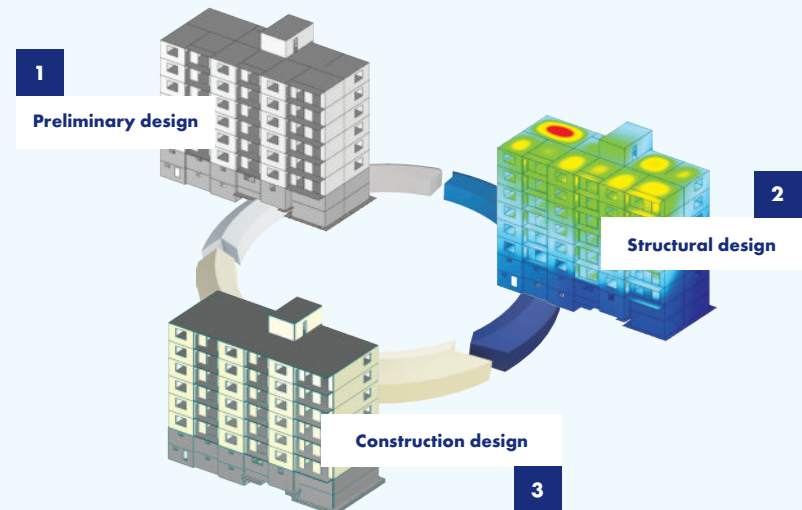


## Automatic Generation of Combinations According to Selected Combination Expressions

- Combinations according to USA, Canada, and other international standards
- Options to reduce the number of generated combinations
- Copying, adding, etc. load cases in a clearly arranged dialog box
- Enveloped result combinations with max/min values

## Building Information Modeling (BIM)

- Direct interfaces with Autodesk Revit, Tekla Structures, and Autodesk AutoCAD
- Other exchange formats: DXF, IFC, STP (e.g. for Intergraph, Advance Steel, SEMA, cadwork, hsbcad), and DSTV (e.g. for Bocad and Frilo)



AUTODESK  
ADVANCE STEEL

Bentley

canwork

AUTODESK  
REVIT

Deutscher  
Stahlbau-  
Verband  
D S T V

SEMA

AUTODESK  
AUTOCAD

INTERGRAPH

AVEVA

Tekla  
Structures

Rhinoceros

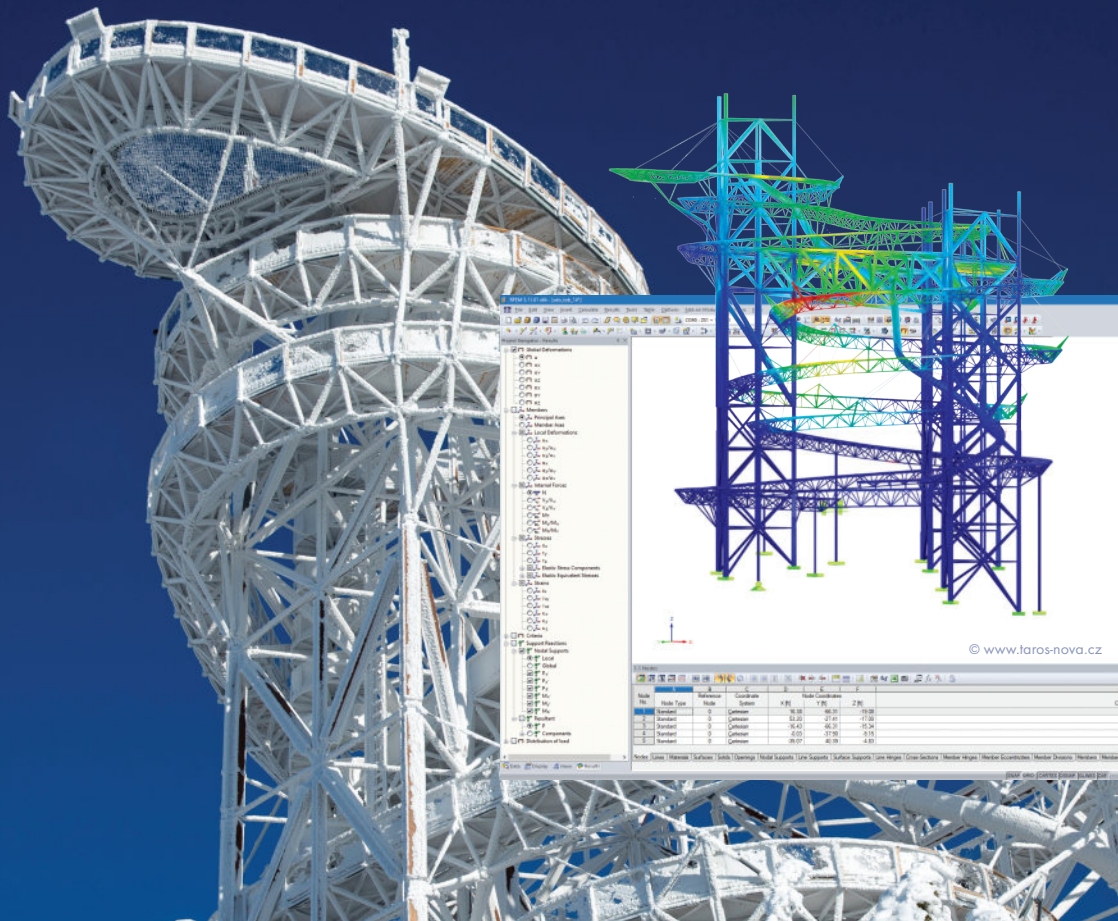


# About RFEM

The 3D FEA structural analysis software RFEM is the basis of a modular software system. The main program RFEM is used to define structures, materials, and loads for planar and spatial structural systems consisting of plates, walls, shells and members. The program also allows you to create combined structures including solid and contact elements. The structure and load generators integrated in the program can be used for expedited data input.

RFEM calculates deformations, internal forces, stresses, support forces, and soil contact stresses while the diverse add-on modules provide design of plate and beam structures including connections according to various standards.

The modular software concept allows you to create a program package tailored to your individual needs. It is possible to add on to your existing RFEM program at any time.



## Salvador Dalí Museum

**Customer:** Novum Structures LLC  
Menomonee Falls, WI, USA

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## St. Elias Ukrainian Catholic Church

**Customer:** Moses Structural Engineers Inc.  
Toronto, ON, Canada

© www.mosesstructures.com



## Candlewood Suites on Redstone Arsenal

**Customer:** Nordic Structures  
Montreal, QC, Canada

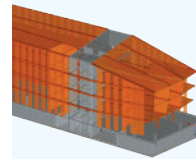
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# Enjoy Structural Analysis with Dlubal Software

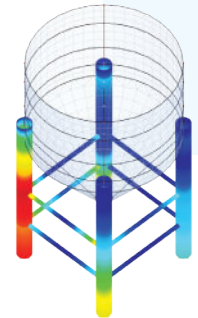
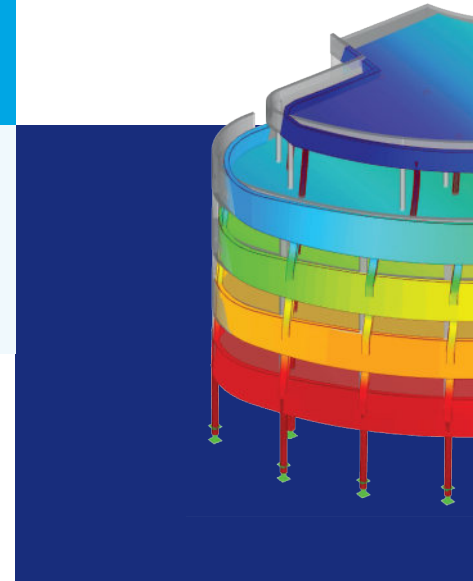
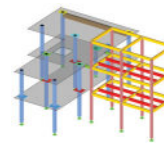
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