



# Structural Analysis & Design Software

[www.dlubal.com](http://www.dlubal.com)



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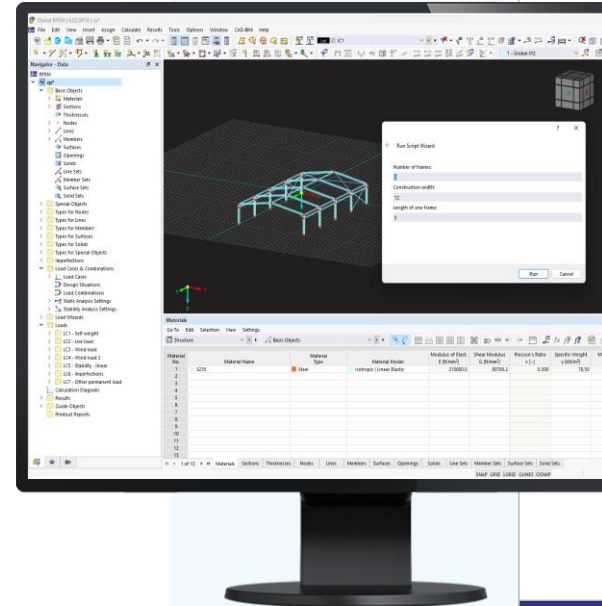


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Webinar

# Automated Workflow with JavaScript in RFEM 6



# Questions During the Presentation



GoToWebinar Control Panel  
**Desktop**



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Ask questions



The screenshot shows the GoToWebinar desktop control panel. The 'Audio' window is open, displaying 'Sound Check' with a green bar and a question mark. Below it, 'Computer audio' is selected, and 'Phone call' is unselected. A 'MUTED' status is shown with a red microphone icon. The audio device is 'Mikrofon (2- Sennheiser USB h...'. A volume slider is visible. Below the audio settings, the 'Questions' window is open, showing a text input field with the placeholder '[Enter a question for staff]' and a 'Send' button. At the bottom of the control panel, the 'Webinar ID: 373-901-987' and the 'GoToWebinar' logo are displayed.



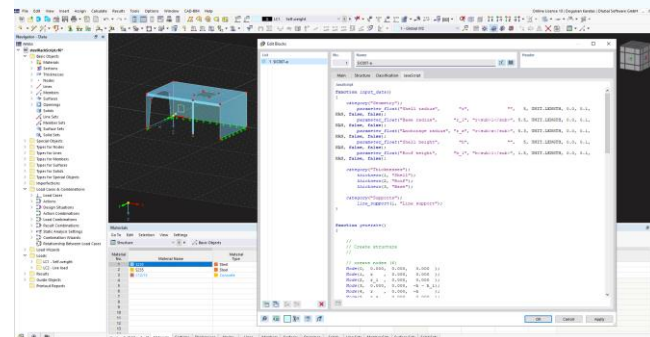
# CONTENT

01 In-App Scripting

02 Dlubal Center and Blocks

03 What is new in JS Library?

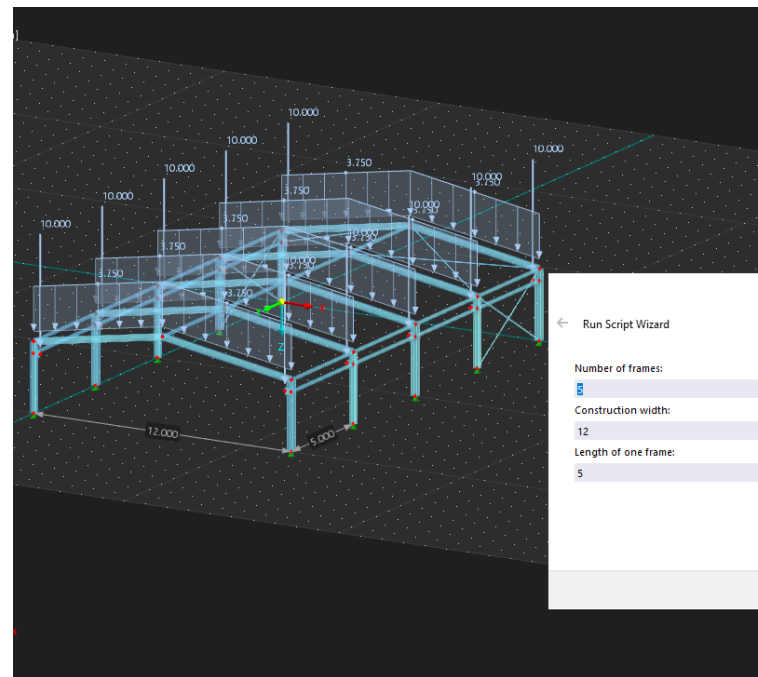
04 Examples





# In-App Scripting

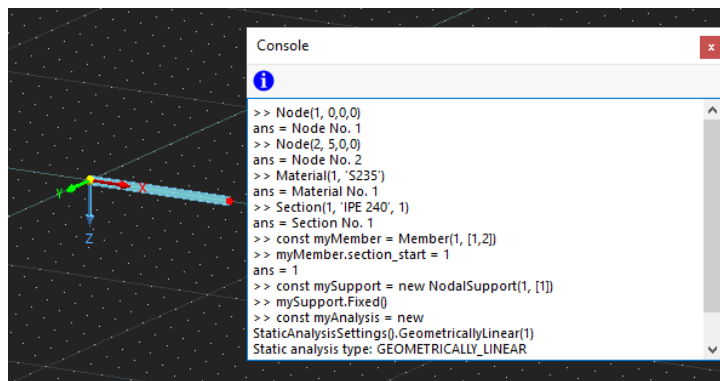
- **RFEM 6 / RSTAB 9 / RSECTION 1 offers in-app scripting**
  - **To parametrize a Model**
  - **Automate Tasks**
  - **Get Information**
- **Access All Objects**
  - **Geometry**
  - **Load, Loading, Load Wizards**
  - **Design Add-On Data**





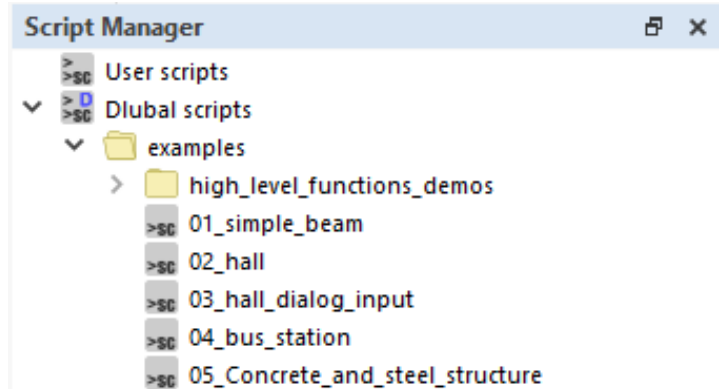
# JavaScript Language

- Based on JavaScript 5
- Scripts can be written in any code editor
- Scripts can be stored in local folder and accessible via Script Manager
- Direct interaction with the model via Console



The screenshot shows a 3D model of a beam with a coordinate system (X, Y, Z) and a console window displaying the following JavaScript code and its output:

```
Console
>> Node(1, 0,0,0)
ans = Node No. 1
>> Node(2, 5,0,0)
ans = Node No. 2
>> Material(1, 'S235')
ans = Material No. 1
>> Section(1, 'IPE 240', 1)
ans = Section No. 1
>> const myMember = Member(1, [1,2])
>> myMember.section_start = 1
ans = 1
>> const mySupport = new NodalSupport(1, [1])
>> mySupport.Fixed()
>> const myAnalysis = new
StaticAnalysisSettings().GeometricallyLinear(1)
Static analysis type: GEOMETRICALLY_LINEAR
```





# Repository / Examples

- Source Code stored in GitHub
- Documentation in GitHub Pages
- Default Examples in Installation
- Embedded Intelligent Blocks

JavaScript High Level Function Library

Enter here to filter...

ContactSolid  
FreeCircularLoad  
FreeConcentratedLoad  
FreeLineLoad  
FreePolygonLoad  
FreeRectangularLoad  
GasSolid  
ImposedLineDeformation  
ImposedNodalDeformation  
Line  
LineHinge  
LineLoad  
LineMeshRefinement  
LineSet  
LineSetLoad  
Material  
Member  
MemberDefinableStiffness  
MemberEccentricity  
MemberHinge  
MemberLoad  
...

## Class Line

Creates line

### Constructors

**Line(no, nodes, comment, params)**

Creates line

Declaration

`new Line(no, nodes, comment, params)`

Parameters

Type	Name	Description
Number	<i>no</i>	Index of line, can be undefined
Array	<i>nodes</i>	List of node indexes
String	<i>comment</i>	Comment, can be undefined
Object	<i>params</i>	Line's parameters, can be undefined

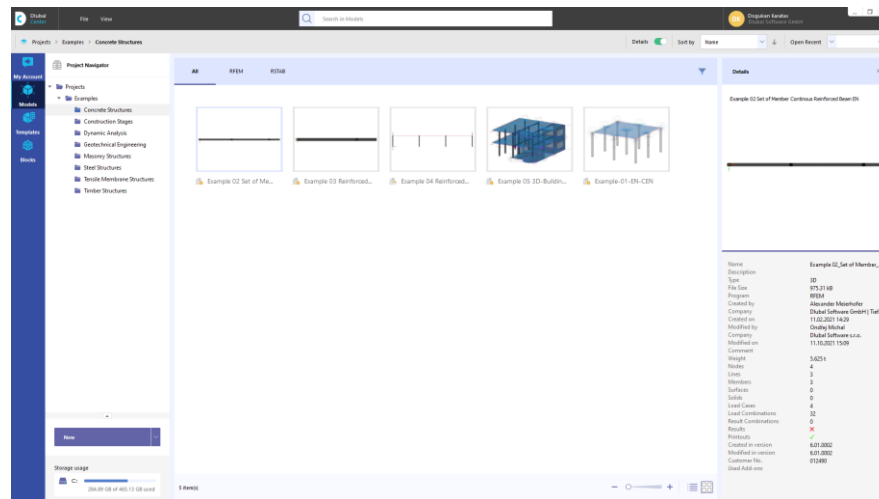
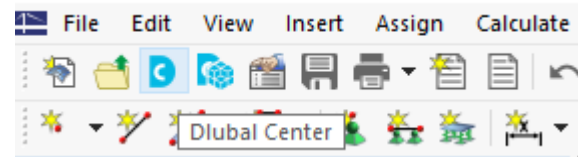
Returns

Type	Description
	Created line



# Dlubal Center

- Organize Projects
- Store Models, Blocks and Templates
- Access Extranet

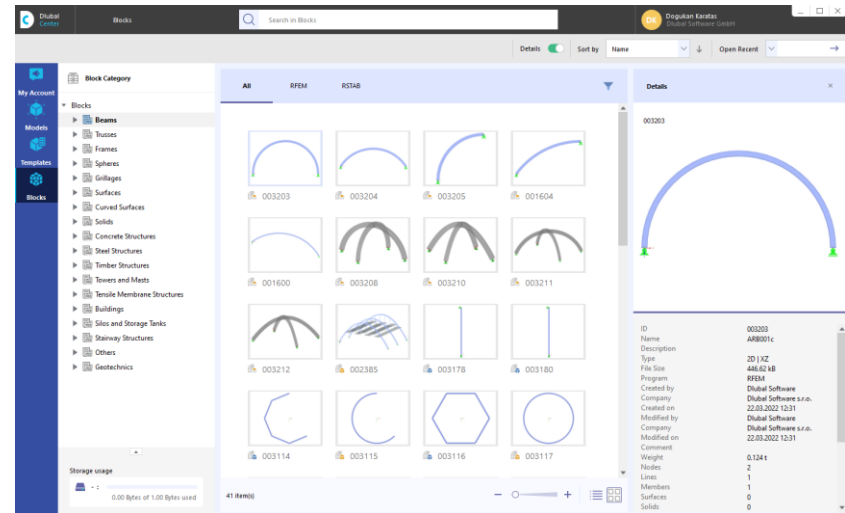






# Intelligent Blocks

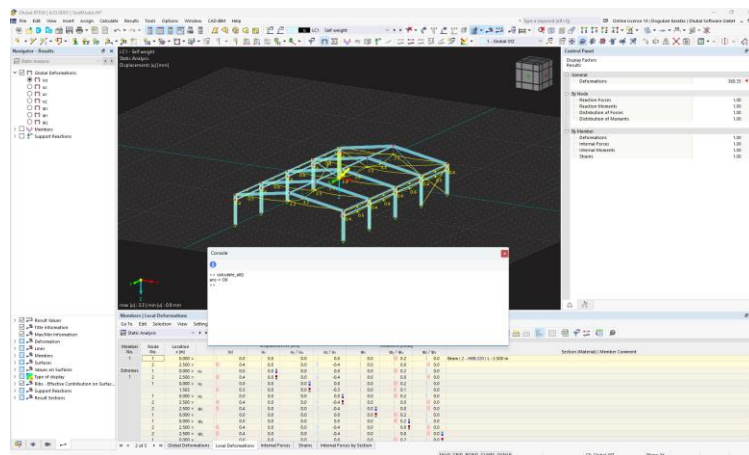
- **RFEM 6 / RSTAB 9 offers possibility to create Blocks**
- **Possibility to save models for future reuse**
- **Types of Blocks**
  - **Non-parametrized**
  - **Parametrized**
  - **Dynamics**
- **Blocks can be managed through Dlubal Center**





# Extended Functionality

- Call Calculate All function
- Call Calculate Specific function
- Erase an object
- Count Objects
- Get existing objects





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Hansen**

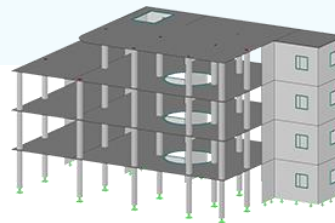
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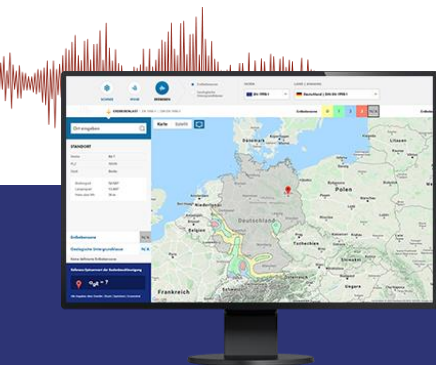


# Free Online Services



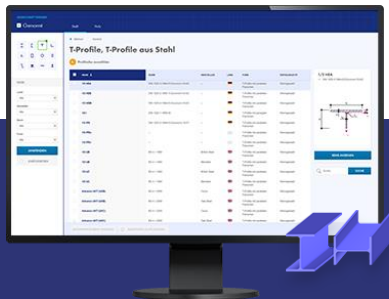
## Geo-Zone Tool

Dlubal Software provides an online tool with snow, wind and seismic zone maps.



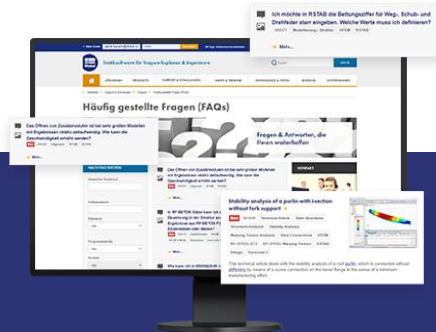
## Cross-Section Properties

With this free online tool, you can select standardized sections from an extensive section library, define parametrized cross-sections and calculate its cross-section properties.



## FAQs & Knowledge Base

Access frequently asked questions commonly submitted to our customer support team and view helpful tips and tricks articles to improve your work.



## Models to Download

Download numerous example files here that will help you to get started and become familiar with the Dlubal programs.





# Free Online Services

## Youtube Channel - Webinars, Videos

Videos and webinars about the structural engineering software.



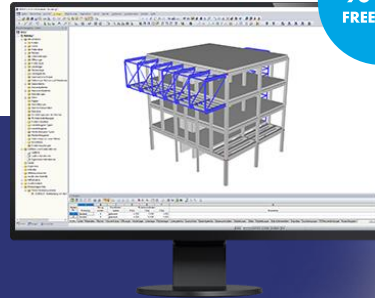
## Webshop with Prices

Configure your individual program package and get all prices online!



## Trial Licenses

The best way how to learn using our programs is to simply test them for yourself. Download a 90-day free trial version of our structural analysis & design software.



90-DAY FREE TRIAL



We offer free support via email and chat



# — Get Further Details About Dlubal



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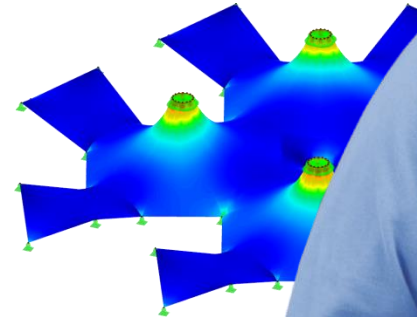
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