

Webinar

# Dlubal

# Concrete design with Dlubal API

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

The screenshot displays the RfEM software interface. The main window shows a 3D model of a concrete beam with a displacement of 2.4 mm. The left sidebar contains a tree view of the project structure, including folders for 'Data', 'Loads', 'Calculation Diagrams', 'Results', 'Guide Objects', 'Layout and Drawing (CAD)', 'Concrete Design', 'Materials', 'Nodes', and 'Ultimate Configurations'. The bottom-left corner shows a 'Materials' table with the following data:

Material No.	Material	Isotropic   Linear Elastic	Poisson's Ratio	Specific Weight $\gamma$ [kN/m <sup>3</sup> ]	Mass Density $\rho$ [kg/m <sup>3</sup> ]	Coeff
1	C25/30	concrete	0.2000	25.00	2500.0	

The bottom-right corner features a 'Control Panel' with 'Display Factors Results' and 'Your AI Assistant Mia'. The assistant's interface shows a chat window with the message: 'Hi! My name is Mia. How may I help you today?' and a text input field with the placeholder 'Ask anything here in your language.' The code editor in the center shows Python code for configuring the RfEM application:

```
with rfen.Application() as rfen_app:
    # Get existing TreeTable from ULS Configuration
    concrete_uls_config: rfen.concrete_design_object
    obj:=rfem.concrete_design_objects.ConcreteDes
)
print(f'concrete_uls_config: no={concrete_uls_co
# print(f'rfem.concrete_design_objects.ConcreteD
# breakpoint()

# =====
# settings_member_ec2_tree = rfem.concrete_desig
settings_member_ec2_tree = concrete_uls_config.s
print(f'settings_member_ec2_tree\nsettings_memb

# =====
# chapter = 'stability_slenderness'
# key1 = 'stability_limiting_slenderness_y'

key = 'stability_determine_factor_ay' # bool=True
common.set_values_by_key(
tree=settings_member_ec2_tree,
```

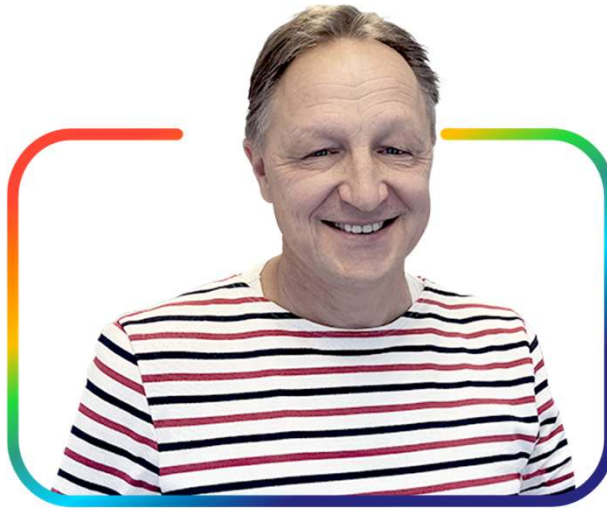


# Today with



**Dipl.-Ing. (FH)  
Andreas Hörold**  
Organizer

Marketing & Public Relations  
Dlubal Software GmbH



**Dipl.-Ing. (FH) Robert  
Milrath**  
Co-Organisator

Product & Solution Engineering  
Dlubal Software GmbH



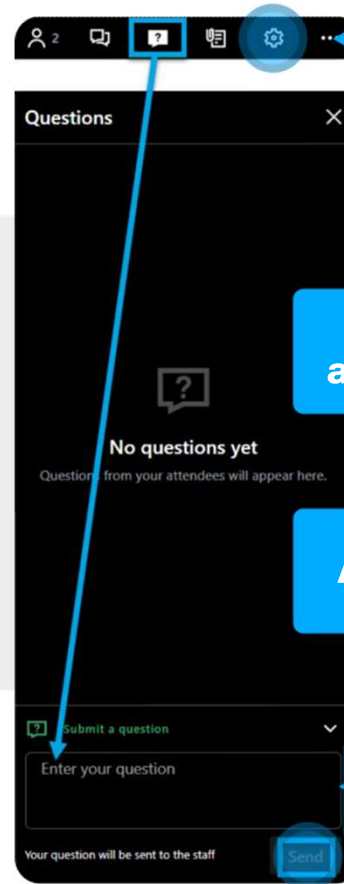
**Dipl.-Ing.  
Rebecca Göbel**  
Co-Organisator

Product & Solution Engineering  
Dlubal Software GmbH

# Questions During the Presentation

1

**Webinar Control  
Panel Desktop**



**Adjust  
audio settings**

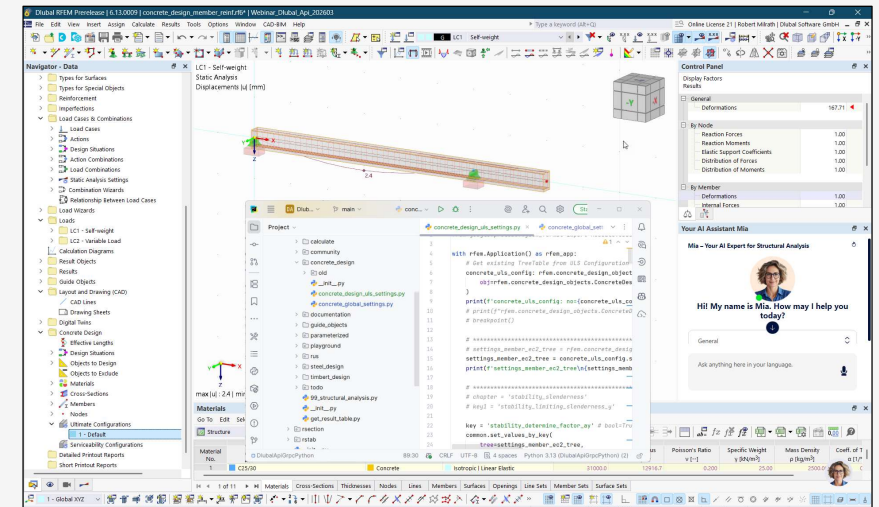
**Ask question**

or 2

**info@dlubal.com**

# Content

- 1 Creating and using API keys
- 2 Accessing settings and values in the tree views - reloaded
- 3 Manipulating the reinforcement used



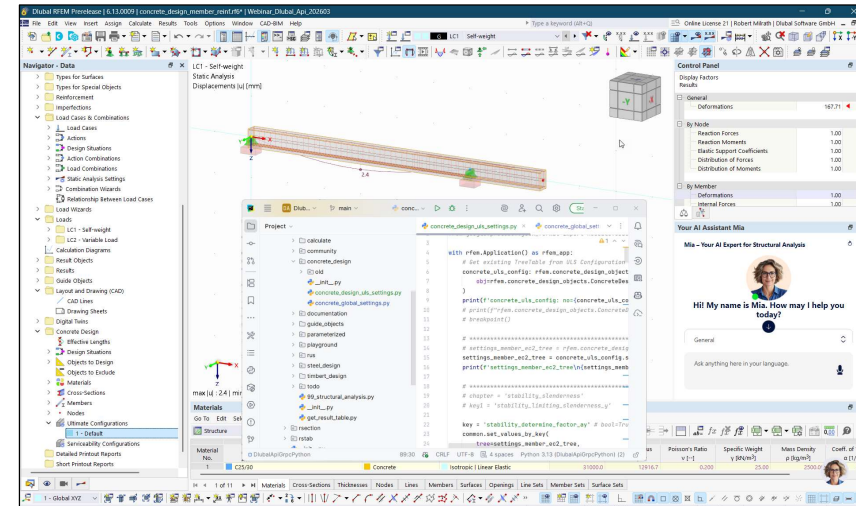
# Webinar API (gRPC)

## Webservices

- The name API II has now become established, replacing the somewhat cumbersome API (gRPC)
- All other web services will no longer be developed (API (SOAP) & RS-COM)

## Timetable

- A brief introduction to the basic functions required to use the API
  - [Python Client — Dlubal API documentation](#)
  - [RFEM — Dlubal API documentation](#)
  - [Releases — Dlubal API documentation](#)
  - [Extranet - My Account](#)
  - [Latest API & Interfaces topics - Dlubal Community](#)
- Switch to PyCharm IDE



## Previous Webinars

- [Introduction to New Dlubal API for RFEM | WEBINAR](#)
- [Webinar | Reading Results in RFEM 6 and RSTAB 9 with the New Dlubal API](#)
- [Webinar | New Features and in-Depth Insights into Dlubal API](#)
- [Webinar | API in RSECTION 1](#)

# Online Courses

## RFEM<sup>6</sup> Masterclass

All you need to know for a start!



[Go to course](#)

## Eurocode 2 Masterclass

Dive in Reinforced Concrete Design with  
RFEM 6!



[Go to course](#)

## Eurocode 3 Masterclass

Deep Dive in Steel Design with RFEM 6!



[Go to course](#)

# Online Courses

## Eurocode 5 Masterclass

Deep Dive in Timber Design  
with RFEM 6!



[Go to course](#)

## Eurocode 8 Masterclass

Deep Dive into Earthquake Design with  
RFEM 6!



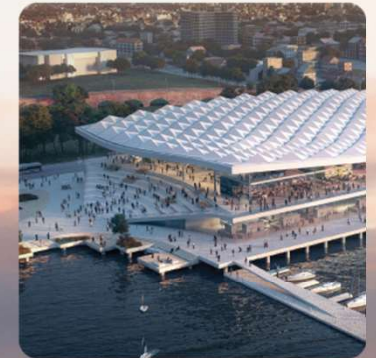
[Go to course](#)



# Submit your customer project and receive a free online course!

For each published project, you will receive a voucher for an Online Course on RFEM 6, Eurocode 2, Eurocode 3, Eurocode 5, or Eurocode 8, valued at 199 - 399€.

 [Submit your Project](#)



**BOLLINGER + GROHMANN**  
Ingenieure

**Jakob**  
Rope Systems

**Haas**

**PIRMIN JUNG**

**RUBNER**



# Free Online Services

## 90-Day Full Trial Version Download

Experience the full power of our structural analysis and design software with a free 90-day trial. Get access to all programs and add-ons without restrictions.



**DLUBAL COMMUNITY >**



**GEO ZONE TOOL >**



**CROSS-SECTION PROPERTIES >**



**3D MODELS TO DOWNLOAD >**

**Explore All  
Our Services >**



# Get Further Details About Dlubal

- Videos and recorded webinars
- Newsletters
- Events and conferences
- Knowledge Base Articles
- MIA AI Assistant
- Download 90-Day Full Trial Version

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

**Dlubal Software GmbH**

Am Zellweg 2  
93464 Tiefenbach, Germany

+49 9673 9203-0  
info@dlubal.com

**90-Day**  
Full Free  
Trial



# Thank You for Your Attention

