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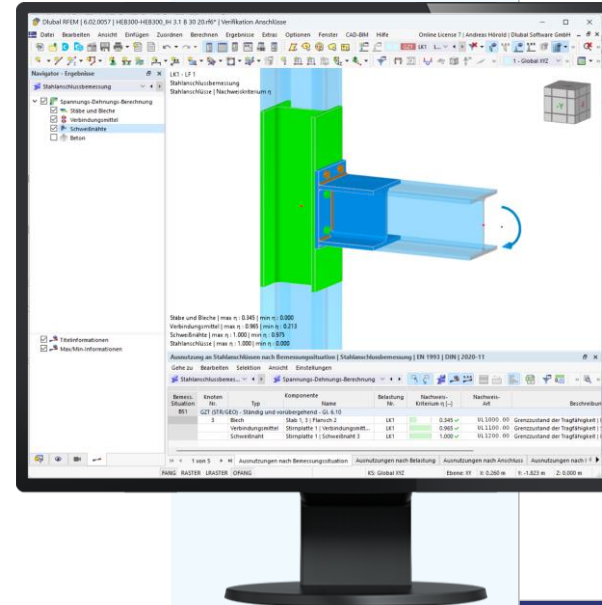


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Webinar

Verification of Standardized Steel Joints Using FE Analysis in RFEM 6



Questions During the Presentation



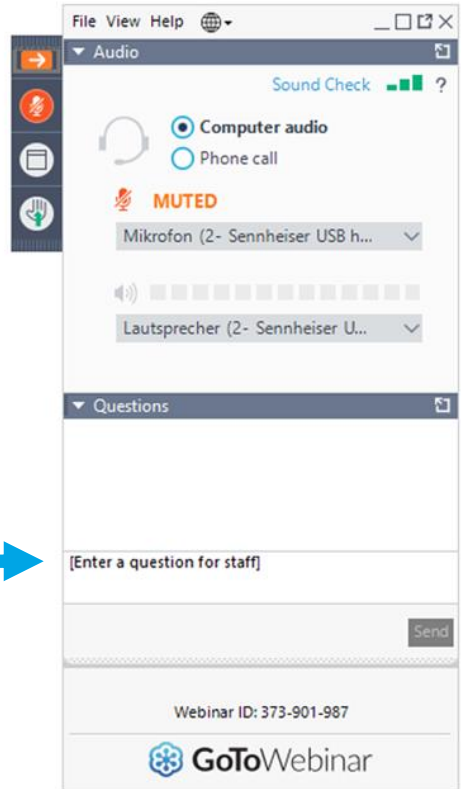
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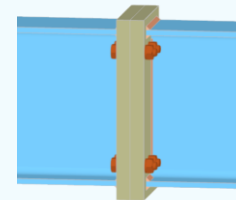
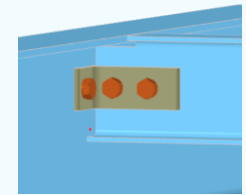
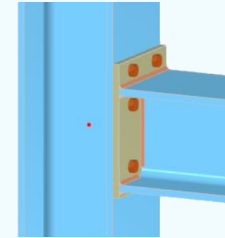
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Ask questions



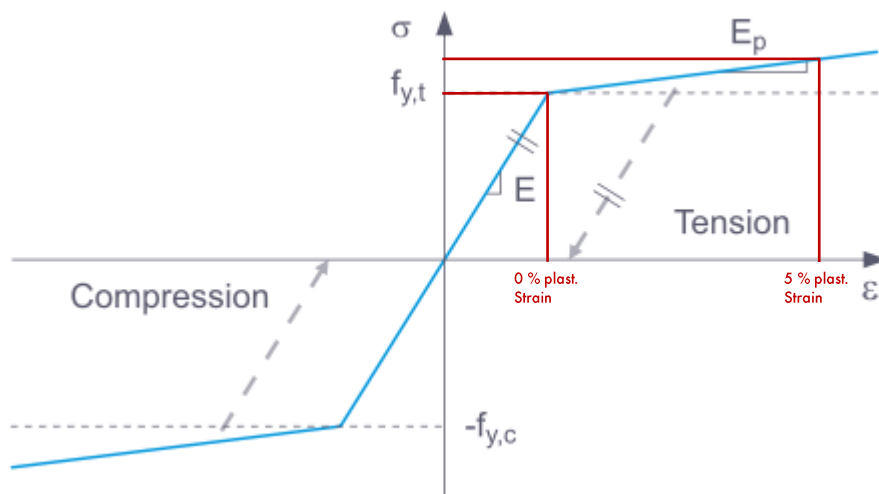
CONTENTS

- 01 Modeling and Design of DSTV Connections in Steel Joints Add-On**
- 02 Load Bearing Capacity of Steel Connections Compared to Limit Values of German DSTV Guideline**
- 03 Advantages of Steel Joints Add-On**





Material Model: Isotropic | Plastic (Surfaces/Solids)





Rigid End Plate Connection IH 3.1 B 30 20

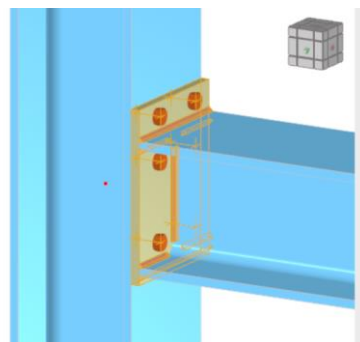
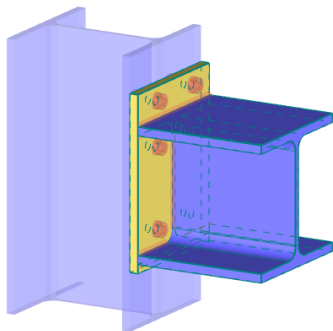
Column: HEB 300 | Horizontal Beam: HEB 300

Max. M_Y (DSTV) = 141,5 kNm

Max. M_Y (Steel Joints) = 151,5 kNm

Ratio

1,07



Max. V_Z (DSTV) = 321,9 kNm

M and V combined (Steel Joints)

0,89



Pinned Connection IW 20 12

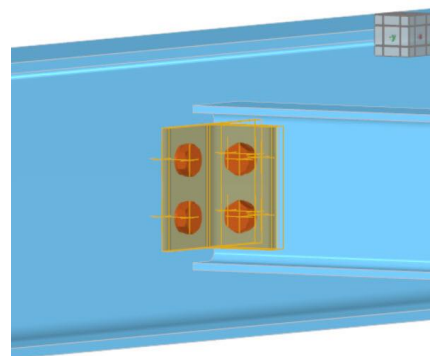
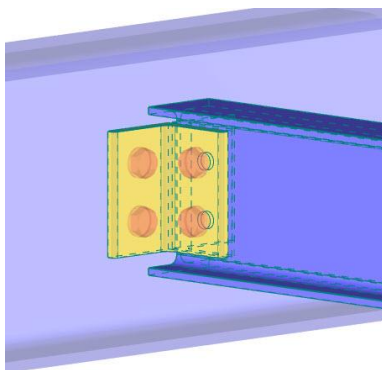
Principal Beam: IPE 360 | Secondary Beam: IPE 200

Max. V_z (DSTV) = 62,58 kN

Max. V_z (Steel Joints) = 62,5 kN

Ratio

1,00





Pinned Connection IS 20 4 8

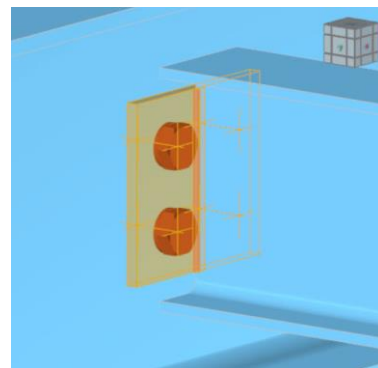
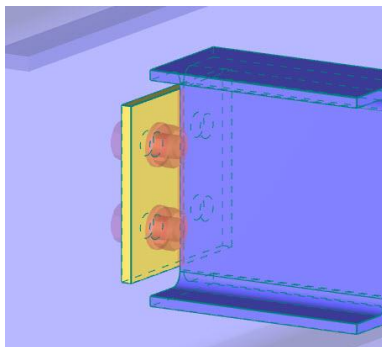
Principal Beam: IPE 360 | Secondary Beam: IPE 200

Max. V_z (DSTV) = 114,0 kN

Max. V_z (Steel Joints) = 141,0 kN

Ratio

1,24





Pinned Connection IW 20 21 + IK 1 2,5 8

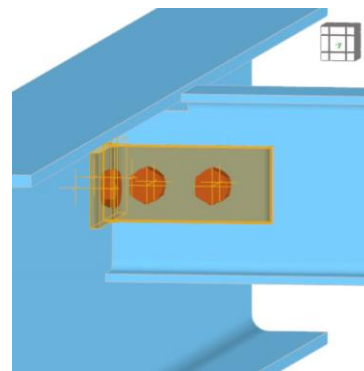
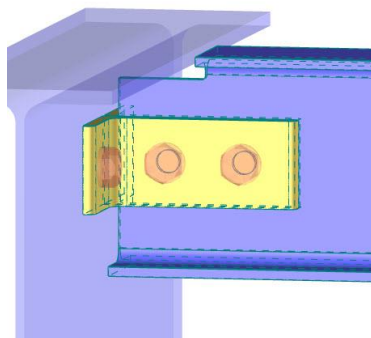
Principal Beam: IPE 360 | Secondary Beam: IPE 200

Max. V_z (DSTV) = 43,42 kN

Max. V_z (Steel Joints) = 40,5 kN

Ratio

0,93





Rigid Plate-to-Plate Connection IH 2.1 E 40 20

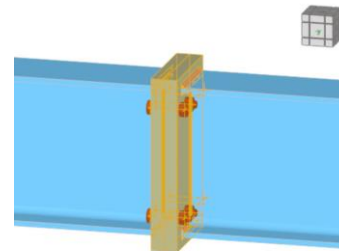
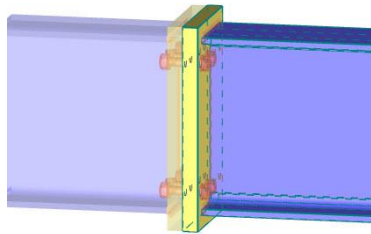
Beam: IPE 400

Max. M_Y (DSTV) = 213,1 kNm

Max. M_Y (Steel Joints) = 189,0 kNm

Ratio

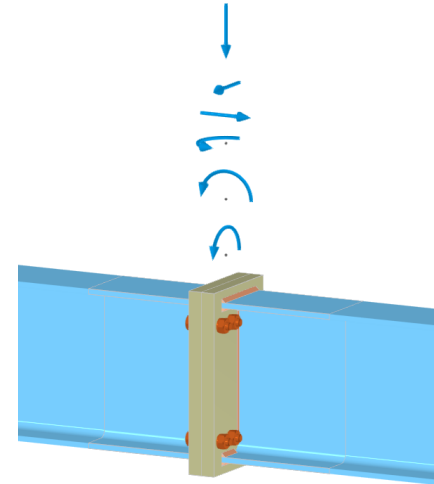
0,89





Advantages

- Consideration of three-dimensional internal forces and moments incl. torsion
- No import of internal forces and moments from external programs required
- Internal forces and moments are always up-to-date
- Calculation update when structure, loading, and so on is changed
- No black box calculation
- Detailed FE model can be checked and analyzed
- High-quality 3D visualization of connections
- One program, one printout report





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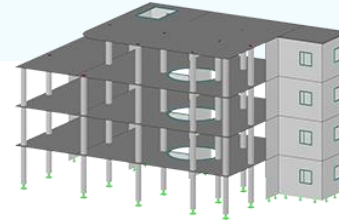
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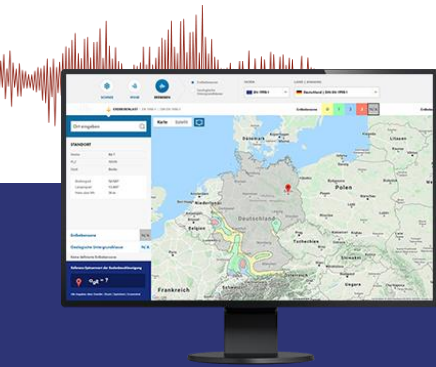


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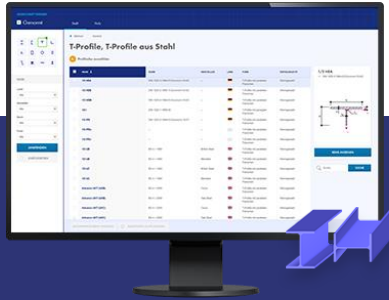
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Dlubal Software provides an online tool with snow, wind and seismic zone maps.



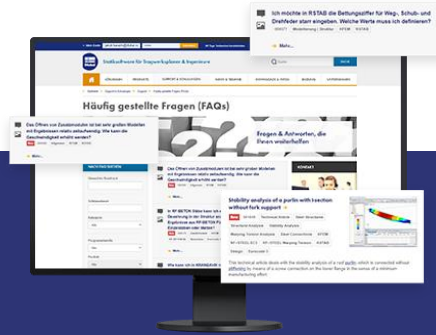
Cross-Section Properties

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.



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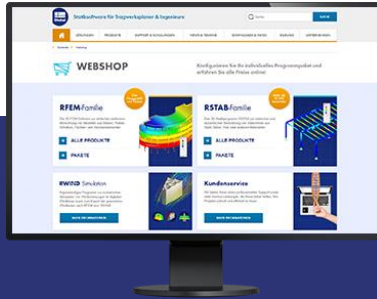
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Videos and webinars about the structural engineering software.



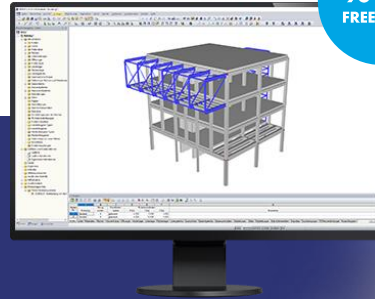
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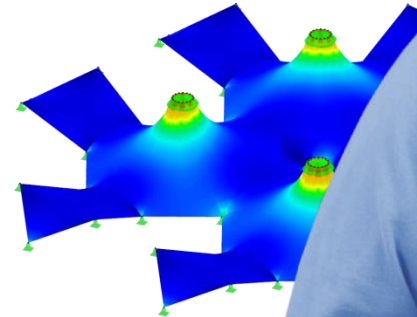
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