IDEA StatiCa®

Calculate yesterday's estimates

IDEA STATICA CONCRETE
3D DETAIL

PRÄSENTATION

Alexander Szotkowski
Produktingenier
IDEA StatiCa

WORL-LEADING STRUCTURAL DESIGN SOFTWARE

8000+ desktop licenses

Software results validated by universities

Linked to 20+ FEA/CAD software

100+ employees
40+ resellers

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Einführung

3D DETAIL

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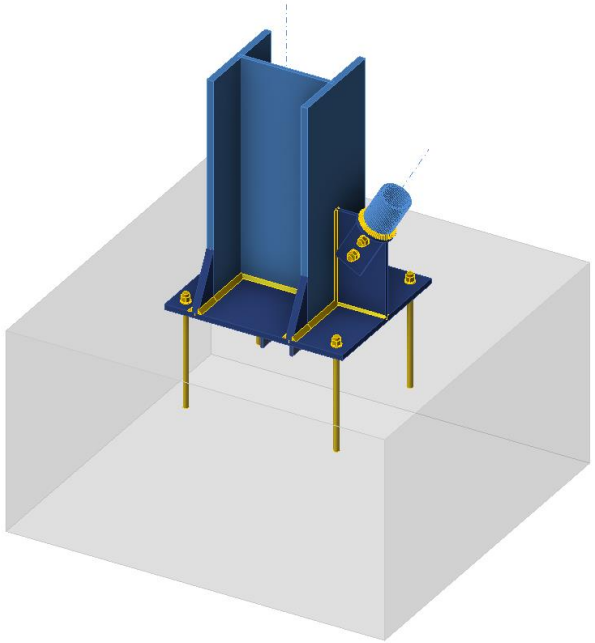
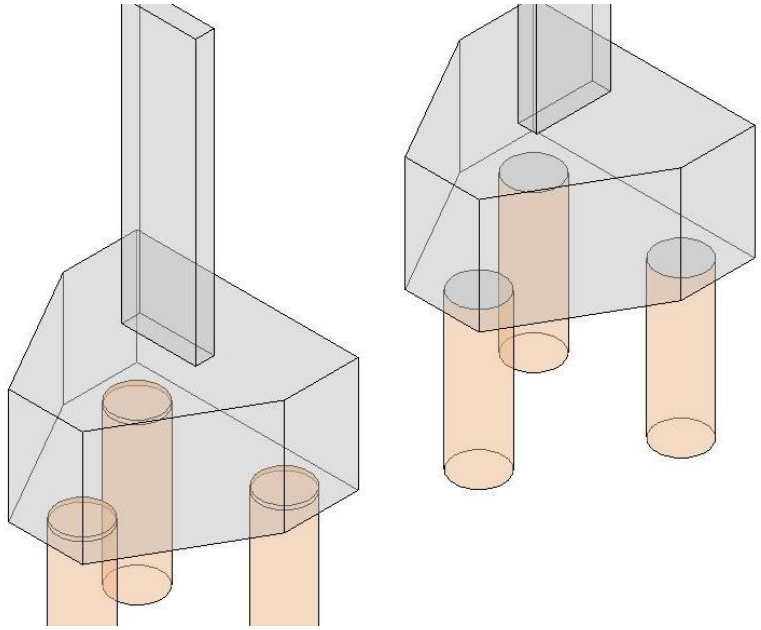
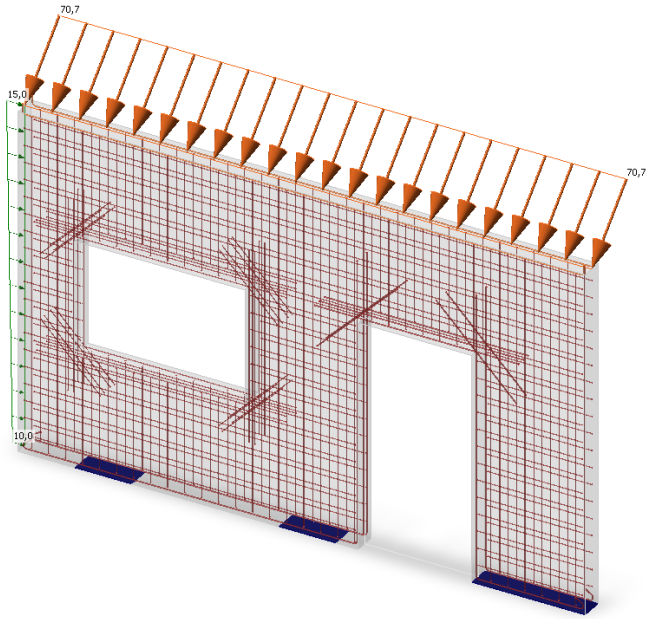
ÜBLICHE 3D-SPANNUNGSPROBLEME IM BETON



Verankerung



Pfahlkappen



Belastung außerhalb der Ebene

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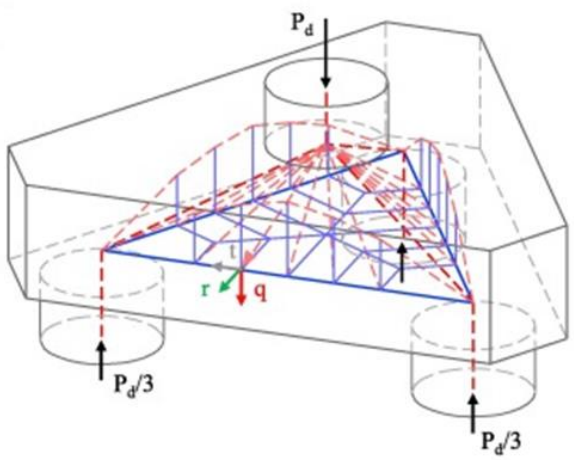
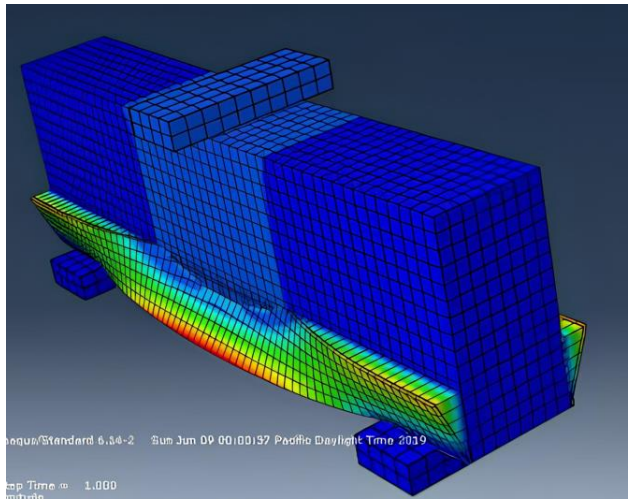
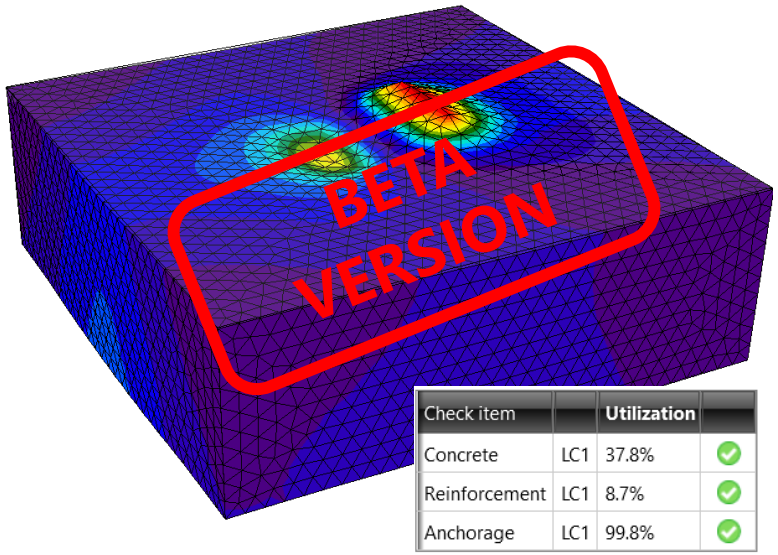
DERZEIT VERFÜGBARE METHODEN



Strebe und Zugband Methode



Wissenschaftliche FEM Nicht-lineare Lösungen



CSFM in IDEA StatiCa Detail 3D

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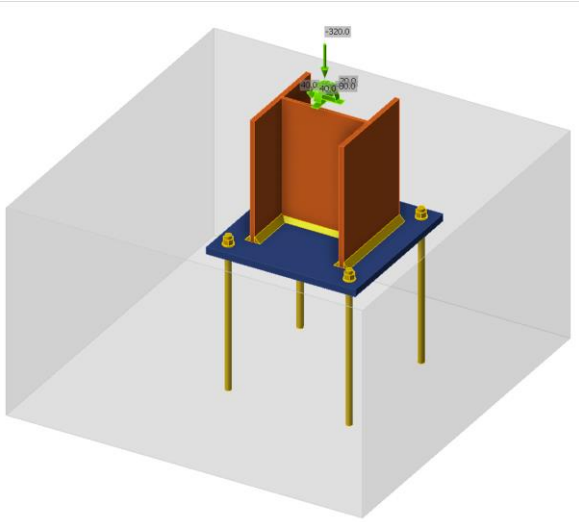
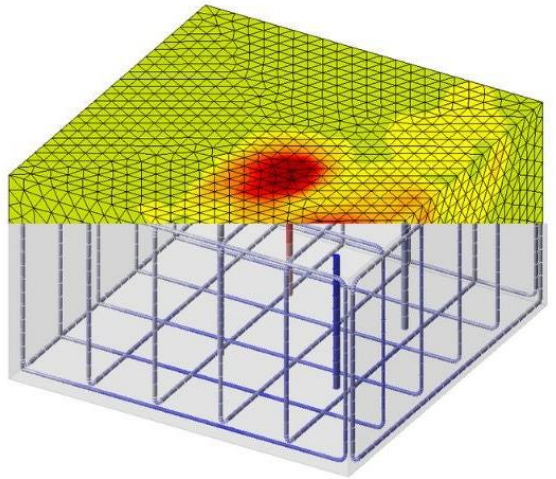
IDEA STATICA DETAIL 3D MIT CSFM

Ingenieure können 3D-Betonmodelle entwerfen und nachweisen

- ☑ JEDE TOPOLOGIE
- ☑ JEDE BELASTUNG
- ☑ IN MINUTEN

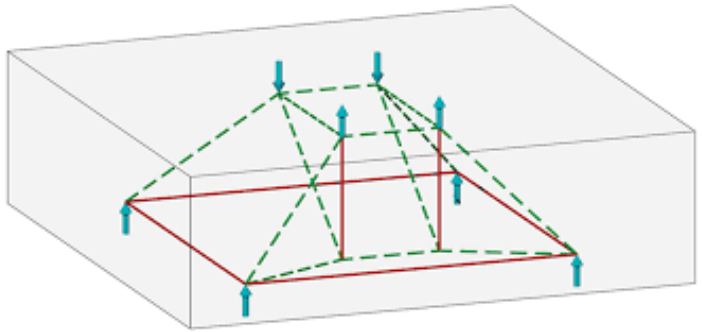




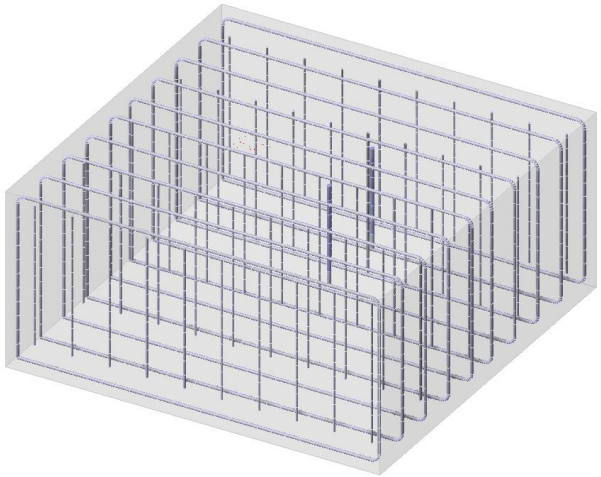
IDEA STATICA DETAIL 3D MIT CSFM

Die **erweiterte nichtlineare** Methode zur rechnergestützten Spannungsfeldbemessung ermöglicht die automatische Bemessung und Bewertung von Betonbauteilen unter komplexer Beanspruchung.

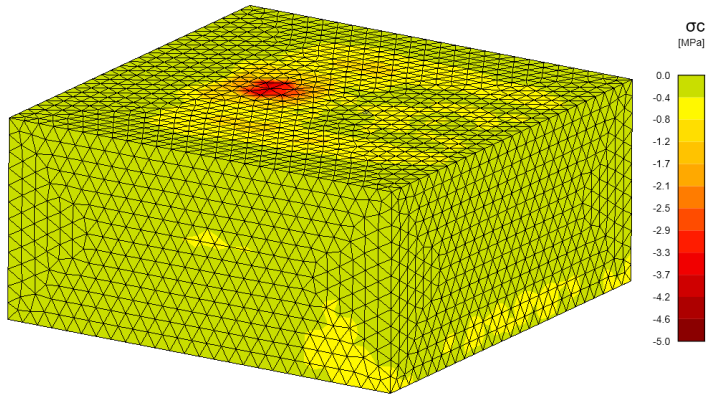
Die Methode **überwindet die Vereinfachungen** und Unzulänglichkeiten der bestehenden und bekannten Strut&Tie-Methode und ermöglicht einen Code-Check des Grenzzustands der Gebrauchstauglichkeit.



Strut & Tie Model

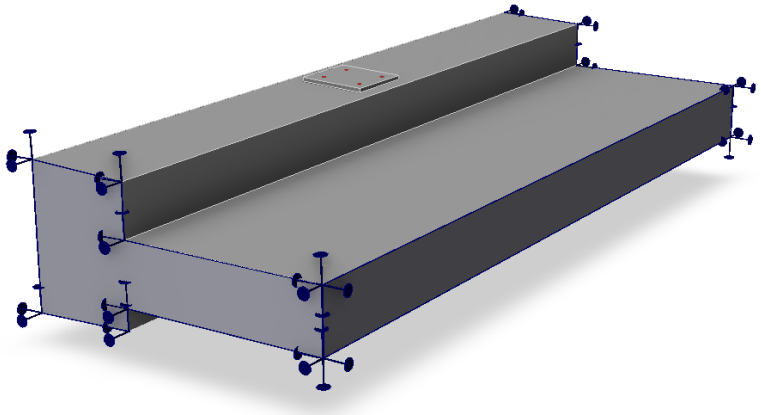


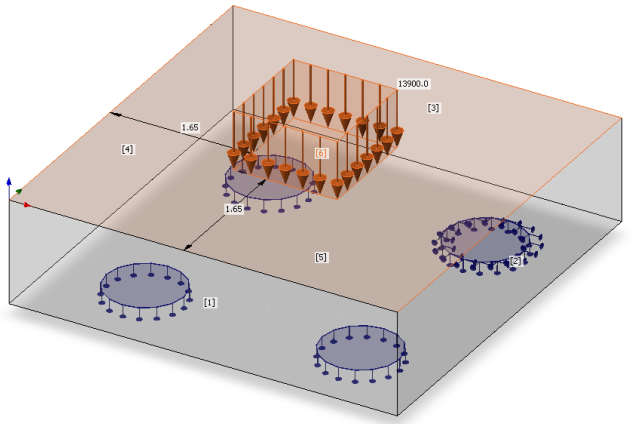
3D CAD Model

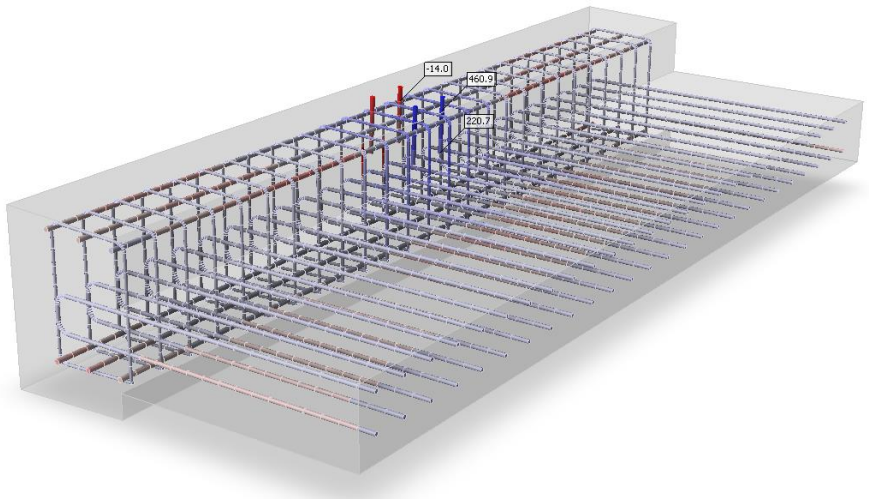


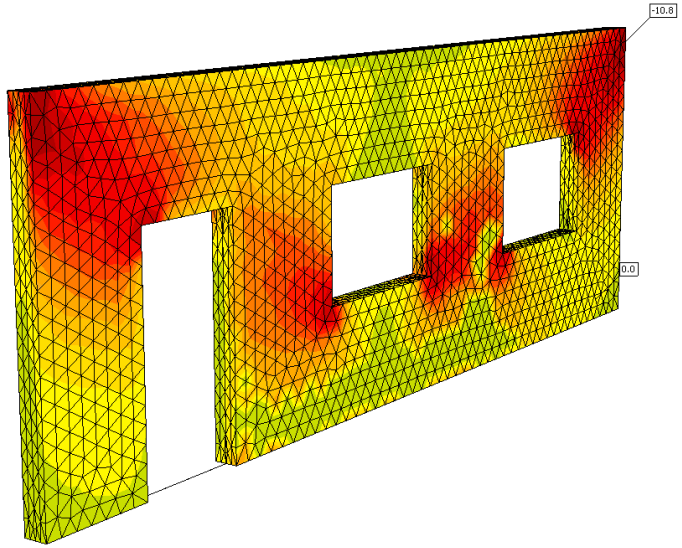
3D CSFM Model
IDEA StatiCa Detail

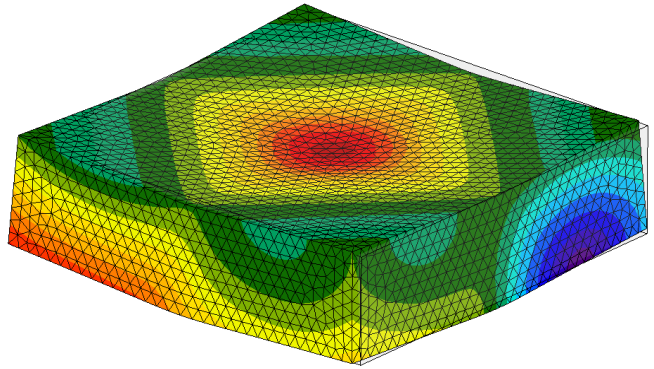
WOFÜR IST 3D DETAIL GEDACHT?











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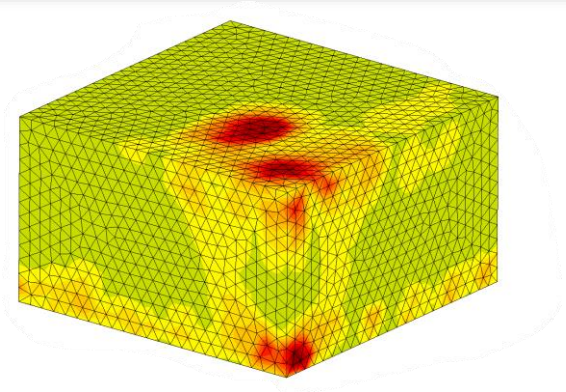
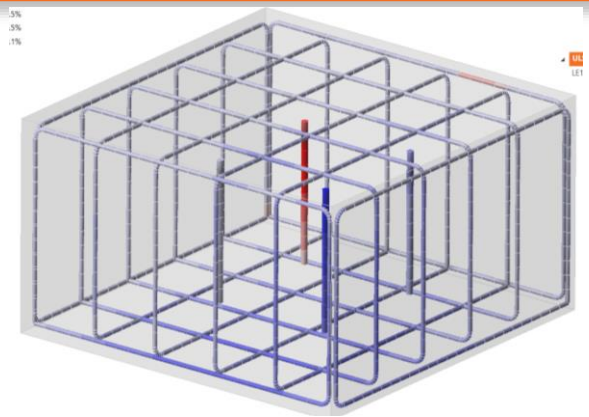
EUROCODE - KONFORMITÄT

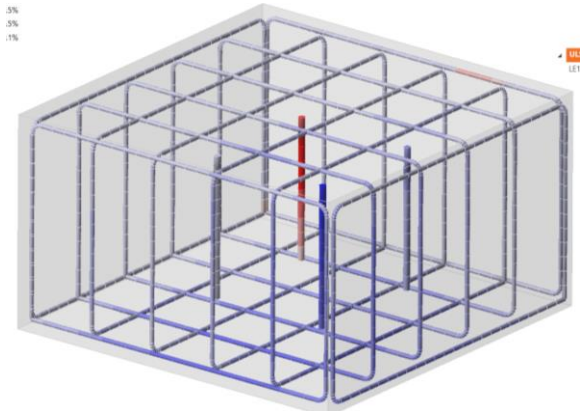
Beton



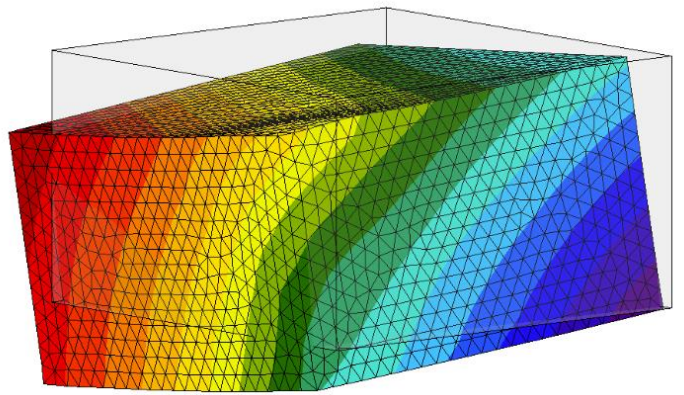
Bewehrung



Anker



Deformation



Verankerung

3D DETAIL

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VERANKERUNG

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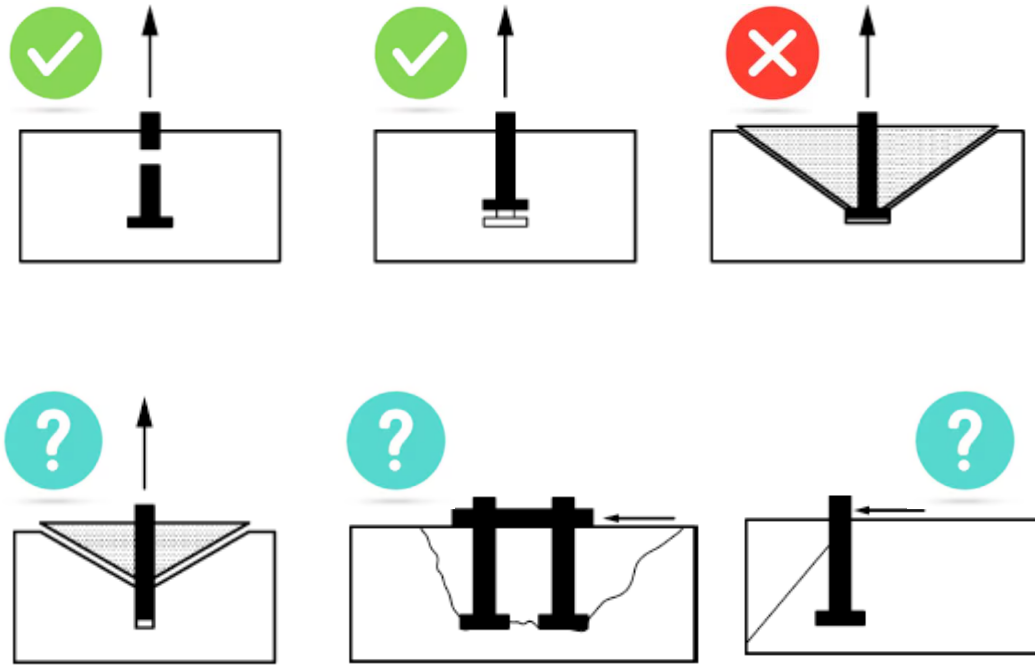
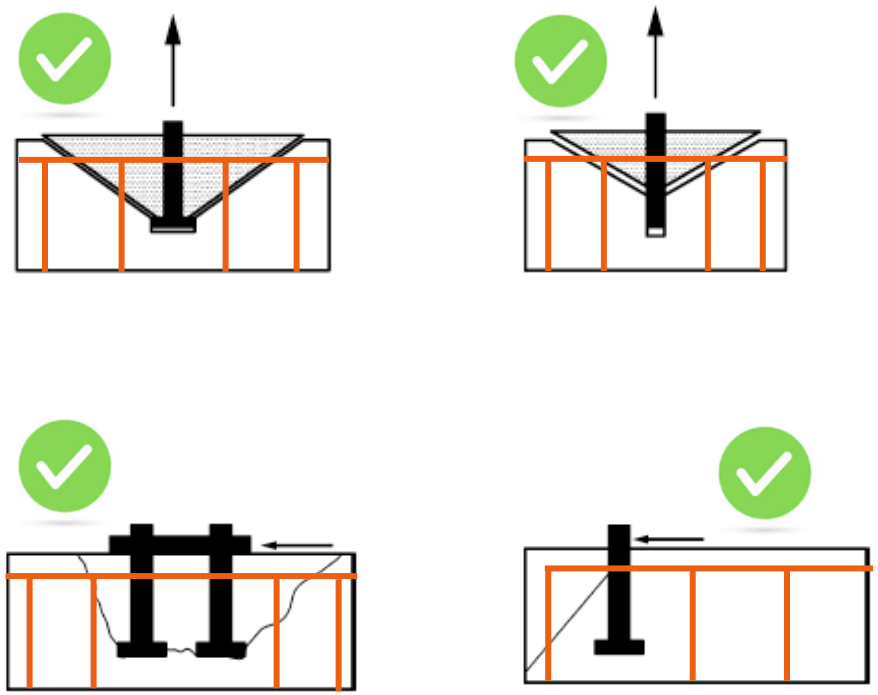


Detail 3D



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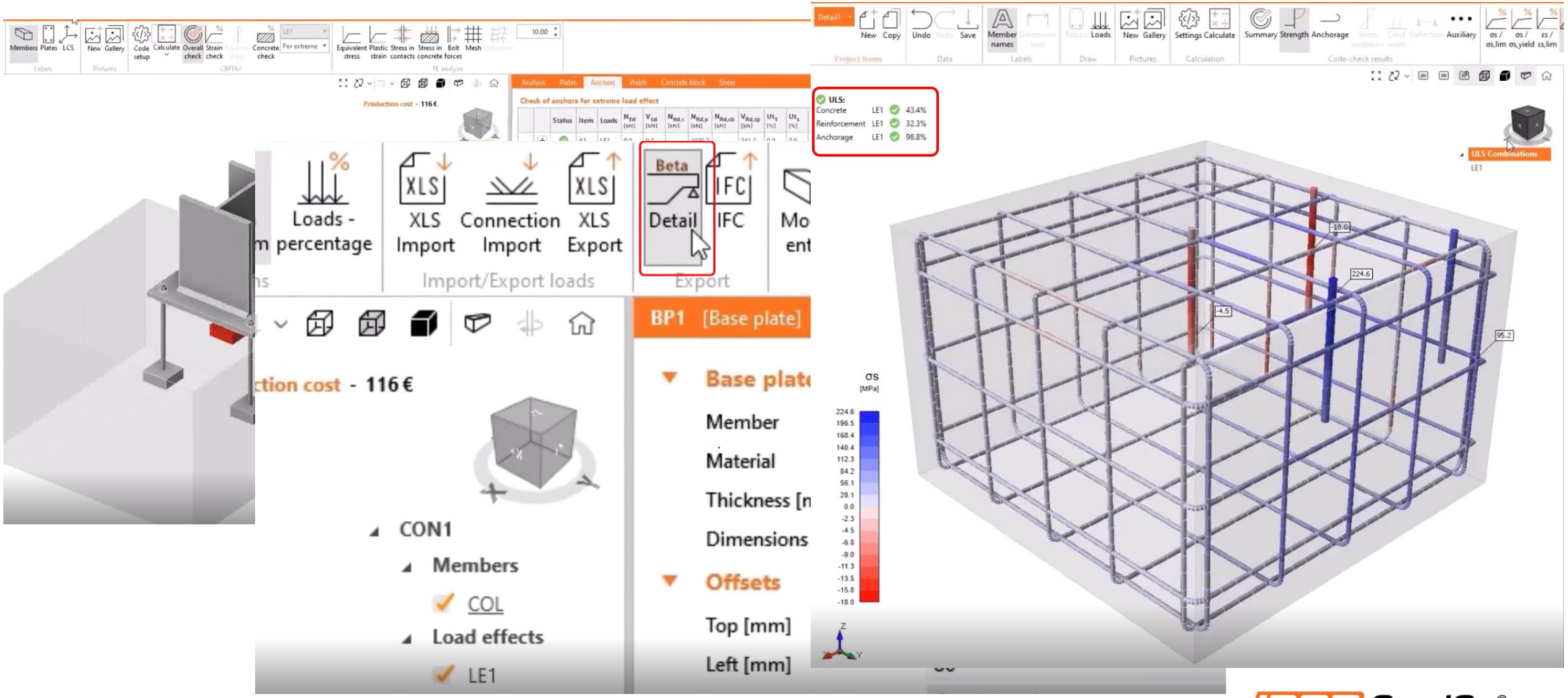

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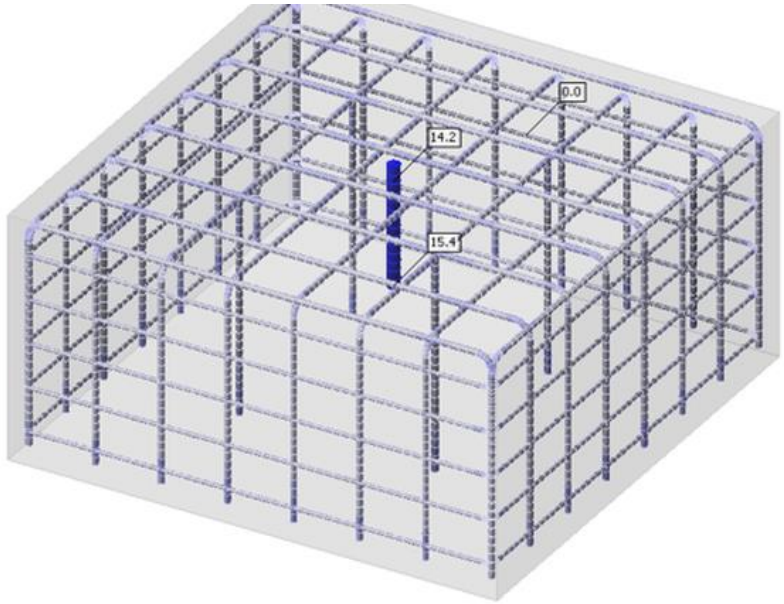
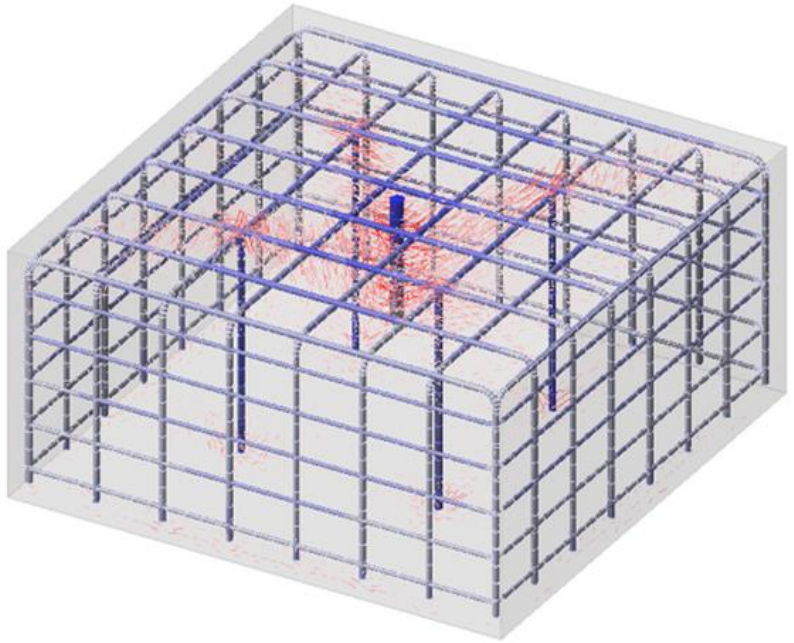
VERANKERUNG





IDEA STATICA DETAIL 3D - GRUNDVORAUSSETZUNGEN

- Beton unter Spannung vernachlässigt - alle Spannungen werden durch die Bewehrung übertragen
- Geeignet nur für bewehrten Beton
- Triaxiale Druckspannung berücksichtigt
- Mohr-Coulomb F=0° -> konservativer Ansatz
- Materialmodelle entsprechend den Normen
- Nachweise im Endzustand

Es ist kein wissenschaftliches Werkzeug! Es ist ein Bemessungswerkzeug.

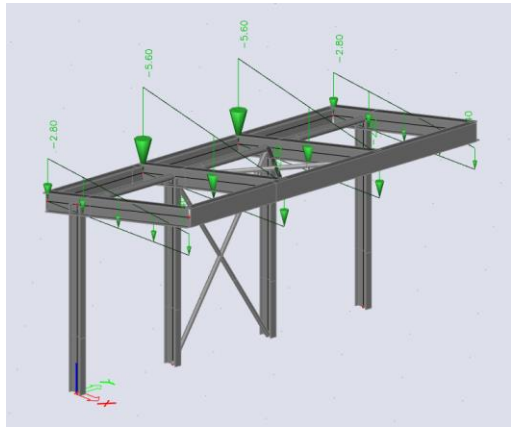
Bemessungs-Methoden, Materialmodelle, Koefficienten usw. werden gemäß der Normen implementiert.

DEMO

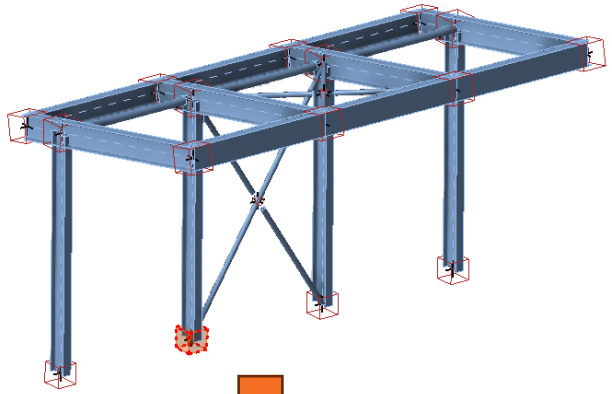
3D DETAIL

BIM LINKS

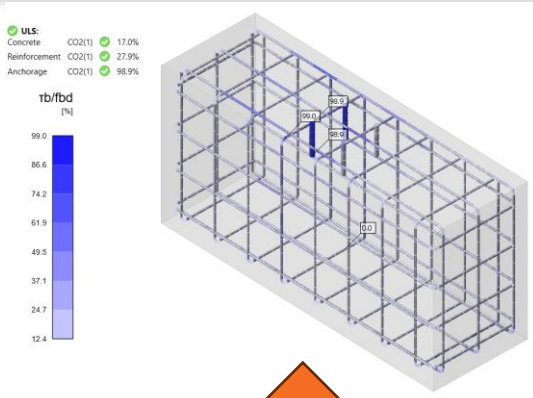
FEA Model

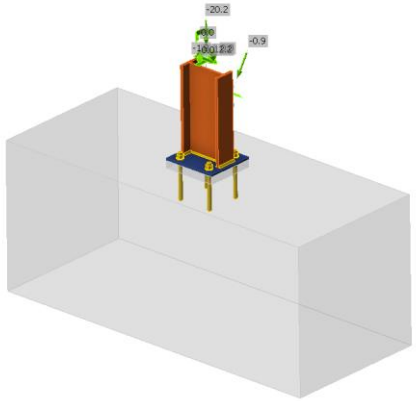


IDEA -Checkbot



3D Detail



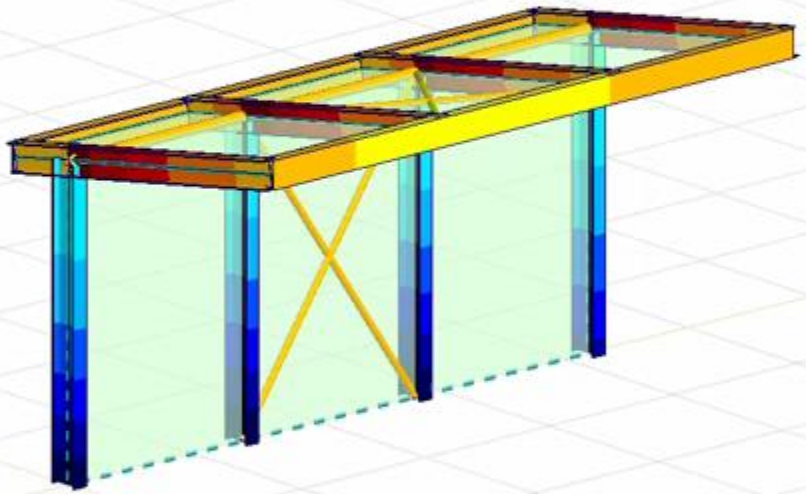


AXISVM (64) X7 R3e - C:\Users\AlexanderSzotkowski\Downloads\IDEA-AxisVM (EN).axs

File Edit Settings View Plugins Window License Help

Geometry | Elements | Loads | Wind tunnel | Mesh | Static | Buckling | Vibration | Dynamic | R. C. Design | Steel design | Timber design | Masonry wall design

(+) Co.#2 (ULS) | My [kNm] | Solid model | 1



dX[m] : -13,619
dY[m] : 12,411
dZ[m] : -2,200
dL[m] : 18,557

d r[m] : 18,557
d a[°] : 137,66
dh[m] : -2,200

Umfrage

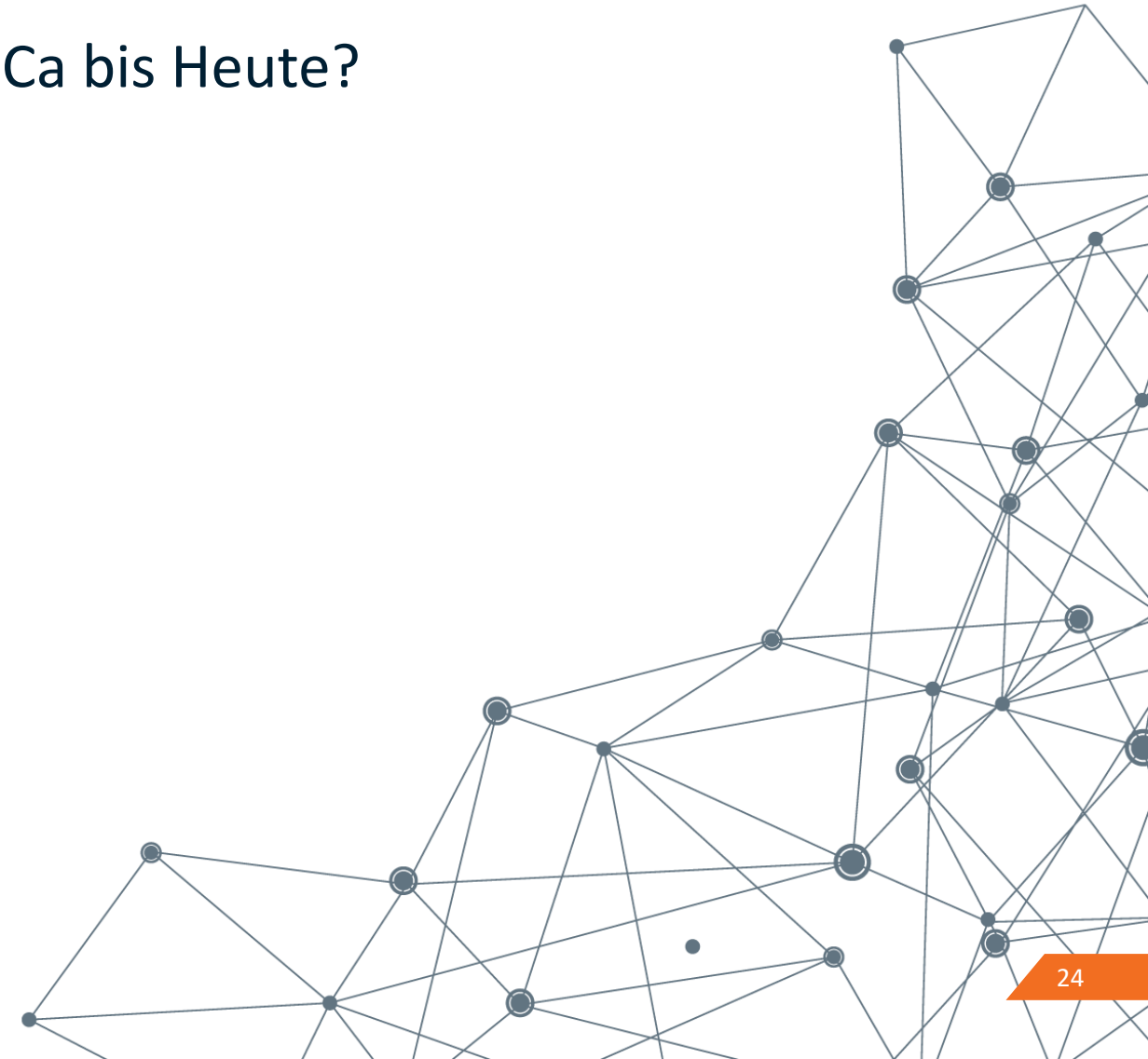
FRAGE

Wie viele Lizenzen weltweit hat IDEA StatiCa bis Heute?

A. Mehr als 6 000

B. Mehr als 8 000

C. Über 10 000



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