KISSsoft Live Stream Training

Special: Bolt Calculation

November 8-9, 2022

Sharing Knowledge
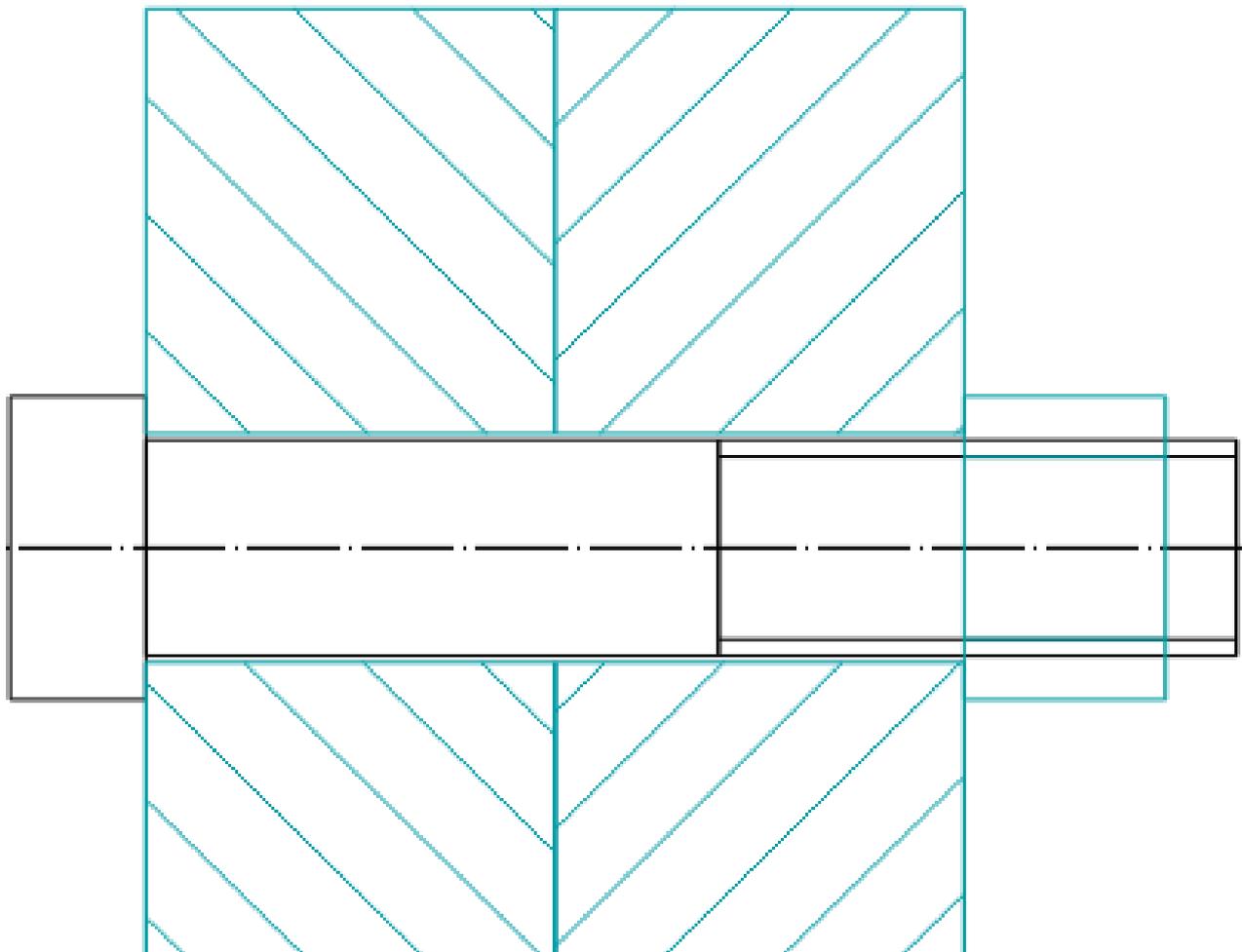
Session 1: November 8, 2022

2:00 – 2:10 pm	Welcome
2:10 – 3:45 pm	Introduction, scope of application, calculation model, distortion triangles
3:45 – 4:00 pm	Break
4:00 – 5:50 pm	Tightening factor, elastic resiliences
5:50 – 6:00 pm	Introduction Exercises

Between the sessions (Time required approx. 2 h)   **Independent work on exercises**

Session 2: November 9, 2022

2:00 – 3:00 pm	Discussion of the independently worked on exercises
3:00 – 4:15 pm	Eccentric load, load introduction factor
4:15 – 4:30 pm	Break
4:30 – 6:00 pm	Stresses and strength, VDI2230 Part 2, Calculation with FE results, Database

Bolt Calculation

The main subject of this special training is the application of KISSsoft for the bolt calculation according to the VDI 2230 guideline. This guideline represents a frequently used method for the verification of different criteria such as static and dynamic strength or safety against gliding.

In the training, the theory of the VDI 2230 (mainly part 1, partially part 2) is introduced to enable the participants to understand the necessary terms and correlations. On KISSsoft side, various connection configurations such as single bolts under longitudinal and lateral force or flange connections are considered. The database with its possibilities to enter own bolts and materials is shown. Exercises are carried out to get acquainted with the sequence of the calculation process.

The training is suitable for both beginners and advanced KISSsoft users. No previous knowledge of KISSsoft is required.

General Training Scope

- General Settings
- Maintenance of the database (materials, bolt geometry)
- Settings and adaptations for calculation reports

Theory Bolt Calculation

- VDI 2230 (part 1, partially part 2)

Bolt Calculation with KISSsoft

- Bolt connection under axial and sheer load
- Flange connection with torque and forces
- Multi-bolt connection with arbitrary bolt position (part 2)
- Bolt calculation based on FE results