KISSsoft Live Stream Training

Bolt Calculation (Special)

November 9-10, 2021

Sharing Knowledge
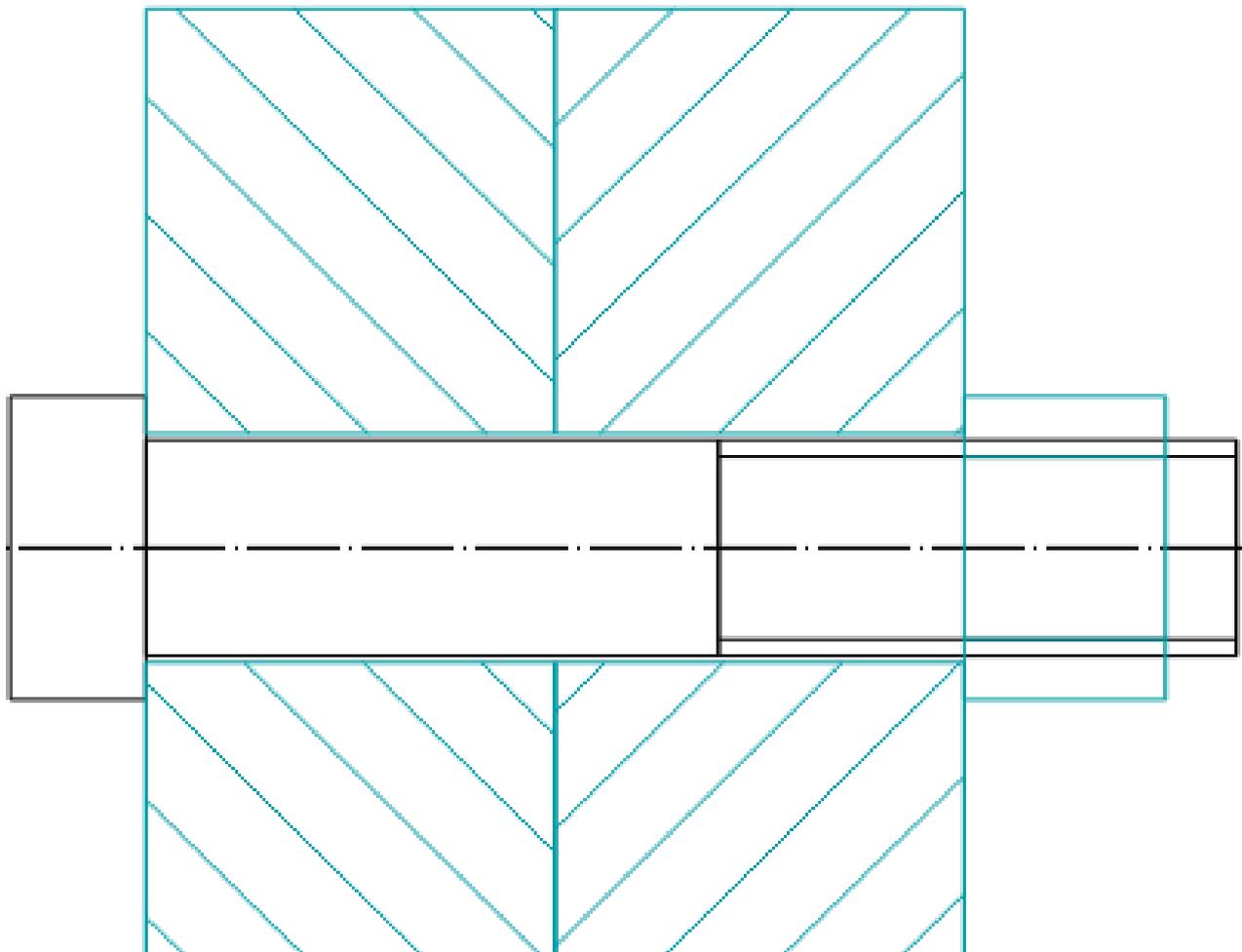
Day 1 – November 9, 2021

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 – 5:45 pm	Tightening factor, clamp load, elastic resiliences
Exercises	**Rigid coupling with transverse load** **Large gear with circular bolt arrangement**

Day 2 – November 10, 2021

2:00 – 3:00 pm	Exercise review
3:00 – 4:00 pm	Eccentric load, load introduction factor
4:00 – 4:15 pm	Break
4:15 – 6:00 pm	Stresses and strength, Calculation with FE results, Database
Exercises	**Connecting rod bearing bolts**

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 (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