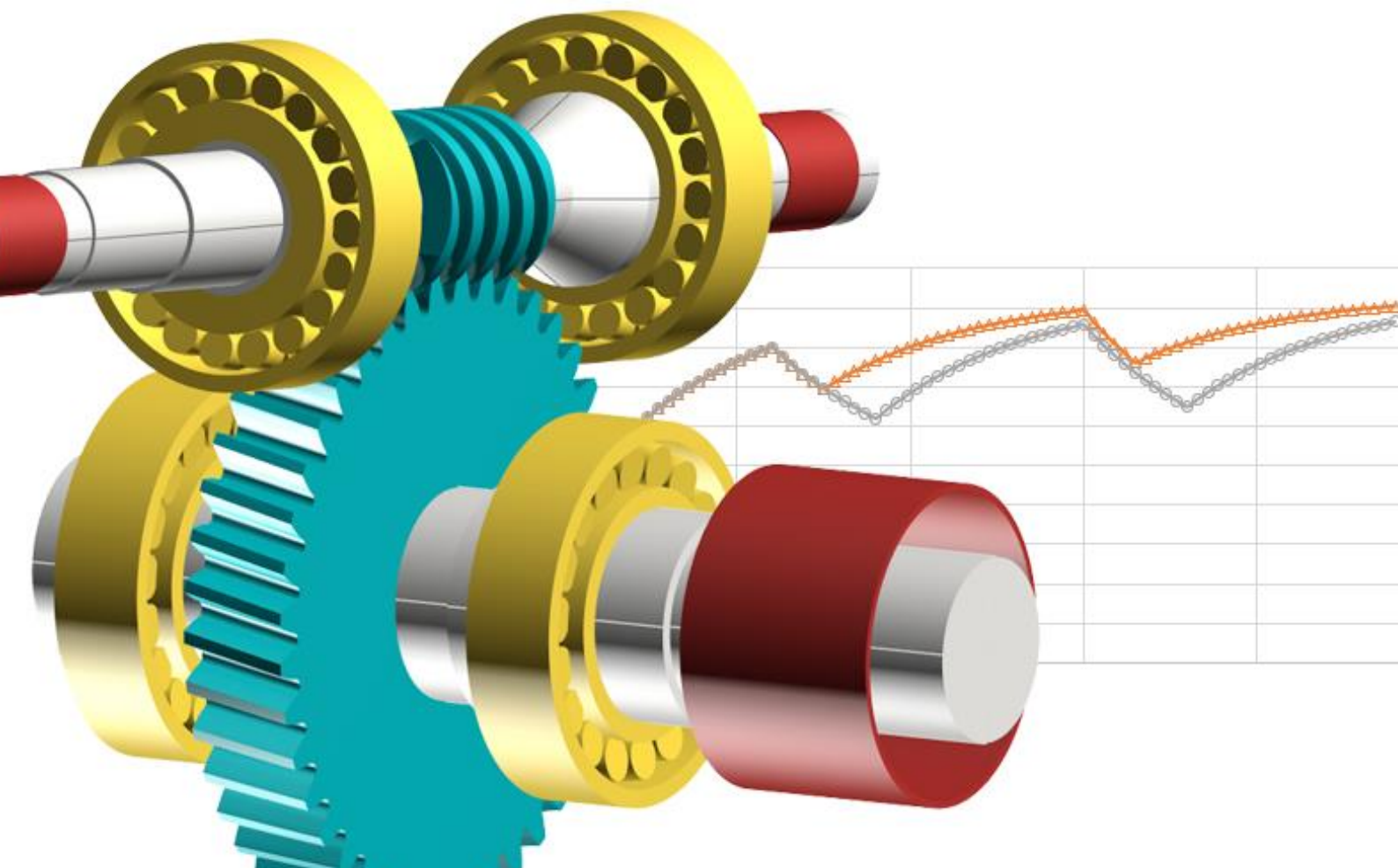


KISSsys Live Stream Training

Advanced: System Calculations

March 29-30, 2022



Session 1: March 29, 2022

2:00 – 2:10 pm	Welcome, introduction
2:10 – 3:55 pm	Efficiency and thermal analysis
3:55 – 4:10 pm	Break
4:10 – 6:00 pm	Load spectrum calculation

Exercises **Efficiency and load spectrum calculation**

Session 2: March 30, 2022

2:00 – 2:10 pm	Exercise follow up
2:10 – 3:55 pm	Housing stiffness consideration
3:55 – 4:10 pm	Break
4:10 – 6:00 pm	Modal analysis, system dynamics

Exercises **Housing stiffness**
System dynamics

Efficiency and Thermal Analysis

- Calculation of gear, bearing and churning losses
- Calculation of dissipation through housing and rotating parts
- Oil temperature over time

Load Spectrum Template

- Definition of a spectrum in KISSsys
- Calculation with different options
- Checking the result data

Housing Stiffness

- Theory
- Characteristics of a reduced stiffness matrix
- Reading in and calculating in KISSsys

Modal Analysis

- Calculation of system eigenfrequencies
- Generation and evaluation of Campbell Diagram

