KISSsoft Live Stream Training
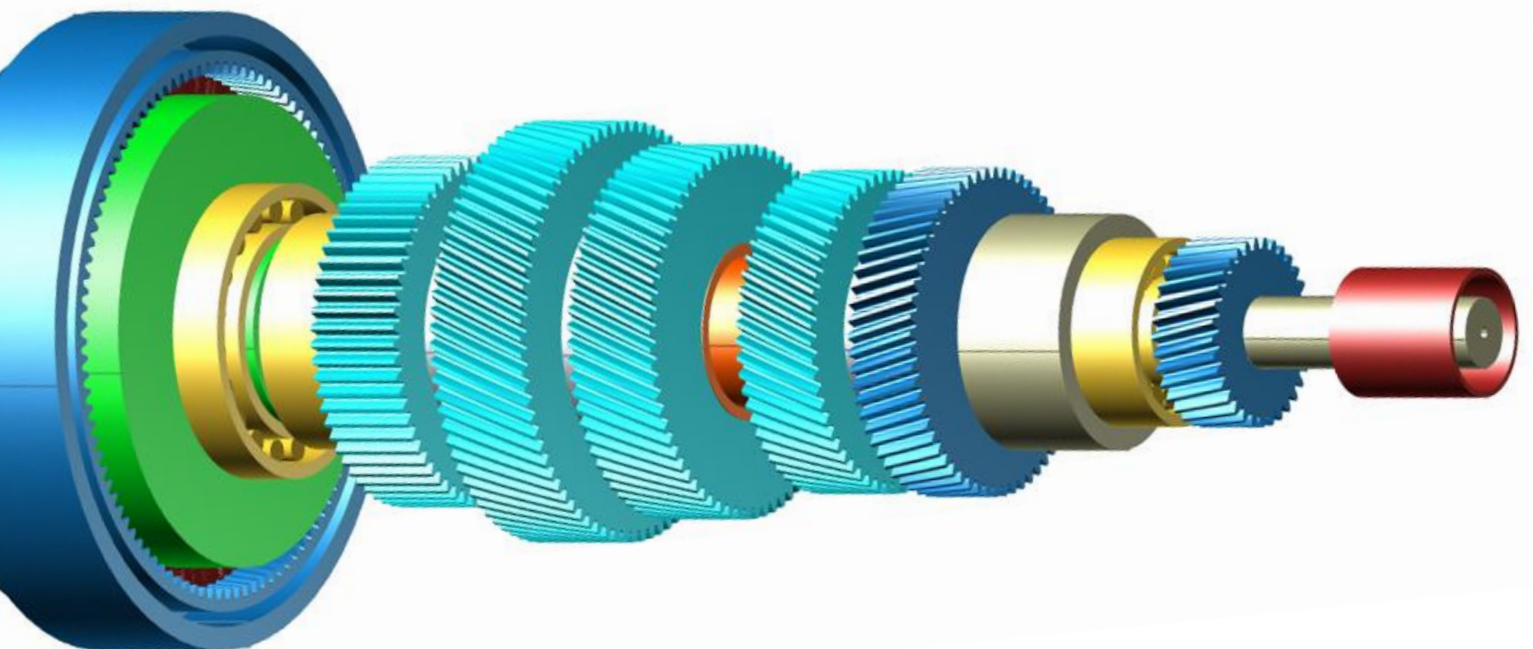
Advanced: Coaxial Bearing Shaft Systems considering inner bearing geometry

October 12-13, 2022

Sharing Knowledge

The below schedule is shown in time zone CET 02:00 pm – 06:00 pm (Brussels)

Session 1:   October 12, 2022

02:00 – 02:15	Introduction
02:15 – 03:40	Rolling bearing calculations
03:40 – 04:00	Break
04:00 – 06:00	Exercises
Exercises	approximate one hour time for exercises

Session 2:   October 13, 2022

02:00 – 02:10	Exercise follow up
02:10 – 03:40	Bearing geometry, properties, stresses, etc.
03:40 – 04:00	Break
04:00 – 06:00	Exercises
Exercises	approximate one hour time for exercises

The below schedule is shown in time zone CET 02:00 pm – 06:00 pm (Brussels)

Bearing Calculations

- Life rating along ISO 281, ISO/TS 16281
- Static strength, contact stresses
- Bearing, assembly and operating clearance
- Failure probability, bearing subsystem reliability
- Pre-tension, offset, stiffness
- Contact stresses and subsurface stresses in raceways
- Influence of roller modifications
- Design of own bearing inner geometry
- Friction and power losses
- Calculations through SKF Cloud Server
- …

Shaft Systems

- Pilot bearings, statically overdetermined systems
- Linear vs. non-linear calculation
- Timoshenko beam vs. Euler beam
- Shaft-, bearing-, environment temperature
- Natural frequencies, critical speeds, forced response
- Calculation with load spectra
- Influence of clearance, stiffness, temperature on deformation
- …

Tips and Tricks

- Working with 3D graphics
- Standard and special reports
- Bearing data base, bearing data
- Defining rolling element modifications
- Module specific settings
- Content of the reports
- Import drawings in shaft editor
- …