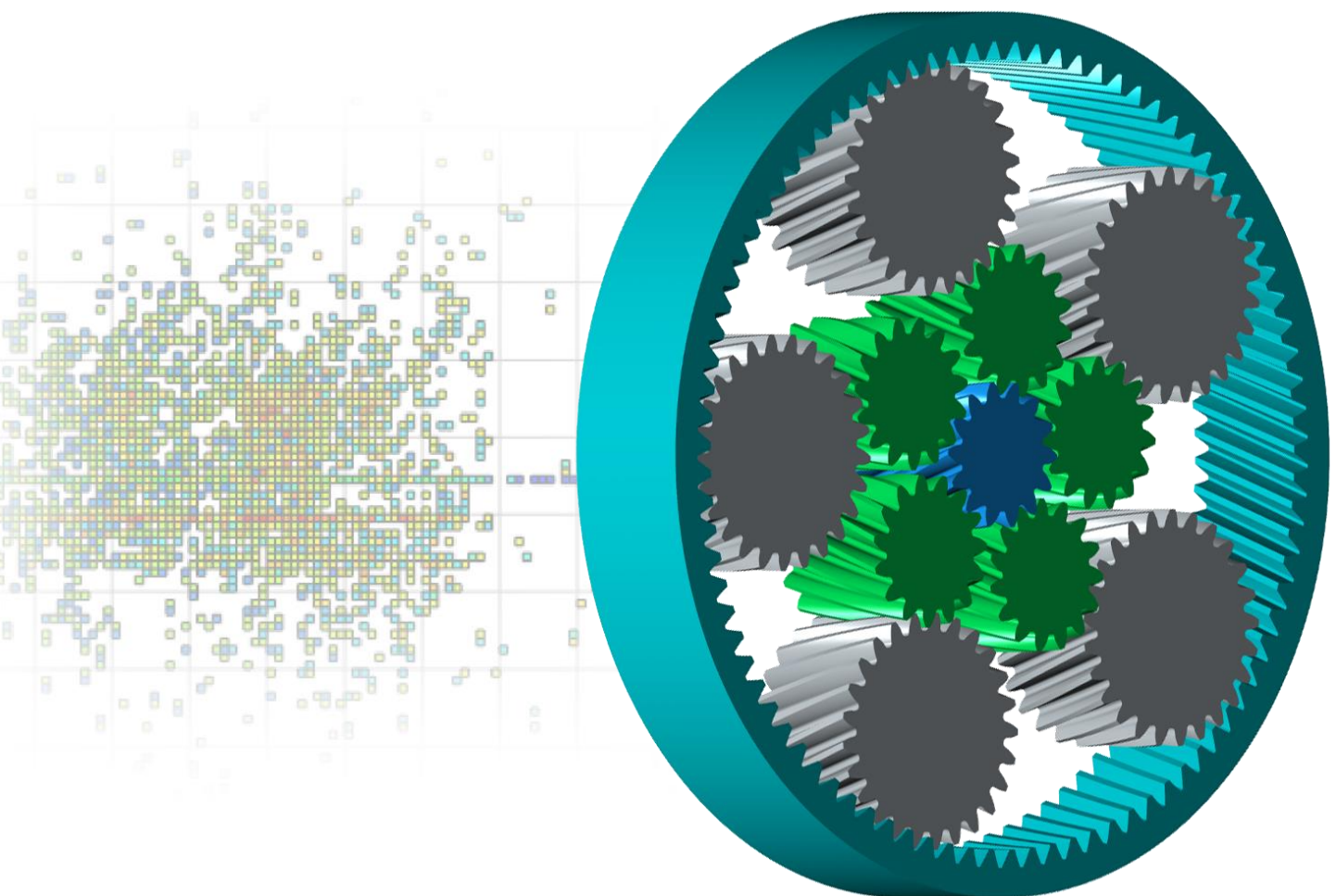


# Advanced Training

Cylindrical Gears: Strength

2 Live Stream Sessions



## Session 1: Strength of Cylindrical Gears, Part I

- Calculation of safety factors
- Identifying required safety factors
- Definition of material data and Woehler Line (S-N curve)
- Calculation of the flank safety and root safety according to ISO 6336
- Alternative methods for root stress calculation (Graphical method and FEM)
- Static strength calculation
- Effect of profile and flank modifications on strength
- User interface and special calculations: Strength tab, Factors tab, FEM tooth root stress, Module specific settings, various graphics

## Session 2: Strength of Cylindrical Gears, Part II

- Load spectrum analysis
- Conversion of time series data (simple counting, rainflow counting)
- Lifetime and damage calculation
- Calculation of scuffing safety (flash temperature and integral temperature) according to ISO 6336
- Calculation of micropitting safety and tooth flank fracture according to ISO 6336
- Calculation of subsurface fatigue according to DNV

