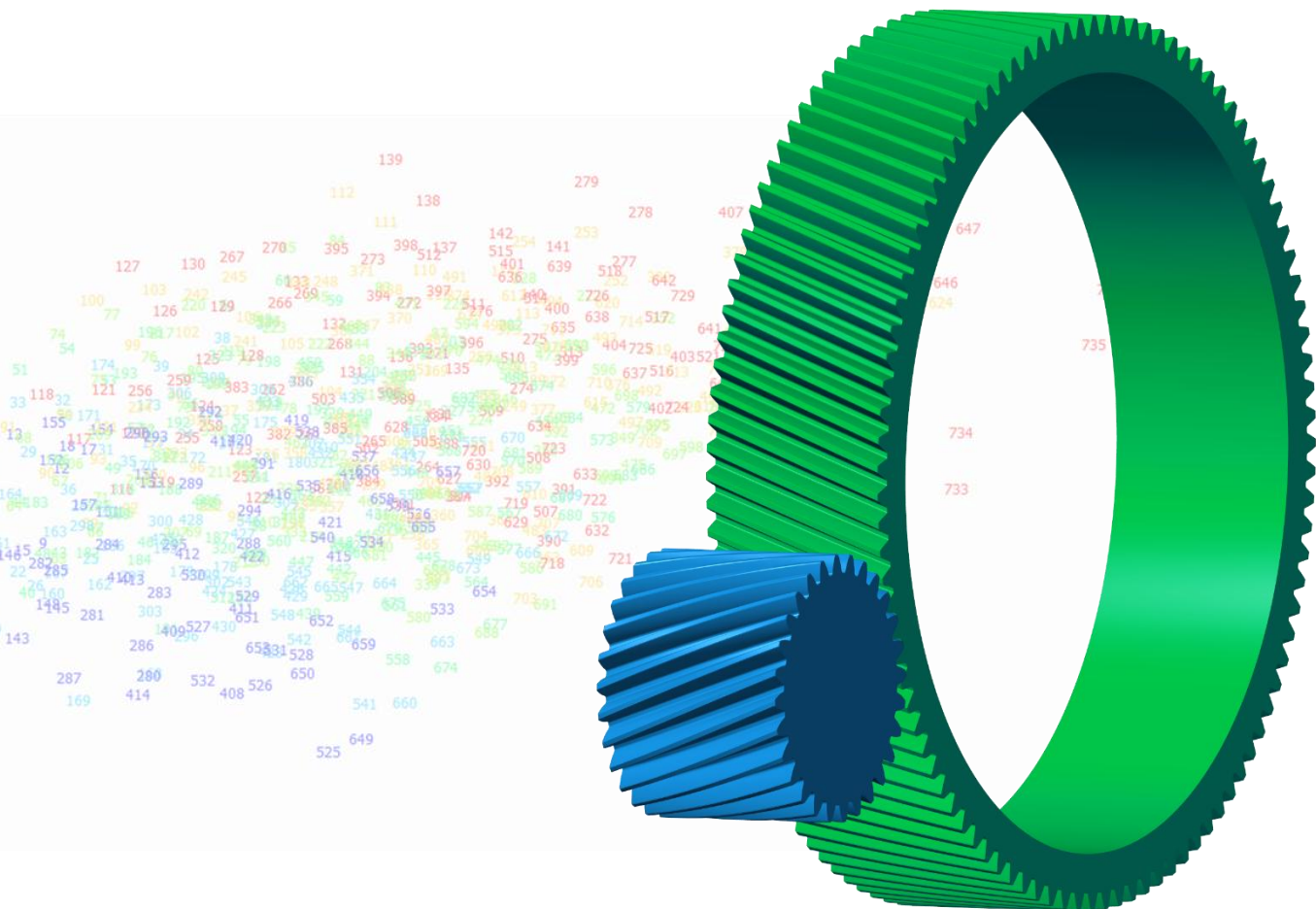# Basic Training

Cylindrical Gears: Geometry and Strength

2 Live Stream Sessions

General Scope of the Program

- General settings
- Maintenance of technology database (materials, tolerances etc.)
- Settings and customization of reports
- Possibilities of project administration
- Generation and application of calculation templates

Helical Gear Calculation (Gear Pair)

- Main data input fields for cylindrical gear calculations
- Reference profile, definition and meaning
- Influence of profile shift
- Definition of deep tooth form
- Definition of tolerances, tooth thickness and backlash
- Possibilities to control the correct inputs
- Introduction of strength calculation
- Pre-sizing of new gears (Rough sizing)
- Gear pair optimization using different criteria such as noise, vibration and strength (Fine sizing)
- Sizing of tip relief
- Evaluation of profile modifications and modified tooth forms
- Working with graphics
- Special features of planetary stages and racks
- Manufacturing data for drawings