

Face gears

General

- Strength rating along ISO 6336 (modified along Niemann, Roth and Basstein), ASS / Crown Gear / DIN 3990, based on ISO 10300, based on DIN 3991
- For 90° or greater shaft angle, with axis offset, for spur and helical gears
- Axis offset may be positive or negative
- 3D models include solid model, skin model, cutting model (based on shaping cutter geometry) and solid model of single tooth and single gap of face gear
- Calculation of subsystem reliability based on pinion and face gear life, using three parametric Weibull distribution

Configurations

- Face gear with cylindrical pinion as spur or helical gear
- Calculation of face gear geometry at different diameters by simulating manufacturing with a pinion type cutter
- Check against undercut and pointed tooth by varying tooth height
- Export of 2D or 3D geometry considering tolerances such as tooth thickness tolerances, tip and root diameter tolerances
- Crowning of face gear through modifications on pinion type cutter
- Output of contact lines on face gear
- Corner modification on inner and outer diameter

Export

- Export of 3D geometry of pinion, face gear and system as *.stp file
- Export of 2D geometry of pinion, shaping cutter and face gear sections as *.dxf file
- Export of surface topology / measurement grid using Klingelnberg and Gleason data format, for pinion and face gear, for a user defined number of grid points
- Export of pinion and face gear data table for CAD drawings



