Rack and pinion modules

Strength rating

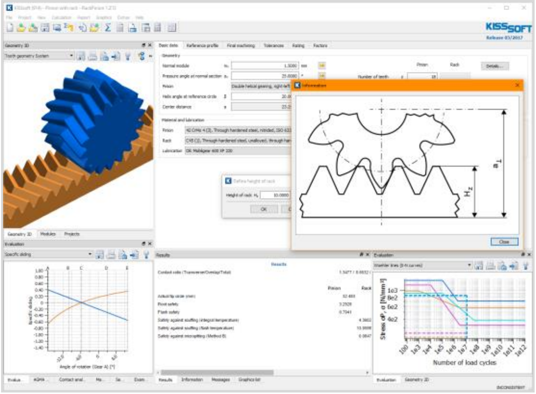
- DIN 3990 method B, DIN 3990 method B with YF along method C, DIN 3990 Part 41 (vehicles)
- ISO 6336:2006 and ISO 6336:2019
- Static rating against yield
- AGMA 2001-C95, AGMA 2101-D04, AGMA 2001-D04
- AGMA 6004-F88, AGMA 6011-J14, API 613 :2021, AGMA 6014-B15, AGMA 6015-A13, GOST 21354-87
- Plastic gears along Niemann, VDI 2545, VDI 2545 modified, VDI2736
- BV / Rina FREMM3.1, Rina 2010, DNV41.2, Loyds Register 2013
- ISO 13691:2001 (high speed gears)
- For nominal load or load spectrum
- Micropitting rating along ISO/TS 6336-22, scuffing rating along ISO 6336-20, ISO 6336-21, DIN 3990, AGMA 925
- Flank fracture rating along ISO/TS 6336-4 and case crushing rating along DNV 41.2

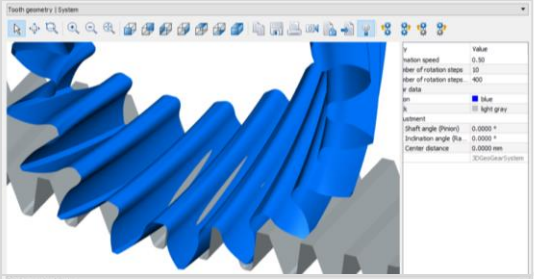
Output

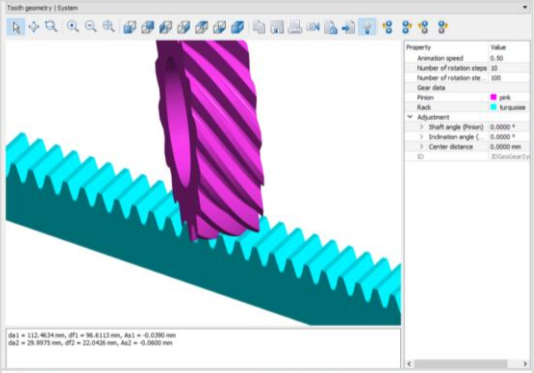
- Reports for manufacturing tolerances, drawing data, hardness depth proposal, geometry calculations and strength rating
- Life and strength results
- 2D and 3D gear geometry

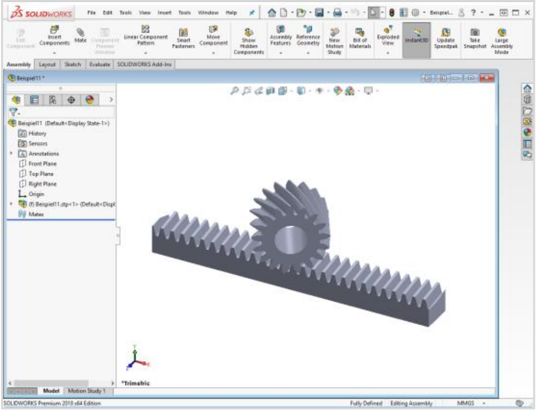
Crossed axis rack and pinion

- Axis angle ≠ 0°
- Calculation of contact ellipse size
- Stress calculation, strength rating
- No load contact pattern
- Consider pinion lead and profile modifications
- Export of 3D geometry in neutral format









Elliptical gears

Mesh calculation for wave gears

Geometry

- Definition of elliptical external gear
- Definition of circular internal gear
- With low number of teeth difference
- Graphical representation of mesh