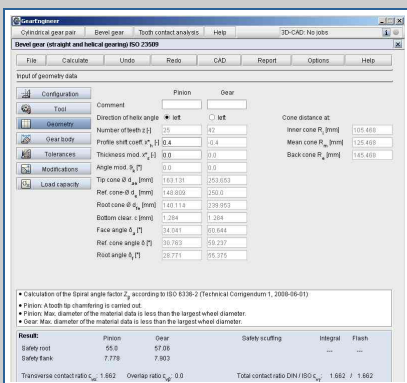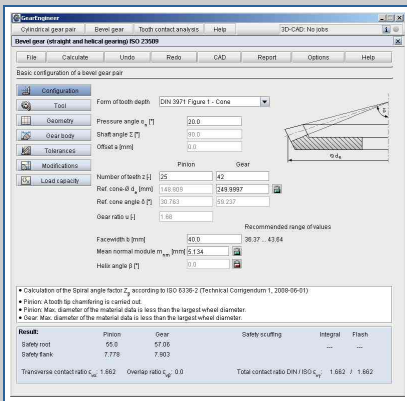# GearEngineer

TECHNOLOGY
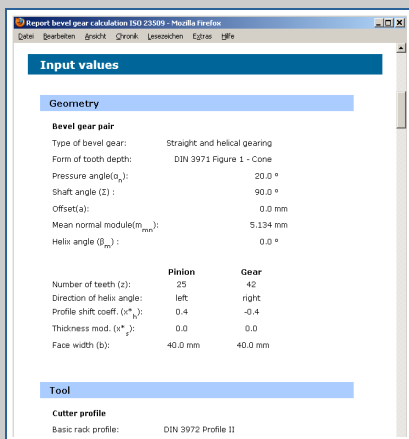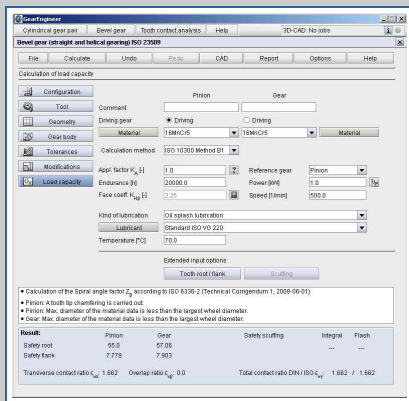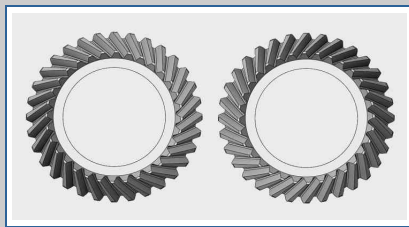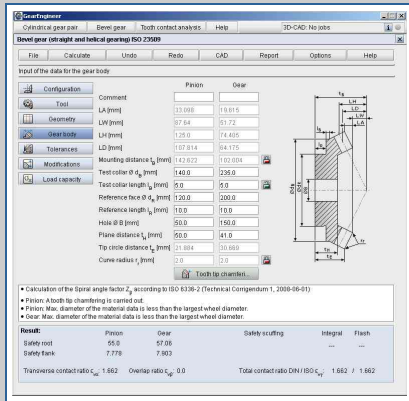
Straight and Helical Bevel Gears

GearEngineer Software

- Software module for the calculation of straight and helical bevel gears
- Language: The software is available in German, English and Chinese.
- Output Format: Output format for the 3-D gear tooth geometry is STEP/IGES.
- Documentation: A calculation report provides all detailed results, input values and figures. The calculation report is available in HTML and PDF format.
- Manual/Help: The integrated manual includes general and technical information.
- Software Protection: In general, the software is protected by an USB device.

Feature Overview

- Geometry of straight and helical bevel gears according to ISO 23509 and DIN 3971
- DIN bevel gears: tip cone, root cone and reference cone intersect in a common point (Gleason)
- Klingelnberg bevel gears: tip cone, root cone and reference cone are parallel (constant tooth depth)
- Standard depth: root cone and reference cone intersect in a common point (Gleason/Konvoid)
- Consideration of profile shift and thickness modification
- Bevel gear pairs with shaft angle equal and unequal 90°, without offset
- Tool data can be specified individually
- Calculation of transverse contact ratio, overlap contact ratio and total contact ratio
- Turning dimensions with lengths of cone and angles, calculation and direct input of mounting distance
- Suggestions for backlash according to Klingelnberg or Niemann, backlash can be defined individually
- Determination of the tooth depth, tooth thickness and chordal tooth thickness
- Consideration of lead crowning

![GearEngineer]

- Allowances according to DIN 3965 for deviations of several parameters, shaft angle and deviation of axis intersection
- Load capacity calculation according to ISO 10300 with integrated material and lubricant database
- Detailed calculation report in HTML and PDF format
- Output of CAD data: 3-D STEP/IGES

Software Maintenance and Update Service

Software maintenance is necessary. In addition to updates and service packs, the software maintenance includes hotline support by phone, fax, e-mail and web meeting. A password-protected download center provides updates and service packs and contains adjustments to newer operating system versions as well as enhancements due to further developments of the software module. The user can subscribe to a mailing list to receive an automatic notification when important updates are available.

Software Training and Software Introduction

Introduction, basic skills, individual settings, design strategies and other main topics in coordination with the user

Course duration: 1 day, on-site (charges and travel expenses are not included)

System Requirements

- WIN XP, VISTA, WIN 7 or WIN 8.1
- JAVA 1.6
- USB port
- Web browser (Internet Explorer, Mozilla Firefox)

Please feel free to contact us for individual enhancements and further gear types!