The KISSsoft Interface to Unigraphics NX

Start KISSsoft through the integrated menu in NX and easily calculate, generate and document gears in 3D!

KISSsoft

KISSsoft is a comprehensive CAE package for the layout, analysis and optimization of machine elements.

For our gear calculation software modules, we have developed an interface to Unigraphics NX. You can now call all KISSsoft calculation modules directly from the CAD program, and comfortably execute your calculations.

We could thus eliminate the laborious construction and the manual transfer of parameters from CAE to the CAD package. With KISSsoft and its interface, it is possible to keep it all under one umbrella.

Gear types

The Unigraphics NX interface supports the following gear types:

- Internal / External Spur Gears
- Internal / External Helical Gears
- Crossed Axes Helical Gears
- Worm Gears

The KISSsoft interface supports NX versions 3 and 4.

The Interface

Generation of a gear model can take place in one of two ways. A gear can be generated for an existing assembly or as a completely new part. The interface attaches the KISSsoft calculation files, as well as the required manufacturing information for the two-dimensional drawings, to the Unigraphics NX Part (see next page in section manufacturing data).

Gears are generated either with polylines, by circular approximation or as splines. It is up to you to decide which format to choose.

KISSsoft Unigraphics NX Interface is intended for your international applications, in following languages: English, German, French, Italian and Spanish.

KISSsoft Display of Spur Gear in NX
Spur and Helical Gears

KISSsoft calculates the geometry and the strength of spur gear pairs and helical gear pairs, as well as planetary gear trains.

The exact generation of the tooth form is guaranteed by the manufacturing simulation. With this data, Unigraphics NX will generate the Spur or Helical Gears, both internal and external. Furthermore, several gears can be created on already existing shafts.

The admissible tooth thickness tolerance deviation is implemented in the KISSsoft Calculation and is also taken into consideration in the 3D Display. This display can also consider minimal, middle and maximal tolerance.

Calculation and Manufacturing Data

The calculation and manufacturing data are directly attached to the tooth profile. This means for you, as end-user, that the drawing will also contain all relevant manufacturing data.

By selection of the tooth in Unigraphics NX the interface takes you back to your KISSsoft calculation. This is a convenient method to implement changes. Through this, access to all necessary information from gear design to the manufacturing is ensured.

For further information and a free test version, please contact your CAD Partner or visit us at the KISSsoft Web page. You can also call us at +41 55 254 20 53 and ask for Mr. Noske, who will be your direct partner.