KISSsoft 2021 – Instruction 135

Installation of a more compact gear report template version

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Contents

1 KISSsoft report templates

For the documentation of user input and calculation results KISSsoft is providing extensive reports. These reports are based on report templates which are text files with file extension "rpt". The installed report templates are located in the RPT-directory, which is by default a subfolder of the installation directory. The administrator can change the respective definition in the KISS.INI file if appropriate. In this case, the report templates used must be copied manually into the new directory. In most cases, the installation will be with the default location.

It is in the nature of reports that every stakeholder has different requirements concerning the contents. Therefore, KISSsoft allows edited versions of the report templates, adapted to the specific needs of the user. The edited files need to have the same name as the original files. To avoid version problems when a service pack contains updated report templates, a special folder is provided for the user to place his own version of these report templates. This folder, which is also named "rpt", is located in the ext-directory, which is defined in the KISS.INI file and can be redefined there. Or the user can change the location of the folder also by going in KISSsoft into Extras-Settings-Directories. If frequent adaptions are made to the files, it might be convenient to move this folder out of the – write protected - "program files" directory and to a location with write permissions.

KISSsoft will always first look into the ext\rpt folder when searching a report template. Only if no file is found is the search extended to the rpt folder in the installation directory itself. So using your own template is equivalent to the report template file being present in the ext\rpt folder or not.

2 Variant of cylindrical gear geometry report

Besides the content, also the arrangement of the data inside the report is a matter of needs and taste. In general we try to find a good compromise when it comes to the format of the reports, but sometimes there are simply multiple good ways to align the data.

For some time now there was an increasing interest in a more compact form of the gear geometry section. The current report in the 2021 version sorts the data according to the gears, the pair data, the pair data for each gear and so on. The idea was to have mainly one column of data to make reading the report easy. On the other hand, the full geometry report extends over 3 pages this way, so it might take some time to find the right place of a specific value.

To offer an alternative, we designed a more compact form of this report, which contains data for all gears side by side in multiple columns. For each language, there is a Z010geometry?.rpt (? being a character designing the language) and a Z016l?0.rpt file. The first one is the geometry report itself, which is loaded automatically by the respective main report file when generating the report. The Z016 file is the main report for 4-gear-chains, which is switched to landscape format. The installed version is in portrait mode, but for 4 gears the report became too wide, so we decided to switch this report to landscape.

3 Installation of the alternative report

If you want to use the new, more compact alternative, go to the ext\rpt folder in the installation directory. There is a new subfolder "prv" installed by service pack 2 (if the folder is missing, you most likely need to install service

pack 2 or higher first). Copy the files from the "prv" folder into the ext/rpt folder used by your installation. By default, this is the same folder you found the "prv" subfolder in. If, however, in your installation the ext-directory is relocated (see chapter 1), copy the files to this relocated folder.

If you don't want to use the new templates any more, simply delete them from the respective ext\rpt folder.

4 Differences

The differences in the report are only in the alignment of the data, the contents are the same. You can see below an example of the affected section of the report for the installed and the alternative version.

4.1 Example for the geometry report, installed version

4.2 Example for the geometry report, alternative version

KISSedit - [Technopower - 01 Spur (ISO 6336)]

Datei Bearbeiten Ansicht Format Fenster Extras Hilfe

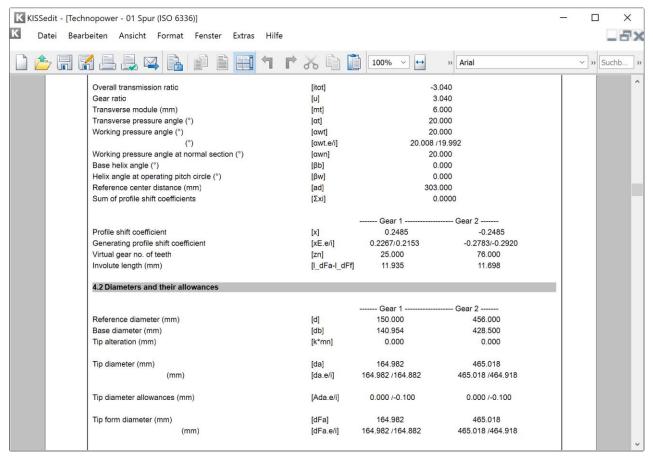|		
Overall transmission ratio	[itot]	-3.040
Gear ratio	[u]	3.040
Transverse module (mm)	[mt]	6.000
Transverse pressure angle (°)	[αt]	20.000
Working pressure angle (°)	[αwt]	20.000
(°)	[αwt.e/i]	20.008 /19.992
Working pressure angle at normal section (°)	[αwn]	20.000
Base helix angle (°)	[βb]	0.000
Helix angle at operating pitch circle (°)	[βw]	0.000
Reference center distance (mm)	[ad]	303.000
Sum of profile shift coefficients	[Σxi]	0.0000

		------- Gear 1 -------	------ Gear 2 -------
Profile shift coefficient	[x]	0.2485	-0.2485
Generating profile shift coefficient	[xE.e/i]	0.2267/0.2153	-0.2783/-0.2920
Virtual gear no. of teeth	[zn]	25.000	76.000
Involute length (mm)	[l_dFa-l_dFf]	11.935	11.698

4.2 Diameters and their allowances

		------- Gear 1 -------	------ Gear 2 -------
Reference diameter (mm)	[d]	150.000	456.000
Base diameter (mm)	[db]	140.954	428.500
Tip alteration (mm)	[k*mn]	0.000	0.000
Tip diameter (mm)	[da]	164.982	465.018
(mm)	[da.e/i]	164.982 /164.882	465.018 /464.918
Tip diameter allowances (mm)	[Ada.e/i]	0.000 /-0.100	0.000 /-0.100
Tip form diameter (mm)	[dFa]	164.982	465.018
(mm)	[dFa.e/i]	164.982 /164.882	465.018 /464.918