

Improvements in winLIFE Version 3.3 compared to 3.2

Innovation/Improvement 3.30.00 compared to 3.20.30

- ☺ The complete FKM-guidelines list of materials can be accessed via the new menu item "SN-curves/load FKM ..." in the nominal and notch stress concept.
- ☺ The complete material data base with over 1400 material data sets is available in winLIFE.
- ☺ Loads can be created for rotating components using the menu item "Extras/tools/divide load file".
- ☺ The winLIFE example videos can be played directly in winLIFE with the winLIFE menu Help | Tutorial | Internet/Local.
 - It is possible to selecting individual menu items with keyboard shortcuts ("ALT" or "CTRL/STRG").
 - For Mohr`s Circles it is also possible to hold down keys ('4' und '6') to go on the the next circle.
- ☺- Calculation of 200 load cases possible (formerly 100).
 - Separate colour setting possible for the edges of the rainflow matrix blocks using helpline 2.
- ☺ The number of the nodes in the csv-file can be limited when adding several results together (Project Info | Settings| Result| Other| Number of nodes)
 - If required the added results can be shown as a percent.
 - Load collectives can be saved in csv-format (for Excel)
 - In the rainflow diagram, values can be shown as single counts.
 - In the X-axis of the graph, the step distance can be changed.

Bugs/Features

- Help in various windows improved or new.
- Error corrected in "Close Project" (The MDI windows of the individual projects got mixed up)
- Problem solved for occasional program crash when moving the mouse in a diagram window.
- adm = 0 now possible.
- When calculating Kappa and KT it was possible for these to be accidentally taken over and used for generating.
- In the calculation dialogue for KT and Kappa, 7.5 entered as default.
- Saving the diagram axis settings is possible as project settings.

Innovation/Improvement 3.20.30 compared to 3.20.20

- For the material dialogue in the SN-curve dialogue, the improved material dialogue can be called up. Only the selected materials are shown.
- ☺ In the project treeview press the right-hand mouse key for a context menu to "save, end or copy" the current project.
- In the level crossing counting diagram you can select for an individual project whether classes or values are shown on the Y-axis.

Bugs/Features

- The help tool tips in the SN-Curve dialogue have been improved and completed.
- Correction in transfer of data from stress gradient/form factor dialogue to SN-curve dialogue with calculate, use, ok and cancel.
- For SN-curves shown logarithmically: If the corner load number of cycles coincided with the upper limit of the X-axis, the SN-curve was not shown.
- The margin settings for the printer and the report generator can now be accessed separately. The print margins and print format "vertical or horizontal" are saved in the program settings.
- The project history has been improved. Double entries are no longer possible. (same project name and same work directory).
- Correction of repeated changed indications of projects "*" in the labels when the project name is the same but in different work directories.

Innovation/Improvement 3.20.20 compared to 3.20.10

- ☺ Opening winLIFE with several project optimised.
- Opening several projects in winLIFE optimised.
- Making more than one copy of projects with specific changes to particular parameters is now possible.
- Creating more than one copy of a project with the possibility of making changes to the SN-curve, the load, the FE interface and the parameter.
- New menu item "Extras/tools/partial load analysis". The damage sum is calculated when the loads vary. This menu item is only available if the licence includes the statistic analysis module.
- New menu item "Extras/tools/sensitivity analysis" shows the effect that the changes made to the SN-curve and the load have on the damage sum. This menu item is only available if the licence includes the statistic analysis module.

Bugs/Features

- In LST-files tabs as value dividers are also accepted.
- The Findley parameter k is now shown with the damage sum.
- Additional licence module "with Statistical Analysis Module".

Innovation/Improvement 3.20.10 compared to 3.20.00

- ☺ Calculation time on average four times as fast.
- Level crossing count with class width.
- ☺ It is now possible to start the program more than once on one PC.
- Loading the projects has been optimised (factor 3)

Bugs/Features

- The SN-curve generator according to Germanischer Lloyd Wind or Germanischer Lloyd Ship now uses the oscillation width instead of the amplitude. The generated SN-curves are wrong by factor 2.
- Findlay factor k is shown correctly in the damage sum report.
- When closing the SN-curve dialogue, the internal safety factor is set to 0. If this is not noticed before generating again, it can lead to very high endurance limits.
- If the signal path is very long and the file has to be loaded in sections, the maximum and minimum value will be repeatedly recalculated.
- The second x-axis in the load time history is now always shown correctly.
- Changing the collective by marking a section is now possible again.
- For changes to the load, it is possible to use real numbers.
- When saving the load file, the old file will not be overwritten.
- In the diagram csv-files can be opened as a force load. If they are saved separately, they can also be classified.