

KUM International 2019 Workshop Program, October 24, 2019

Rating of cylindrical gears using contact analysis

Rating of cylindrical gears with different face widths, various settings for evaluation of results, evaluation of asymmetric gears with different pressure angles.

Plastic gears and calculation methods

Design plastic gears using general guidelines. Specialties in plastic material data regarding the calculation guidelines VDI 2545 and VDI 2736 and new calculation options in the KISSsoft Release 2019.

FEM calculations in KISSsoft

Learn about FE calculations which are started from KISSsoft, such as planet carrier and gear body deformation and stresses from grinding notch, and the handling of the SALOME software.

KISSsoft steered through the COM interface

Steering of KISSsoft via the COM interface using Python or Excel VBA. Learn about the basic commands such as reading and writing parameters as well as calling advanced KISSsoft functions.

3D models of gears

Generate 3D models of various gear types such as cylindrical gears, bevel gears and worm gears. Check the contact line using the 3D skin models and provide the measuring grid data for inspection.

Customizing of KISSsoft

Customize your KISSsoft: Apply starting parameters, setup the individual result window, add your own tool list, modify the report and much more.

Building drivetrain concepts

Build various drivetrain concepts using the modeling tree and sketcher functionality. Create several kinematics starting from industrial gearboxes up to shifted transmissions.

KISSsys with load spectrum calculation

Define a detailed load spectrum in KISSsys with user-defined parameters and additional calculations such as casing stiffness, thermal rating etc, per bin. Export the data in user specific tables.

Rolling bearing calculation

Perform the bearing calculation with classical and inner geometry method. Use the rating of the bearing life time through the SKF Cloud. An expert from SKF will explain the details about the calculation.

Bevel gear rating

With KISSsoft, a fine sizing of a bevel gear pair is done, and the solution is transferred to GEMS® for manufacturing checks. With KISSsys, the EPG values are calculated and in GEMS, the LTCA is performed.