Tutorial on Using GRC-GEAR-SCouP

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To run GEAR-SCouP, users need to install MatlabMCR. The installation file is included in the package. A sample file with GRC spline dimension is provided in the package "input_GRC750kW.txt".

Descriptions on current individual button functionality:

Load input File type: .txt file currently; during next step, it will have the capability to prompt dropdown menu to type in individual parameters inside the GUI.

Review Input Parameters: review the parameter before run analysis. Editing functionality is disabled for now as there is compatibility issue with Matlab MCR.

Start Analysis: compute stress/strength/safety factor/tooth contact pattern programs.

Result review: this button prompts the plots. The check box below is user-selected output to be shown in the screen.

Save results: export all the results to a spreadsheet in the same working folder "data.xls"

Capture image: save images to .jpg files

Exit: exit the program.

Help: Dummy

Procedure to run GEAR-SCouP:

Run GRCGEARSCouP.exe->Load input file "*.txt"->Review input parameter->Start analysis->Result review-> Save result->Exit