

Thank you for downloading GearUp.

Author: Thejus

Platform: Android Studio App

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What the app can do

The App is for Mechanical Engineering students to calculate the design parameters for Spur and Helical gears (Helical gears will be added soon). Based on given data of Power, Speed and teeth of both gear and pinion, pressure angle, strength etc. the app will calculate design criteria, module and will also do the standardisation. The pitch circle diameters of both pinion and gear will also be calculated.

What the app cannot do

The app, as of now, does not find out the teeth or speed based on gear ratios and also the app is not suitable for design problems based on centre distance. This app is not a replacement for the Design Data Handbook. Although in many places the app takes data book values by itself. The data book used for the app is Design Data Handbook for Mechanical Engineers by K. Mahadevan and K. Balaveera Reddy, Fourth edition.

Cross check accuracy

The accuracy for safety cross check is maintained in the application. I.e. If the design fails with the calculated module, the app will readjust not only the module value but also the velocity and Cv values according to the new module.

Cv value assumption

User is given the freedom to select a suitable Cv value for the design. User can refer the data book (Page 205) for clarity.