

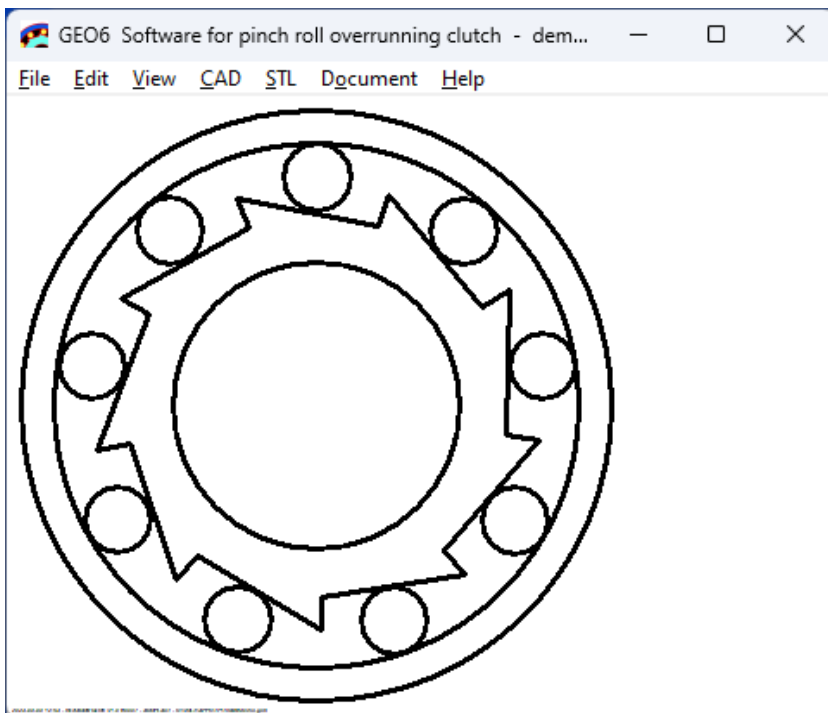
GEO 6



Pinch roll overrunning clutch

for Windows

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Calculation of overrunning clutch

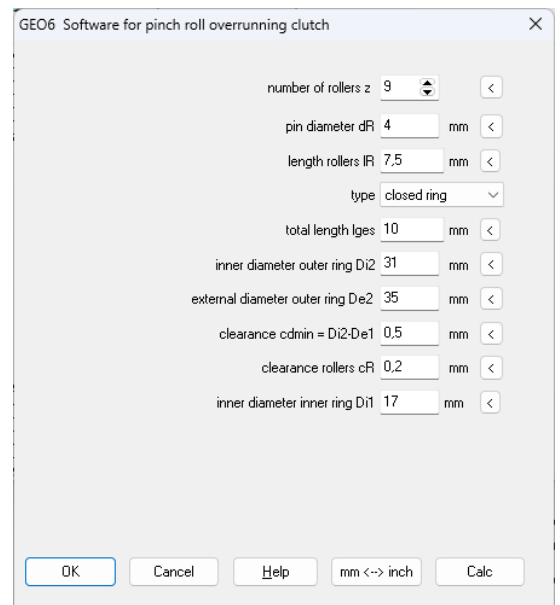
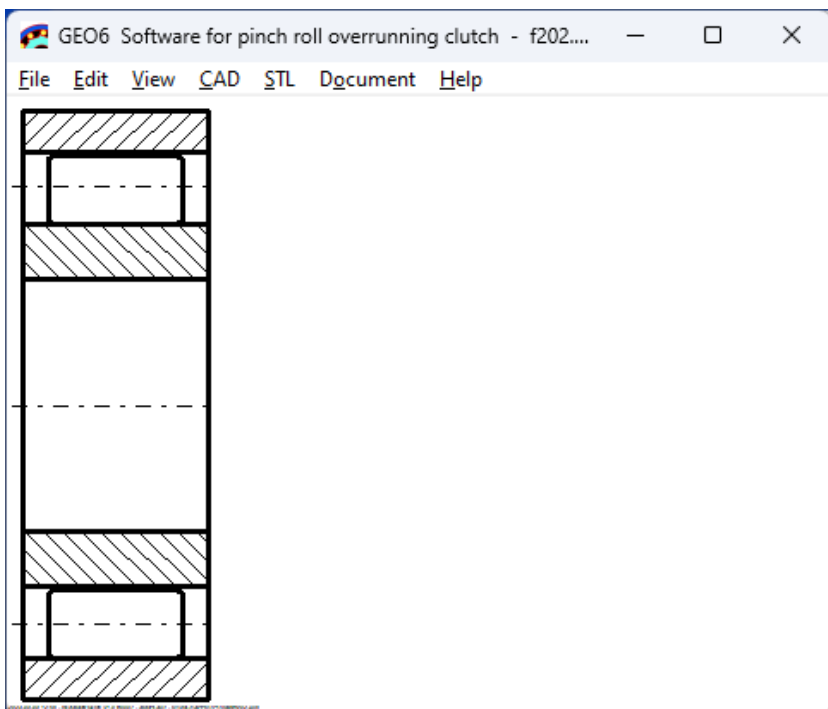
GEO6 calculates dimensions, shifting travel, shifting angle, minimum friction coefficient and Hertzian pressure of pinch roll overrunning clutches with cylindrical rollers. GEO6 generates drawings of inner ring and outer ring as screen view and DXF or IGES file for CAD export. Clutch components can be generated as STL files and printed on your 3D printer, to assemble a full functioning model.

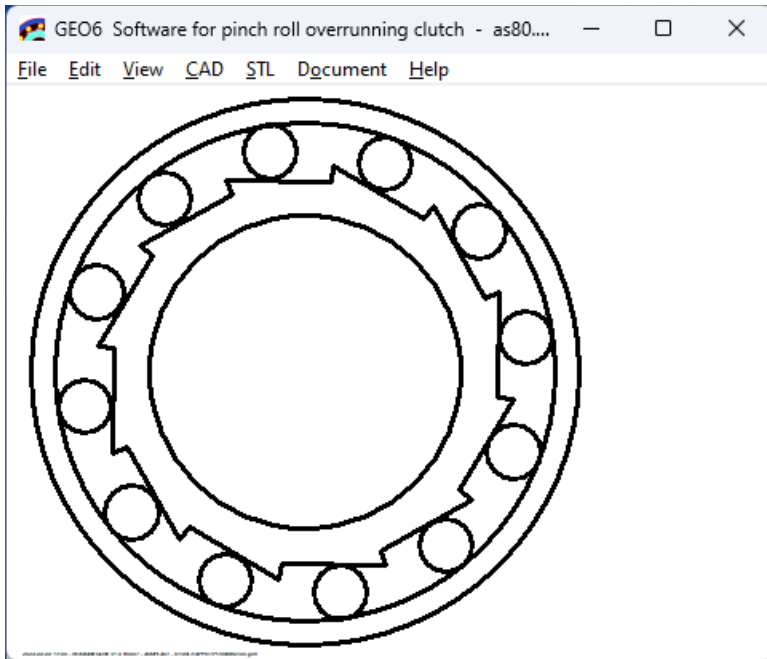
Dimensions

Enter number of rollers, roller diameter, internal and external diameter and width of the clutch, type and clearance. Suggest buttons support you in input of unknown items. GEO6 calculates dimensions of the components. By means of a true-scale drawing on screen you can evaluate and optimize dimensions of the pinch overrunning clutch.

Pinch roll overrunning clutch

In load direction, cylindrical rollers roll up along the inner ring until clamped between outer ring and inner ring. A compression spring could be used to support clamping and minimize shifting travel (not used with GEO6).





Friction

GEO6 calculates minimum friction coefficient between rollers and ring.

Strength

GEO6 calculates Hertzian pressure between rollers and outer ring or inner ring.

Material Database

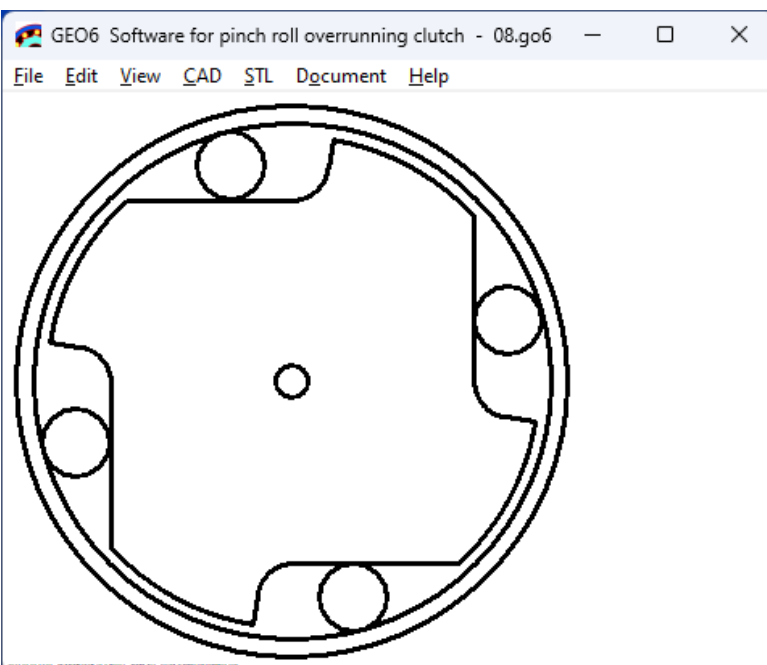
Material properties for strength calculation can be entered directly, or you can select the material from integrated database.

Animation

Rotation of inner ring and outer ring with switchover from free run into load run can be simulated on screen in an animation.

Text Output

Input data and calculation results may be printed, saved as text file or HTML file, or exported to MS Excel via OLE interface.



Graphics Output

Drawings and diagrams can be printed on any Windows printer, or exported to CAD.

CAD Interface

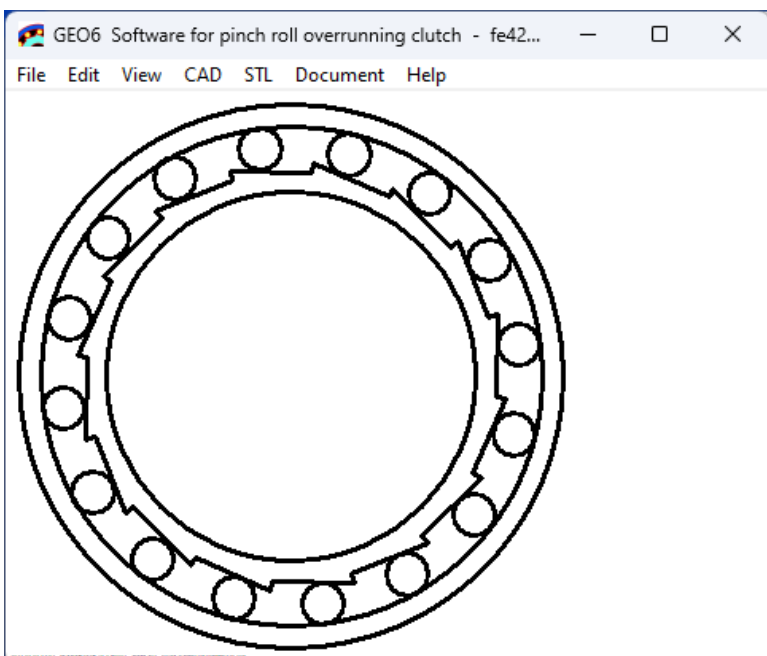
Drawing outer ring, inner ring with rollers, diagrams and tables can be exported as DXF- or IGES files, and opened in CAD. Layers, colours and text font can be configured in GEO5.

STL Interface

Inner ring and outer ring can be generated as STL file and produced with 3D printer. This way you can assemble a pinch roll overruning clutch with the printed parts, just to be completed with metal rollers.

HEXAGON Help System

GEO6 provides help text and auxiliary images. Warnings and error messages occur if exceeding a limit. For every error message you can have a description and remedy suggestion.



Units

Units can be switched between metric (mm) and imperial (inches).

Export Formats

DXF, IGES, STL, HTML, TXT, Excel, GO6.

System Requirements

GEO6 is available as 32-bit app or as 64-bit app for Windows 11, Windows 10, Windows 7.

Scope of Delivery

Program with user manual (pdf), example applications and help images, non-expiring perpetual license.

Guarantee

HEXAGON gives a 24 month guarantee on full functionality of the software. We provide help and support by email without extra charge.