Calculation and Design of Geneva mechanism
GEO7 calculates dimensions, operation angle, velocity and acceleration of inner Maltese cross gears. GEO7 generates drawings of inner Maltese cross wheel and driving crank as DXF or IGES files to be used with your CAD software. The component parts can be generated as STL files, then printed on a 3D printer and assembled as functioning model of an inner Geneva mechanism.

Dimensions
Number of slots in the inner Maltese cross may be 4, but also any number between 3 and 100.
Size of the Geneva mechanism can be defined either by external diameter of the Maltese cross or by center distance. Then enter width of slots and driving bolt diameter. Dimensions of arc segments used as locking device are calculated by GEO7, just enter minimum wall thickness at slots and clearance between arc segments of Maltese cross and driving wheel.
### Diagrams
Angle of rotation of the Maltese cross as function of the driving wheel as well as velocity and acceleration over one revolution can be shown as diagram.

### Animation
Rotation on inner Maltese wheel and driving crank can be simulated on screen as 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
Drawings and diagrams can be printed on any Windows printer, or exported to CAD.

### STL Interface
Inner Maltese wheel, driving crank, bearing plate and spacer sleeve can be generated as STL file and produced with 3D printer. This way you can assemble a Geneva mechanism with the printed parts, just to be completed with metal bolt and shafts.

### HEXAGON Help System
GEO7 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, GO7.

### Import Formats
TXT, Excel, GO7.

### System Requirements
GEO7 is available as 32-bit app or as 64-bit app for Windows 10, 8, 7.

### Scope of Delivery
Program with example applications and help images, user manual (pdf), license agreement for an indefinite period of time.

### Guarantee
HEXAGON gives a 24 month guarantee on full functionality of the software. We provide help and support by email and hotline without extra charge. GEO7 is constantly being improved and updated. Registered users will be informed about news, and can get new versions at a reasonable update price.