

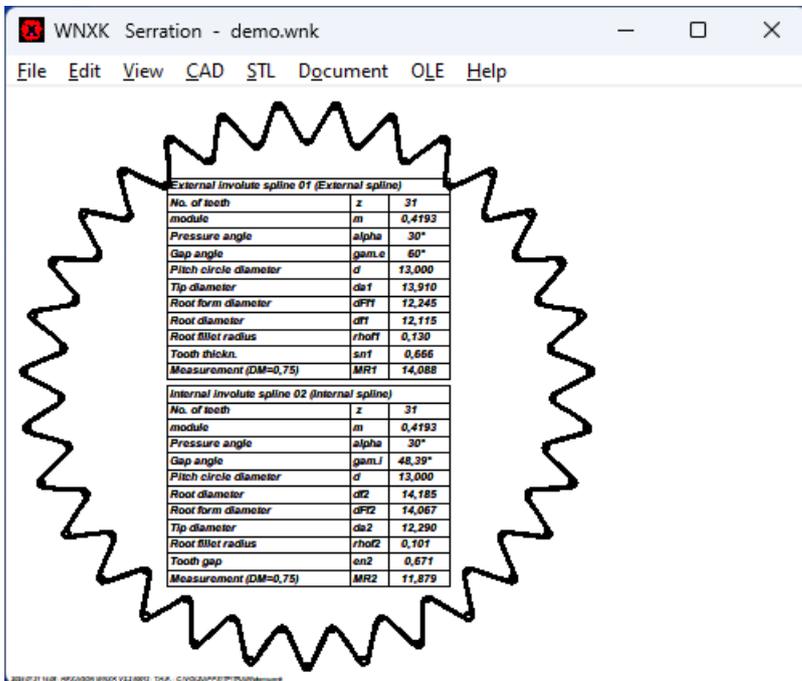
WNXX



Serration Spline Design

for Windows

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Application

WNXX calculates dimensions of any serration spline. You have the choice to input dimensions of external spline and internal spline, then calculate clearance and backlash. Or enter dimensions of external spline or internal spline together with clearance and backlash to get counterpart dimensions. And you have the choice to input tooth thickness or tooth gap width or profile shift coefficient or dimension over/between pins. WNXX can calculate dimensions of serration splines (without tolerances) according to any standard, if the most essential dimensions are known or measured. WNXX also calculates serration splines according to DIN 5481, and you can calculate dimensions and generate profile drawings of gauge. Serration splines according to unknown standards and non-standard serrations can be designed, calculated and generated by means of WNXX.

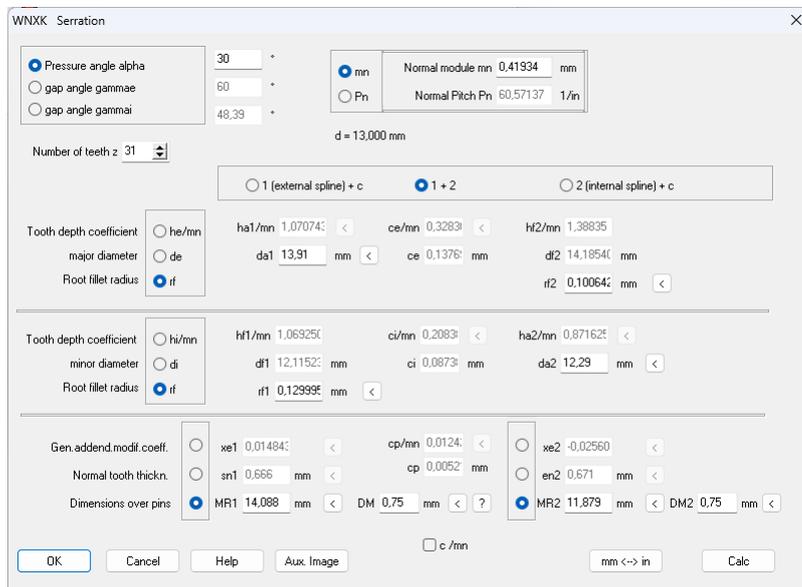
Tooth Profile

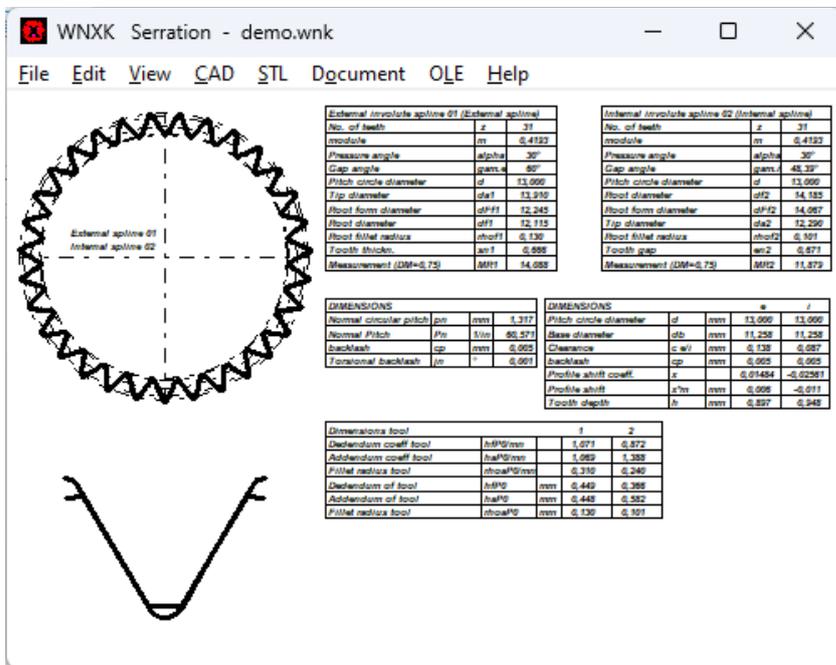
WNXX generates a true-scale drawing of the serration profile of both, internal and external serration spline. The profile drawing can be used for profile projector, wire eroding machine, 3D printer, etc.

Calculation

WNXX software calculates dimensions and profile of external spline (shaft) and internal spline (hub). WNXX offers various input options:

- external spline and internal spline or either of them together with clearance and backlash
- major diameter and minor diameter or tooth height coefficients (addendum and dedendum)
- profile shift coefficient or tooth thickness or dimensions over/between balls
- clearance and backlash in mm or inches, or as factor of module c/m
- module or pitch





Measurement

WNXK calculates dimensions over/between pins, where pin diameter be modified. Or you can input measured dimensions instead of addendum modification coefficient. Dimensions not selected for input are immediately calculated and displayed in the dialogue window.

Reference Profile

Addendum and dedendum tooth height coefficients can be entered, or WNXK calculates it from major diameter and minor diameter.

Tolerances

WNXK calculates dimensions without tolerances. This, you have to input average dimensions, not nominal dimensions. If limits should be calculated with WNXK, you have to run two calculations with min and max tolerances. And maybe a 3rd one with mean tolerance.

Quick View

Quick View shows a drawing of internal and external spline together with tables of dimensions and measurement altogether on one screen.

Graphics

Drawings of single tooth and serration spline profile can be shown on screen, printed or generated as DXF or IGES file.

Production Drawing

WNXK generates a production drawing with serration spline dimensions and ISO 7200 data field. Drawing data and modifications can be edited within WNXK. Production drawing may be printed directly, or exported as DXF or IGES file.

CAD Interface

WNXK generates true-scale drawings as DXF or IGES file, ready to be loaded into any CAD or CNC system. Settings like number of points for the involute or fillet curve may be configured in WNXK.

Units

WNXK software can be switched between metric units (mm) and imperial units (inch).

System Requirements

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

Scope of Delivery

WNXK Software with user manual (pdf), non-expiring license for unlimited time use with update rights.

Software Maintenance

HEXAGON Software is continuously improved and updated. Registered users are regularly kept informed of updates and new editions.

Guarantee

HEXAGON gives a 24 month guarantee on full functionality of the software.

