WN5 calculates dimensions, tolerances, dimension over/between pins, stress and life expectation for involute splines according to ISO 4156 and ANSI B92.2M. Basically, WN5 uses metric units. Imperial units inch, psi, lb-in, can be configured as well. WN5 calculates the fit types „Flat Root Side Fit“ and „Fillet Root Side Fit“. Pressure angle can be 30°, 37.5° or 45°.

Flank Clearance, Tolerances
WN5 calculates tolerances for diameters, space width and tooth thickness according to ISO 4156 and ANSI B92.2M from Fit Class and Spline Tolerance Class. When entering centerline runout of internal and external spline, WN5 calculates required effective clearance.

Measurement
WN5 calculates dimension over/between pins, span measurement and tooth thickness. Pin diameter and number of teeth measured may be modified by the user.
Stress Calculation
WN5 calculates compressive stress, spline teeth shear stress, hoop stress, bending stress, torsional stress, and equivalent stress according to “SAE Design Guide for Involute Splines”. Material, application factors and life expectation coefficients can be entered directly, or calculated by WN5.

Production Drawing
Drawing tables with spline dimension data according to ANSI B92.2M or ISO 4156 together with a spline draft may be printed or loaded with CAD via DXF-/IGES interface.

Tooth drawing
WN5 generates true-scale drawings of internal and external involute spline as DXF/IGES files for CAD Import.

System Requirements
WN5 is available as 32-bit app or as 64-bit app for Windows 7, 8, Windows 10.

Scope of Delivery
Program with user manual (pdf), example applications and help images, 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.

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