

WN7

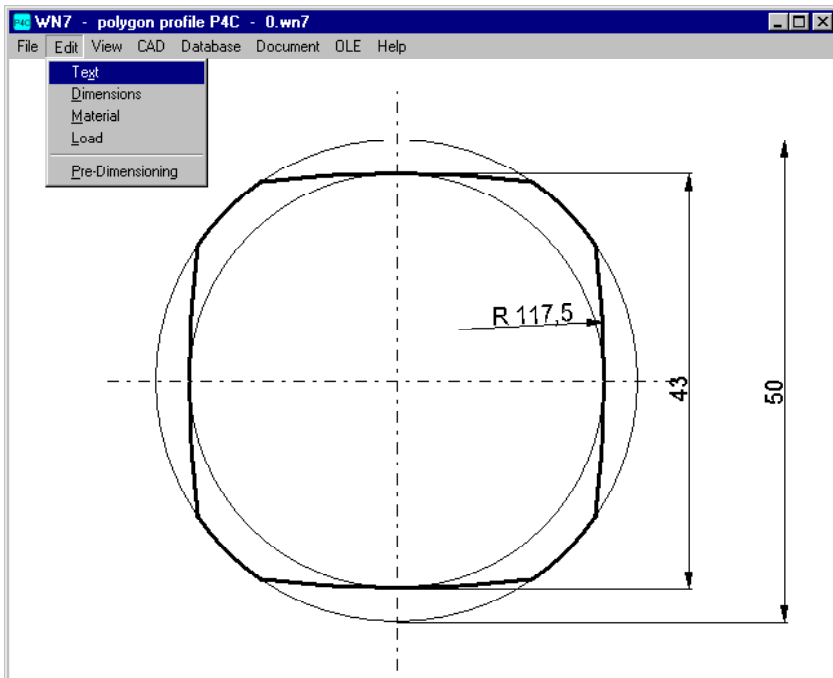


www.hexagon.de

Software for Polygon Profiles P4C according to DIN 32712

for Windows

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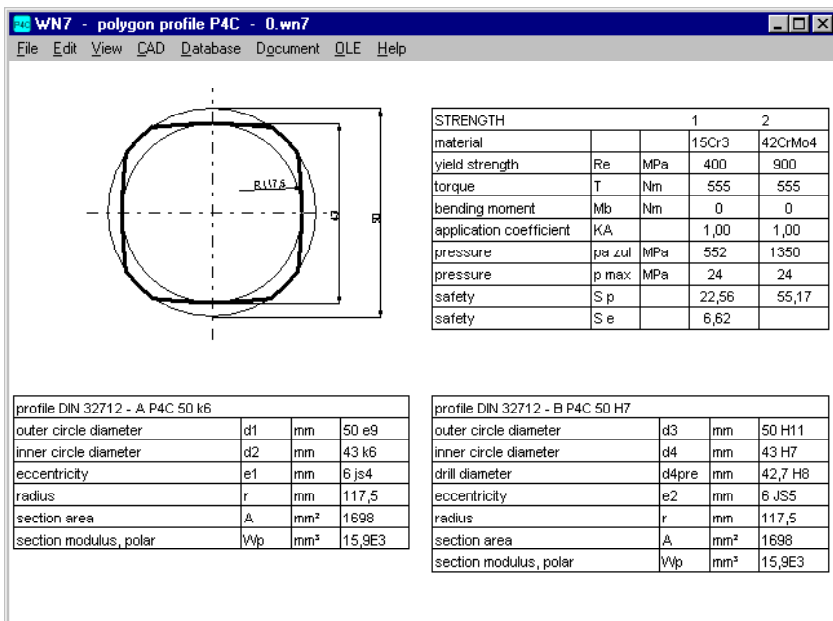
P4C Calculation

WN7 calculates dimensions, tolerances, stress and safety factors for P4C polygon profiles according to DIN 32712.

P4C Database

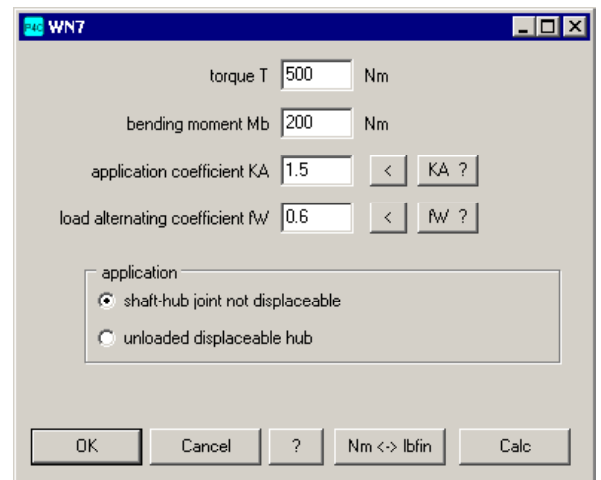
P4C sizes according to DIN 32712 (size 14 mm to 100 mm) can be selected from database. The database may be extended by the user.

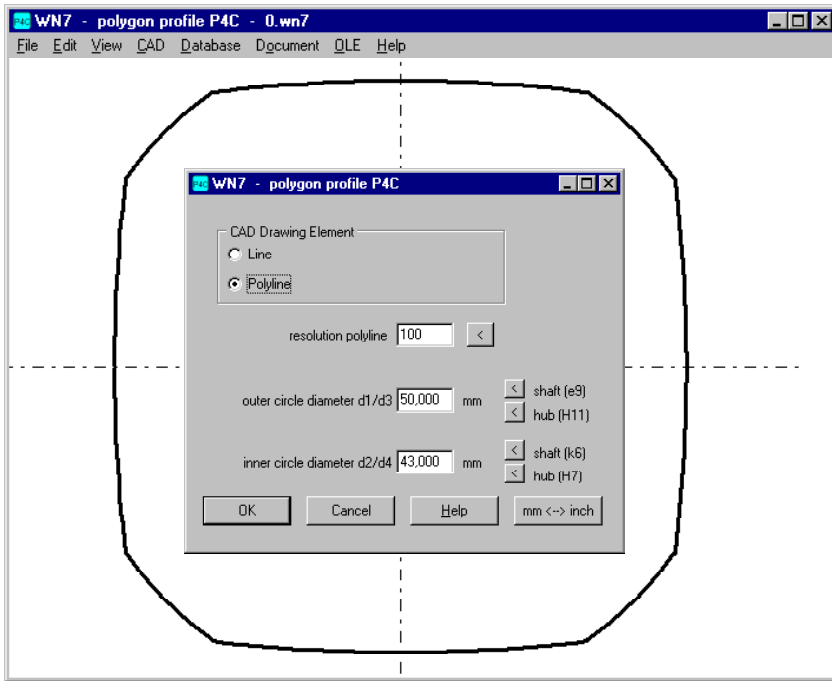
D1	D2	E1	D4PRE	R	INFO1	INFO2
16	13	2	12,8	38,5		
18	15	2	14,8	39,5		
20	17	3	16,8	46,5		
22	18	3	17,8	57		
25	21	5	20,8	90,5		
28	24	5	23,8	92		
30	25	5	24,8	92,5		
32	27	5	26,8	93,5		
35	30	5	39,8	96		
40	35	6	34,8	113,5		
45	40	6	39,8	116		
50	43	6	42,7	117,5		
55	48	6	47,7	120		
60	53	6	52,7	122,5		



Pre-Dimensioning

Enter torque, select material and application: WN7 calculates minimum size required for a P4C shaft-hub joint.





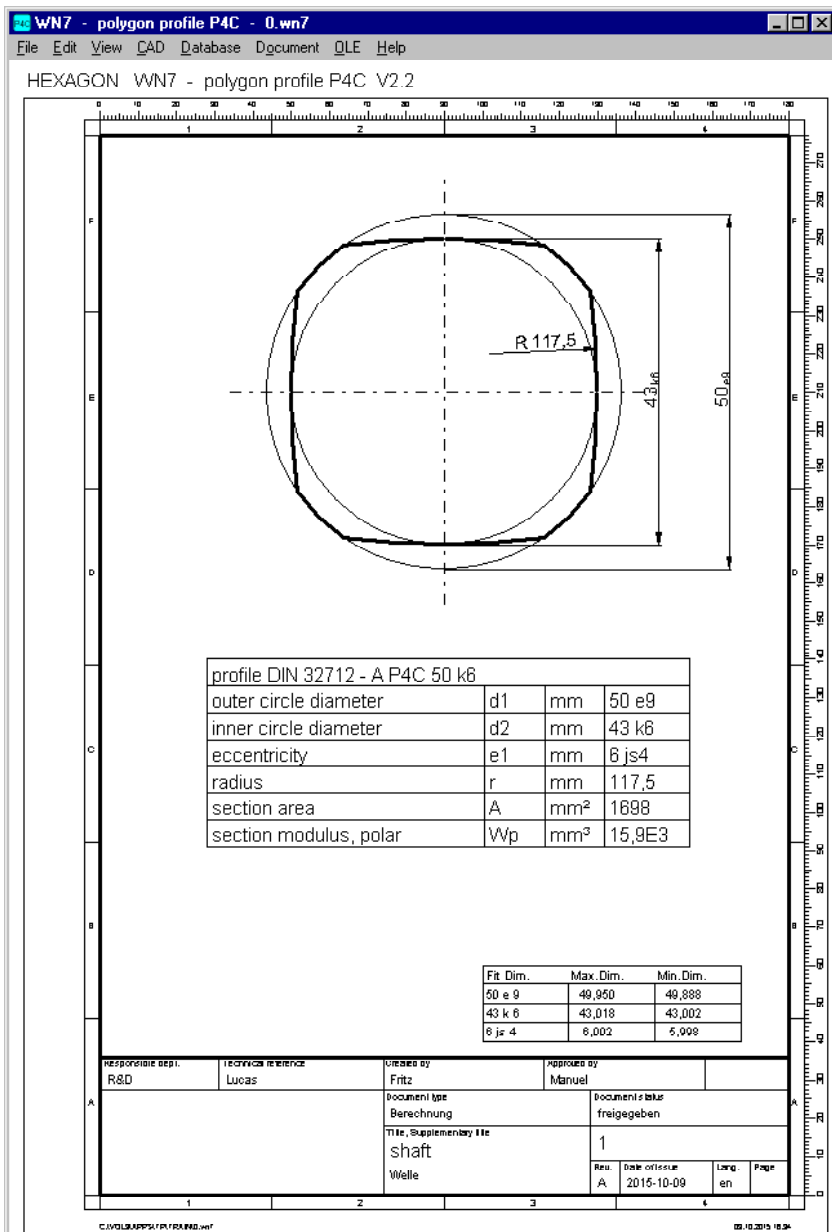
Strength Calculation

WN7 calculates compressive stress, torsional stress, bending stress, and equivalent stress according to DIN 32712 and DIN 6892. Material, application factors and life expectation coefficients are considered by WN7.

Material Database

Materials for shaft and hub can be selected from the integrated material database with 900 steel and non-iron materials.

IDENT	MATERIAL	MAT_NR	NR	RM	RE	E_MODUL	A5	Z
1.7035	41Cr4	1.7035	13	1000	800	210000	11	3
1.7036	28CrS4	1.7036	7	0	0	210000	0	
1.7037	34CrS4	1.7037	13	900	700	210000	12	3
1.7038	37CrS4	1.7038	13	950	750	210000	11	3
1.7039	41CrS4	1.7039	13	1000	800	210000	11	3
1.7043	38Cr4	1.7043	8	930	735	210000	11	4
1.7045	42Cr4	1.7045	8	980	780	210000	11	4
1.7102	55SiCr6	1.7102	26	1450	1300	210000	6	2
1.7103	67SiCr5	1.7103	26	1500	1350	210000	5	2
1.7106	58SiCr7	1.7106	26	1500	1350	210000	6	2
1.7108	60SiCr7	1.7108	26	1320	1130	210000	6	3
1.7117	52SiCrNi5	1.7117	26	1450	1300	210000	6	3
1.7131	16MnCr5	1.7131	7	900	635	210000	9	3
1.7138	22MnCrB3	1.7138	26	1320	1175	210000	6	4
1.7139	16MnCrS5	1.7139	7	880	635	210000	9	3
1.7147	20MnCr5	1.7147	7	1000	700	210000	8	3
1.7149	20MnCrS5	1.7149	7	1080	735	210000	7	3
1.7160	16MnCrB5	1.7160	7	0	0	210000	0	
1.7176	55Cr3	1.7176	26	1320	1175	210000	6	3
1.7213	25CrMoS4	1.7213	13	900	700	210000	12	5



Production Drawing

P4C dimension table together with P4C profile in an ISO 7200 drawing header may be printed directly, or exported to CAD via DXF-/IGES interface. Drawing name, date, users and modifications are described in WN7.

CAD Interface

W7 generates a true scale P4C profile as DXF or IGES file to be used in CAD or CNC system. Resolution and tolerances can be configured.

User Interface

The dialogue windows of WN7 allow even the less experienced PC user to find his way around the program quickly. WN7 provides users with a help text wherever they are in the program. When the demo mode is selected, WN7 runs through a demo program in which an example calculation is performed. WN7 contains auxiliary pictures with geometrical signs and formulas used by the program.

System Requirements

WN7 is available as 32-bit app or as 64-bit app for Windows 7, 8, Windows 10.

Scope of Delivery

WN7 Software 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.