

## OPTIONS

**GearTeq - [Standard Spur Gear Sizing]**

File CAD View Insert New Component Tools Help


..... <Insert a new component or open a file>

**Spur Gear Sizing for Standard Tooth Forms**

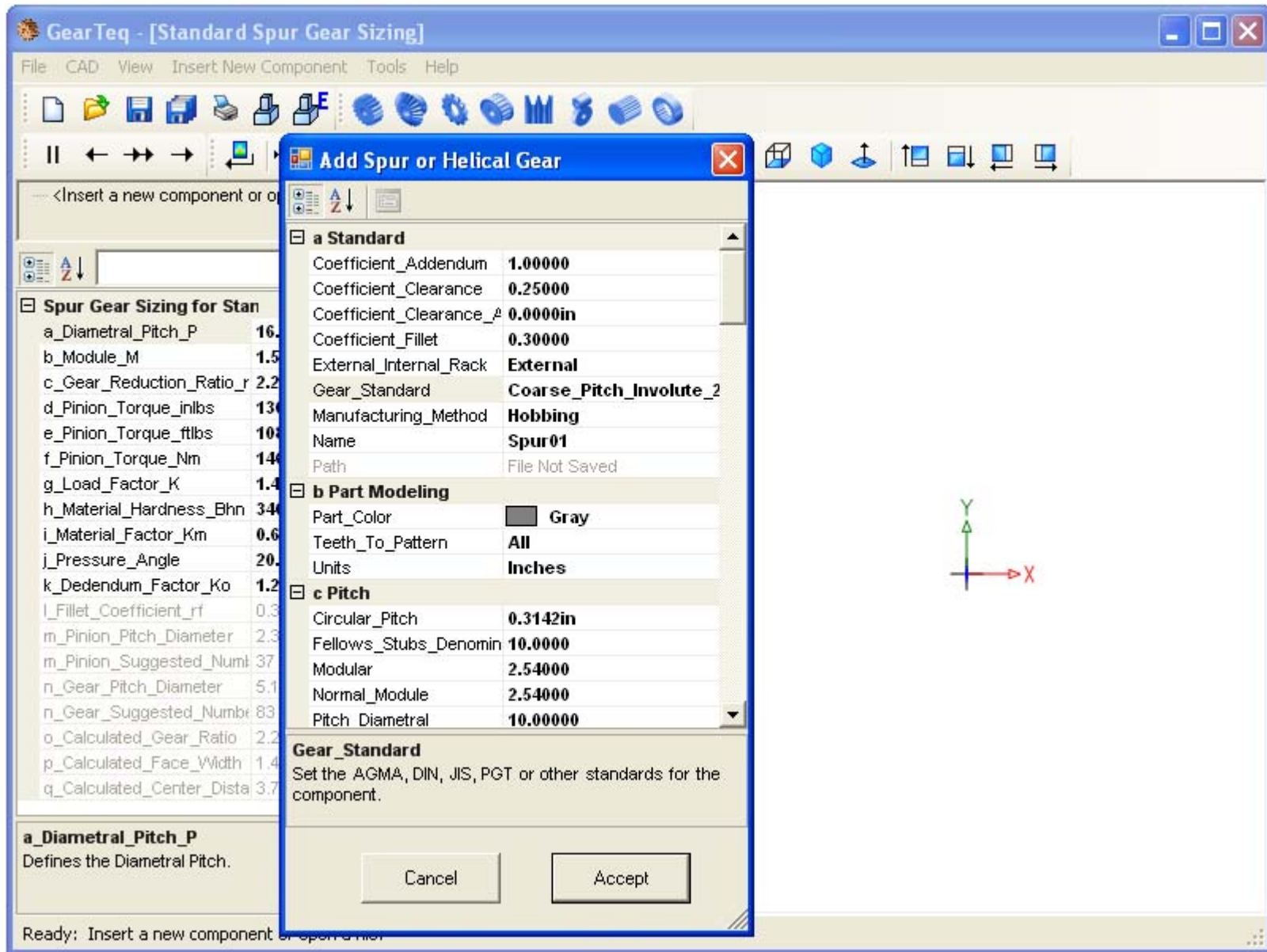
a_Diametral_Pitch_P	<b>16.0000</b>
b_Module_M	<b>1.5875</b>
c_Gear_Reduction_Ratio_r	<b>2.25000</b>
d_Pinion_Torque_inlbs	<b>1300 in-lbs</b>
e_Pinion_Torque_ftlbs	<b>108.3 ft-lbs</b>
f_Pinion_Torque_Nm	<b>146.9 Nm</b>
g_Load_Factor_K	<b>1.400</b>
h_Material_Hardness_Bhn	<b>340.000</b>
i_Material_Factor_Km	<b>0.600</b>
j_Pressure_Angle	<b>20.00</b>
k_Dedendum_Factor_Ko	<b>1.25</b>
l_Fillet_Coefficient_rf	0.30
m_Pinion_Pitch_Diameter	2.313in, (58.74mm)
m_Pinion_Suggested_Numt	37
n_Gear_Pitch_Diameter	5.188in, (131.76mm)
n_Gear_Suggested_Numbr	83
o_Calculated_Gear_Ratio	2.24324
p_Calculated_Face_Width	1.497in, (38.02mm)
q_Calculated_Center_Dista	3.750in, (95.25mm)

**a\_Diametral\_Pitch\_P**  
Defines the Diametral Pitch.

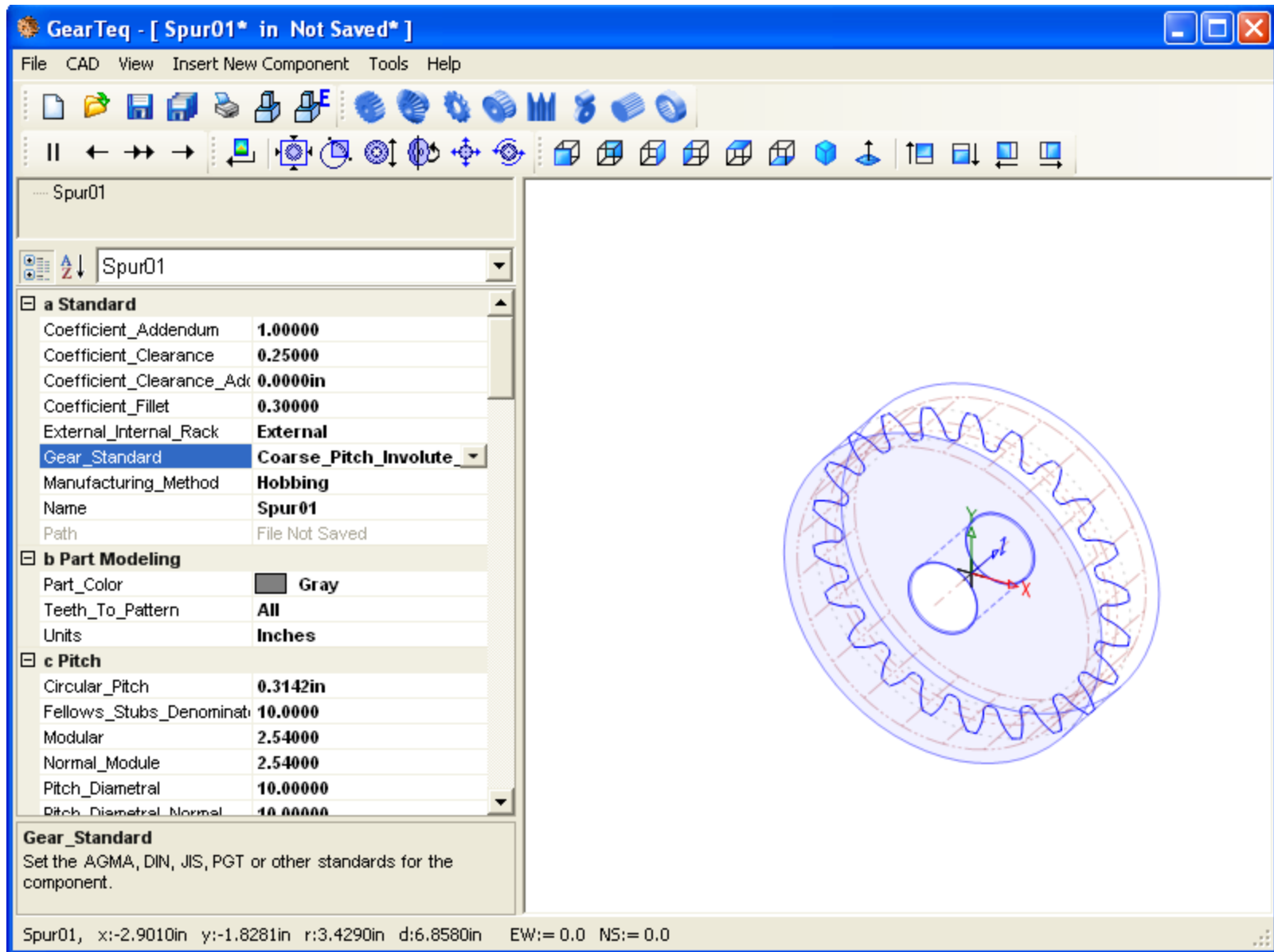
Ready: Insert a new component or open a file.



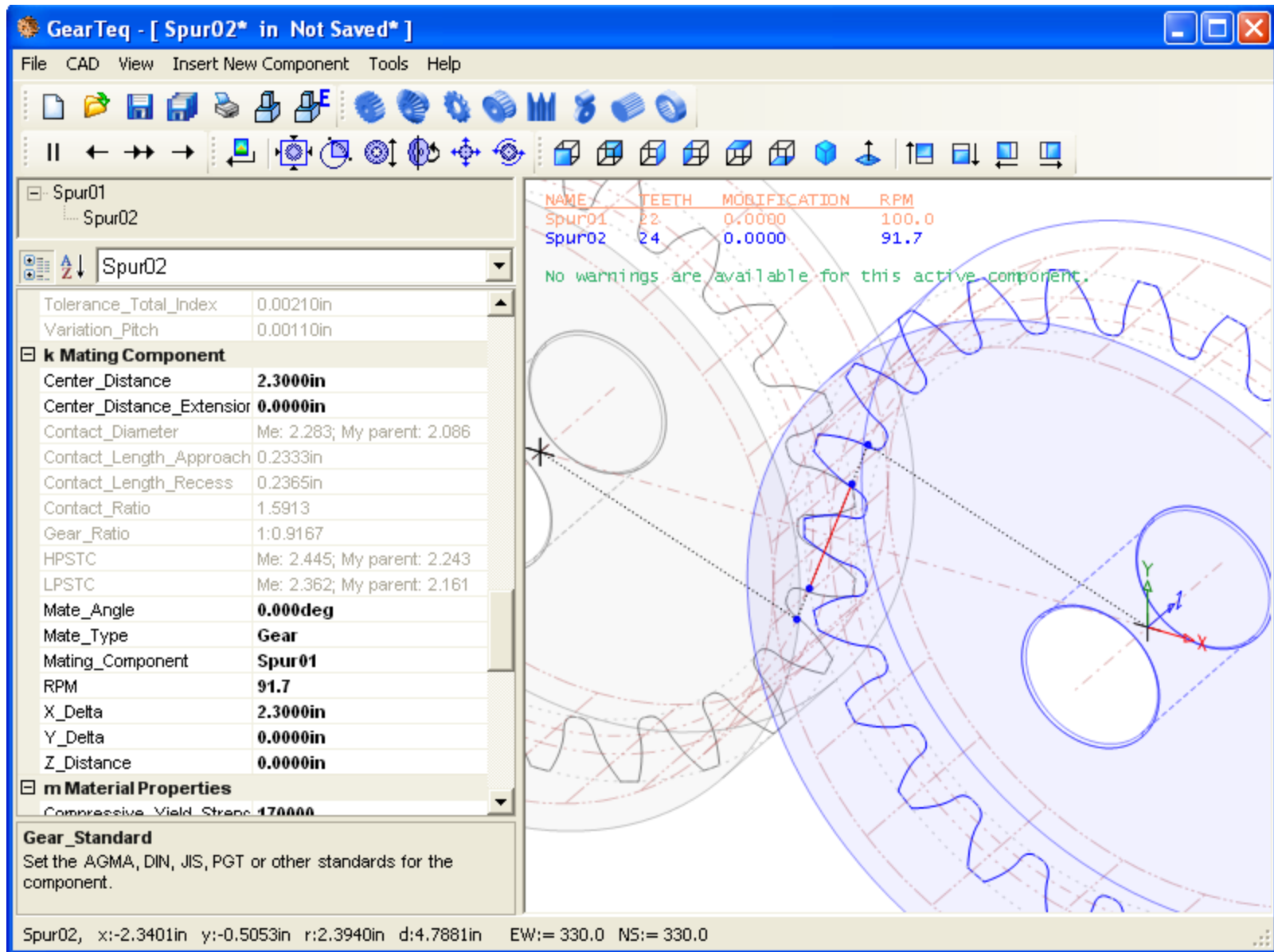
## STANDAD SPUR GEAR SIZING



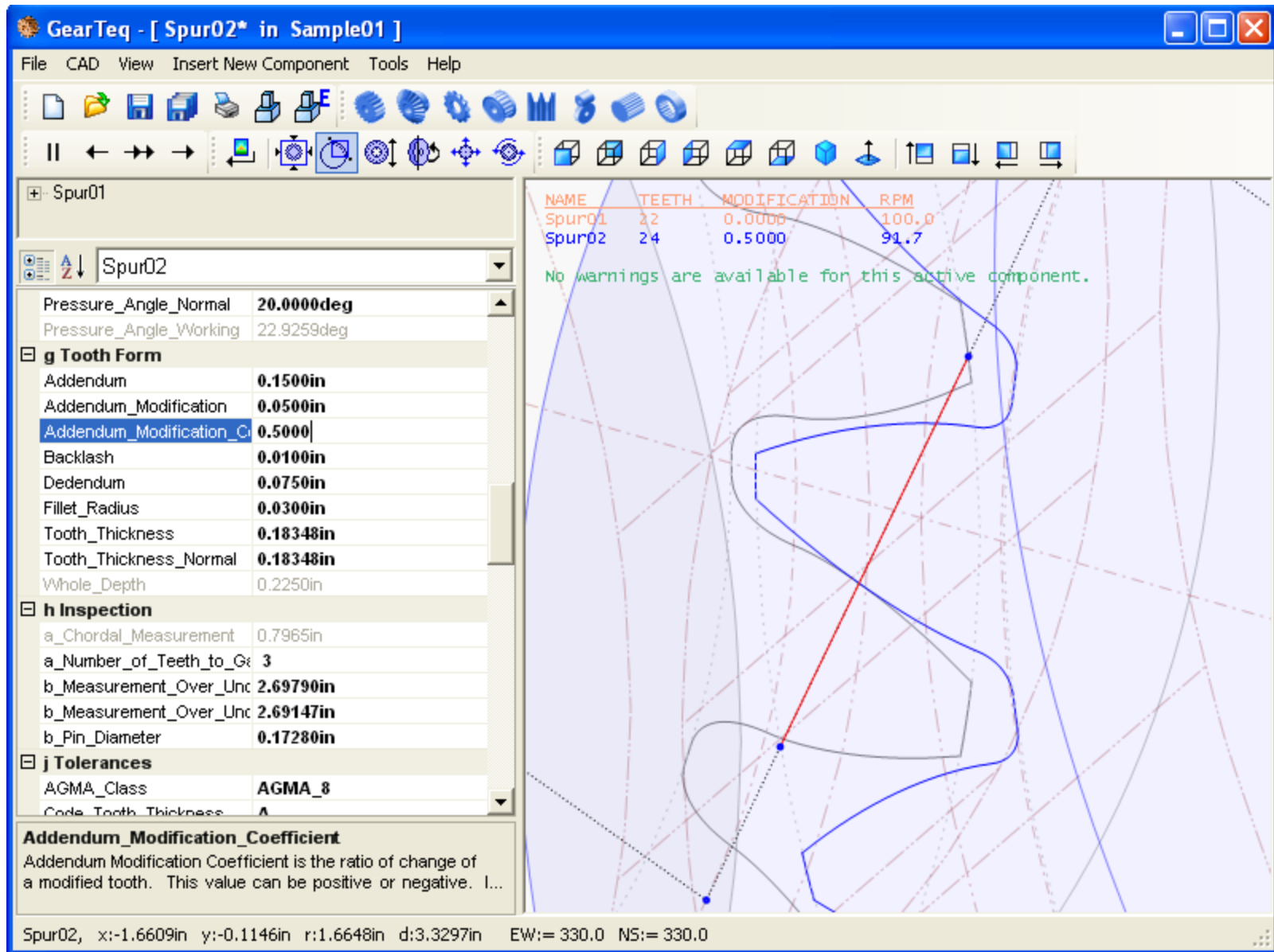
ADD A NEW SPUR OR HELICAL



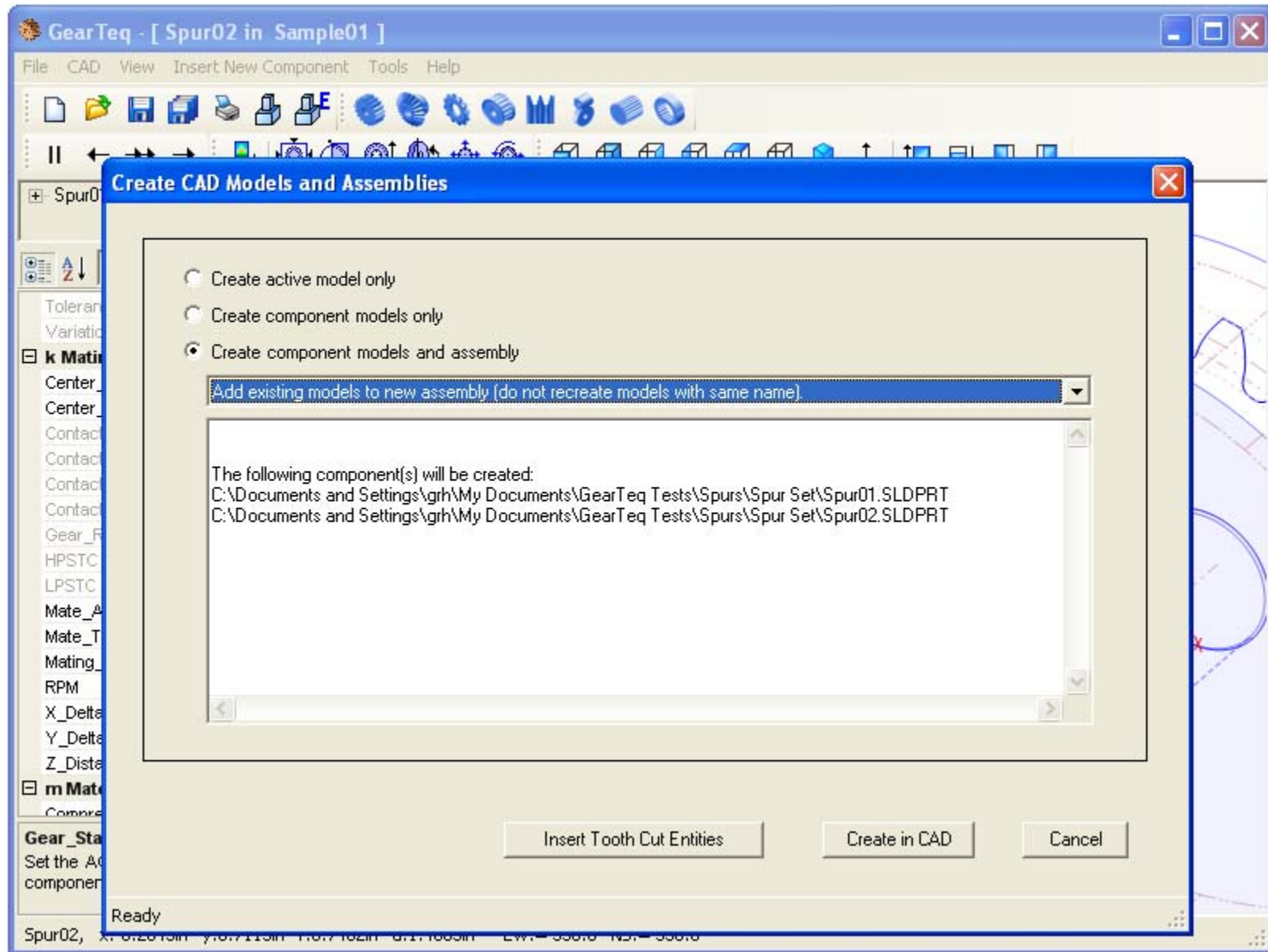
SPUR GEAR DISPLAYED IN 3D



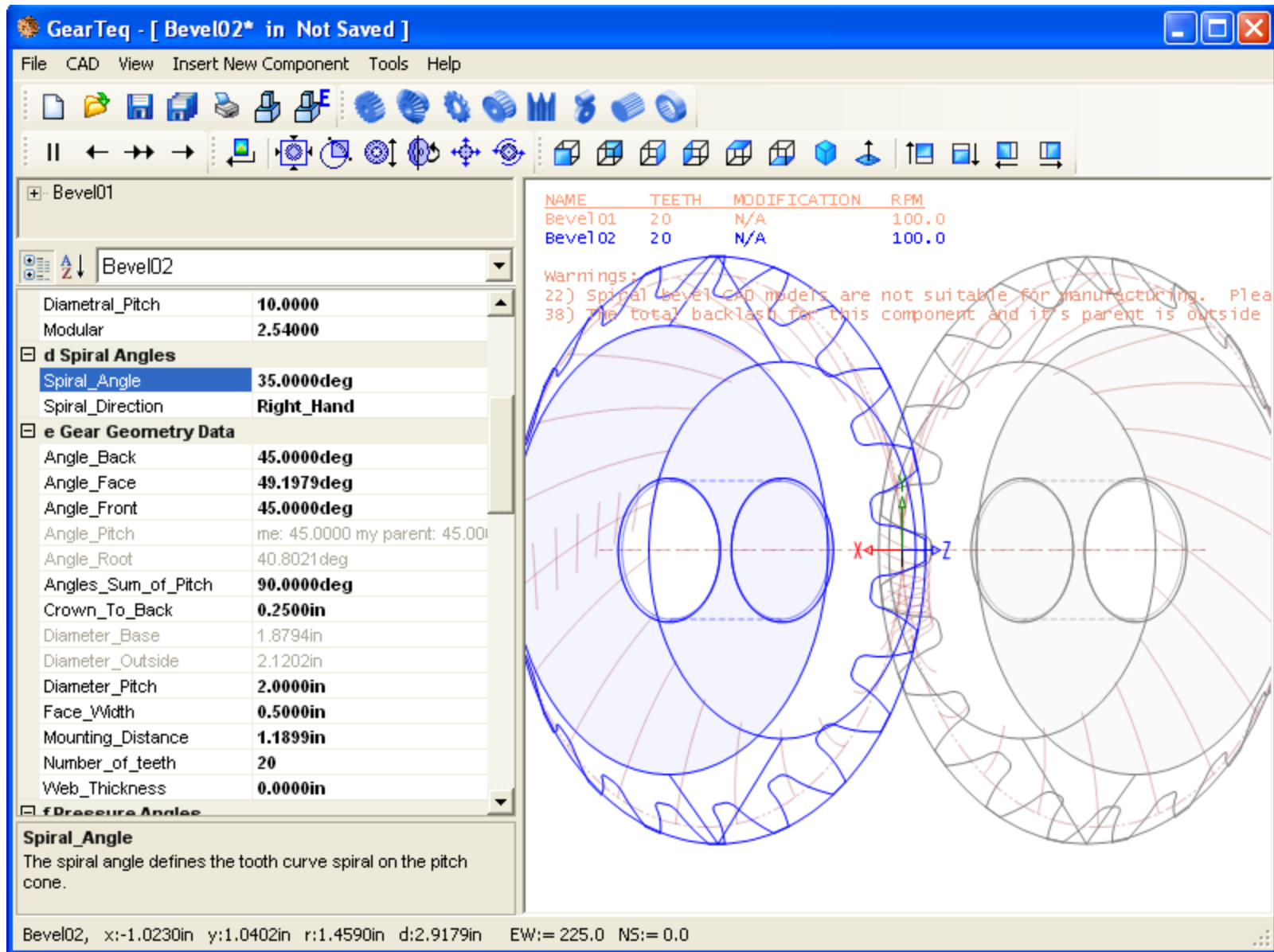
SPUR GEAR SET DISPLAYED IN 3D



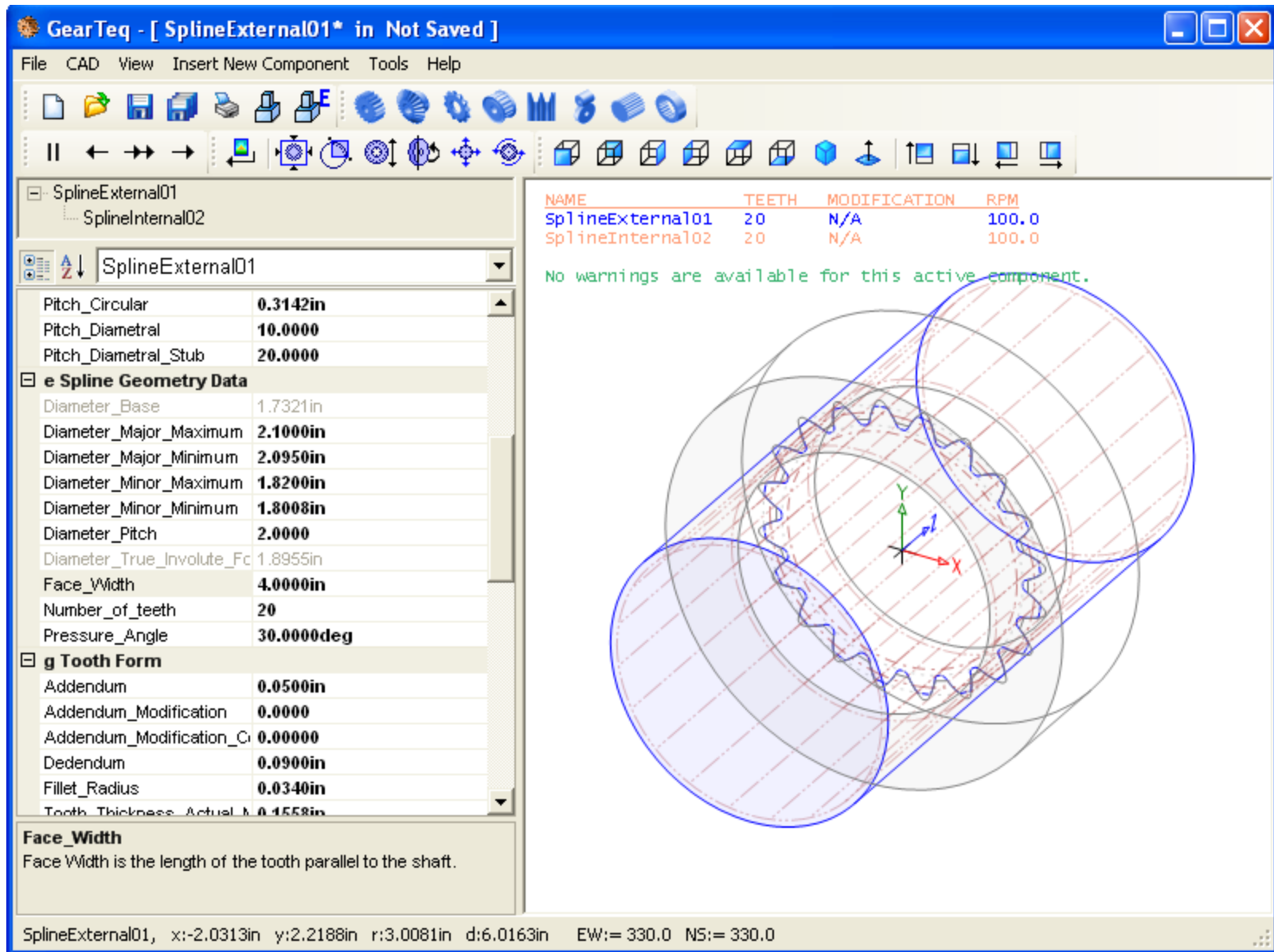
CHANGES TO THE TOOTH FORM (BACKLASH AND ADDENDUM MODIFICATION)



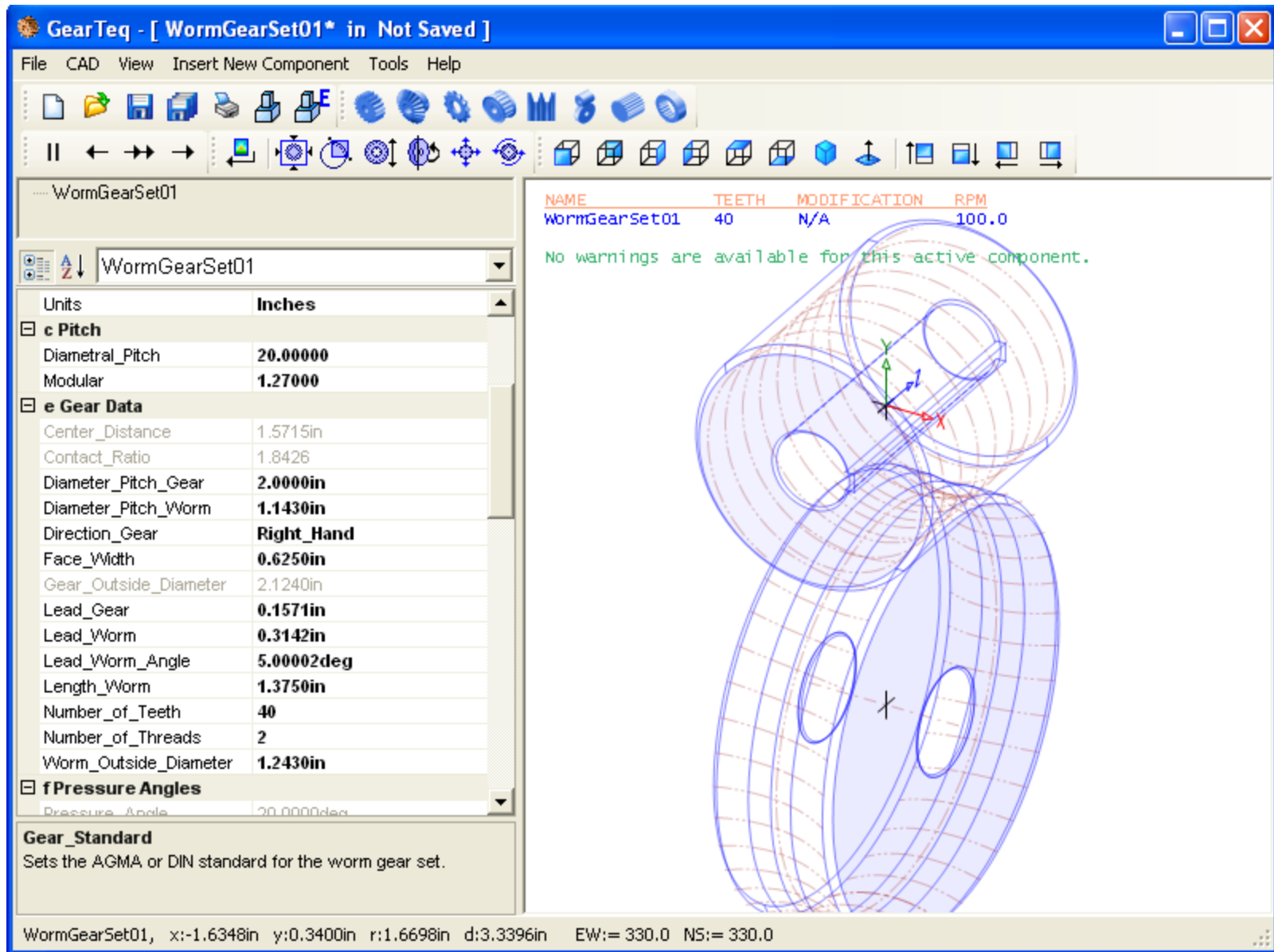
## CREATE CAD MODELS AND ASSEMBLIES



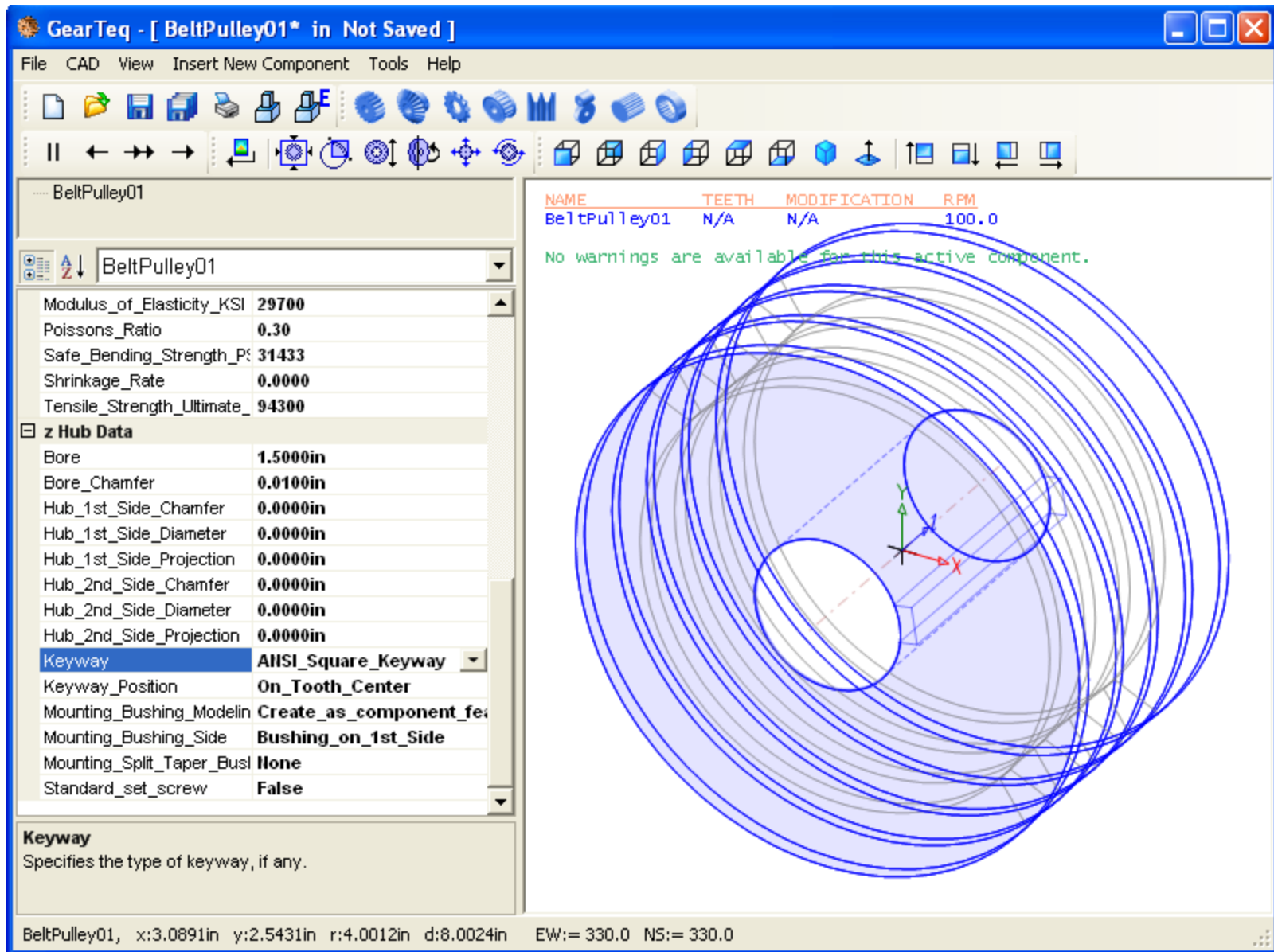
SPIRAL BEVEL SET DISPLAYED IN 3D



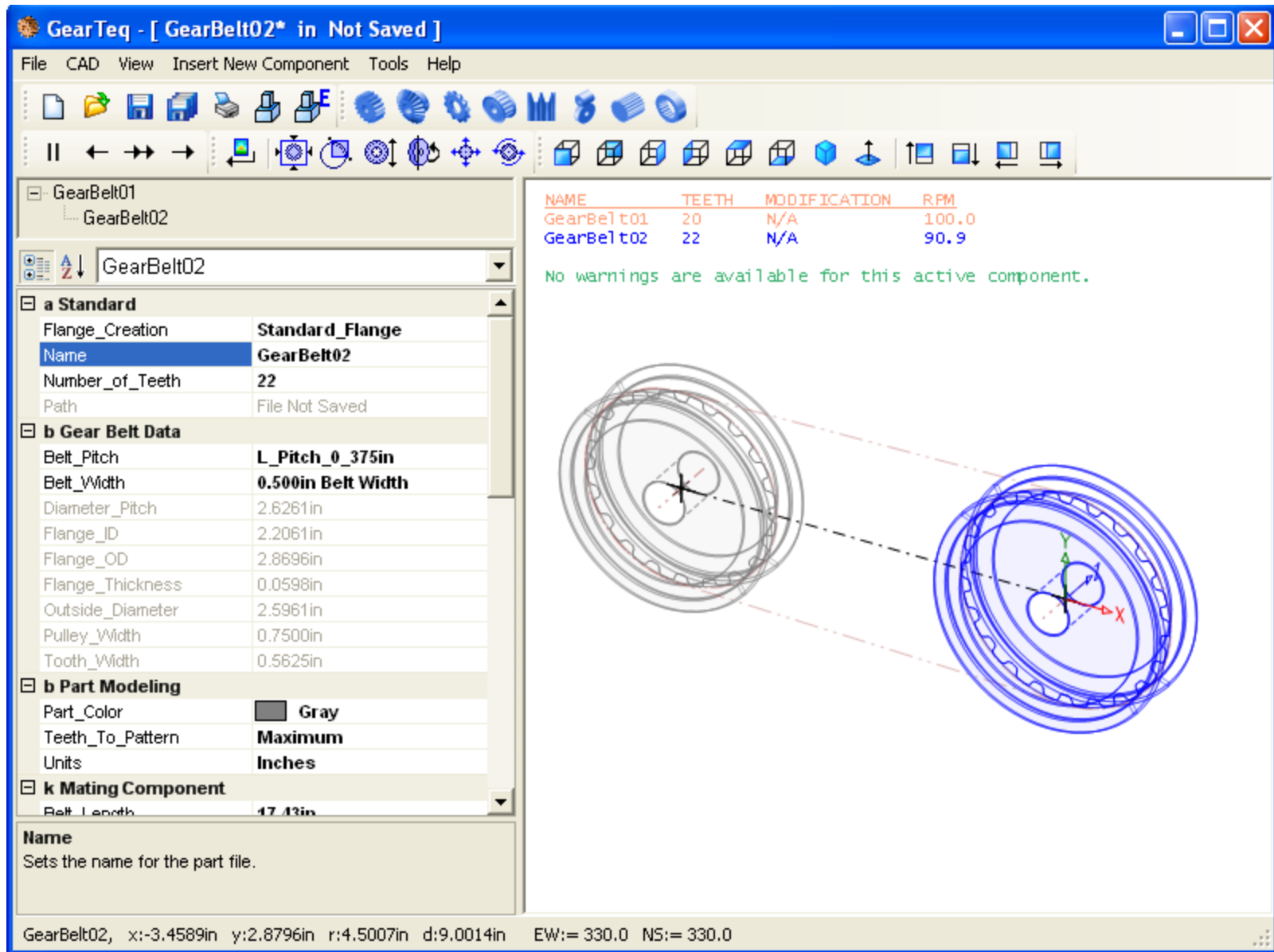
INTERNAL AND EXTERNAL SPLINE



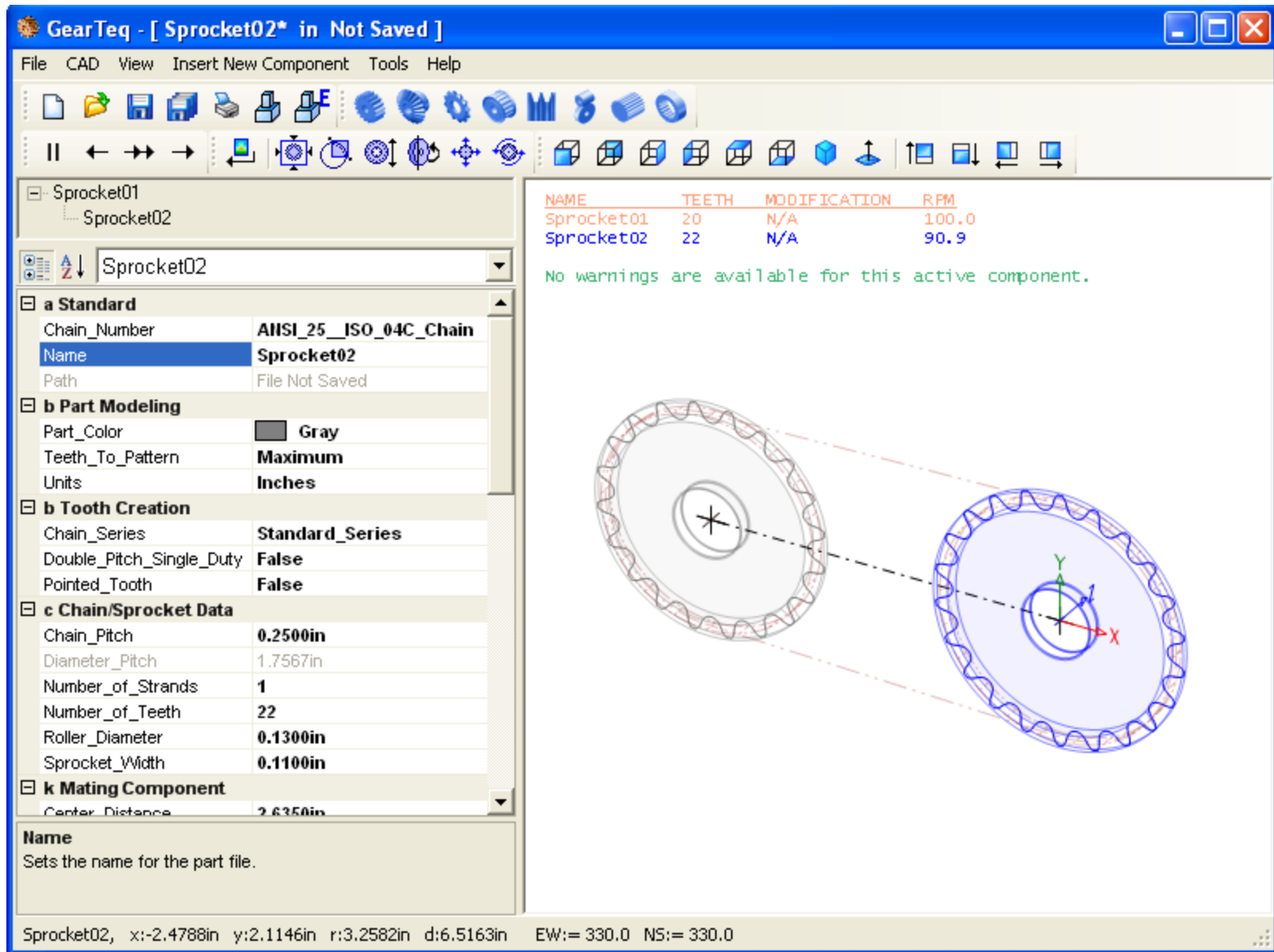
WORM GEAR SET DISPLAYED IN 3D



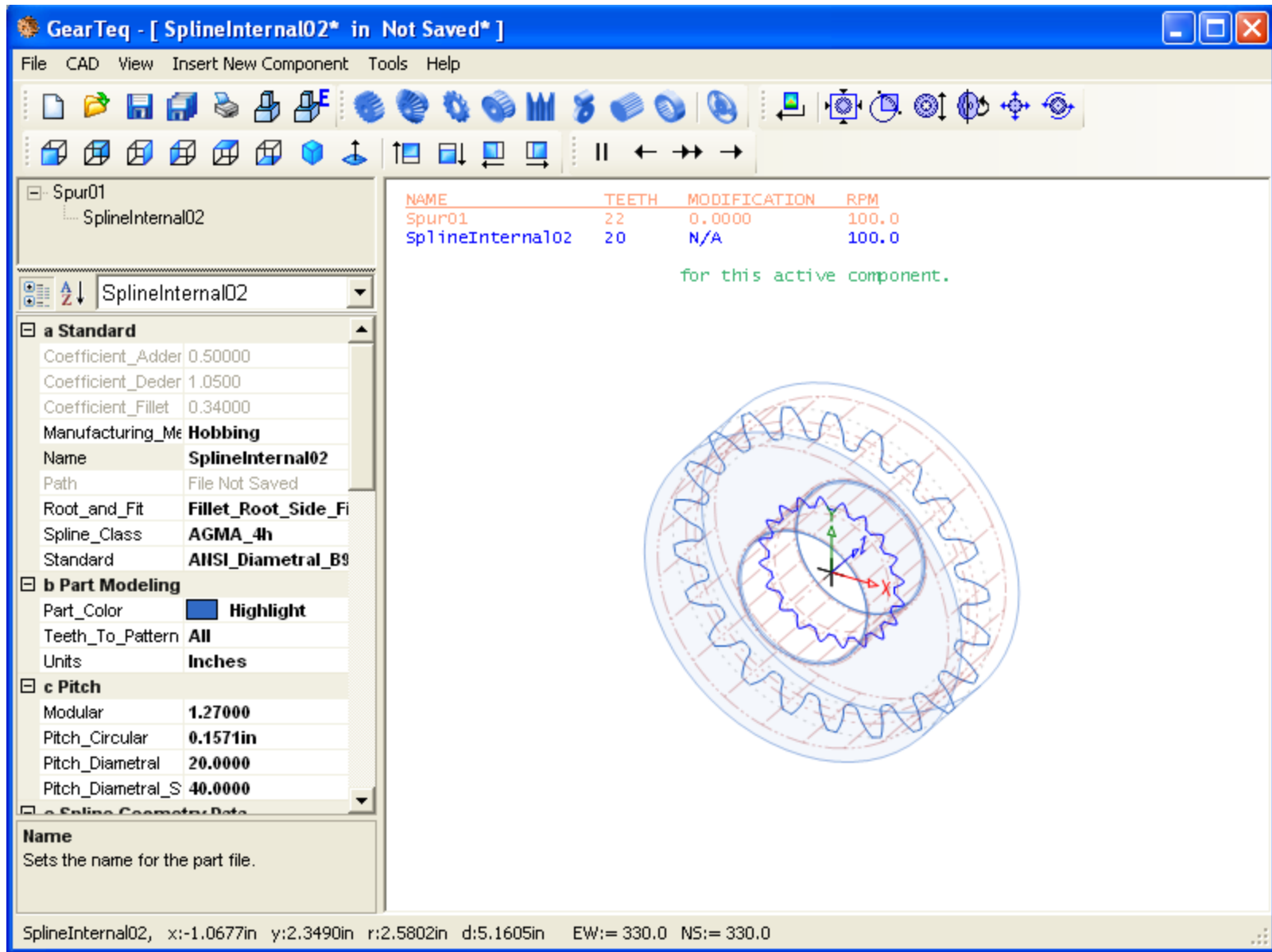
VEE BELY PULLEY DISPLAYED IN 3D



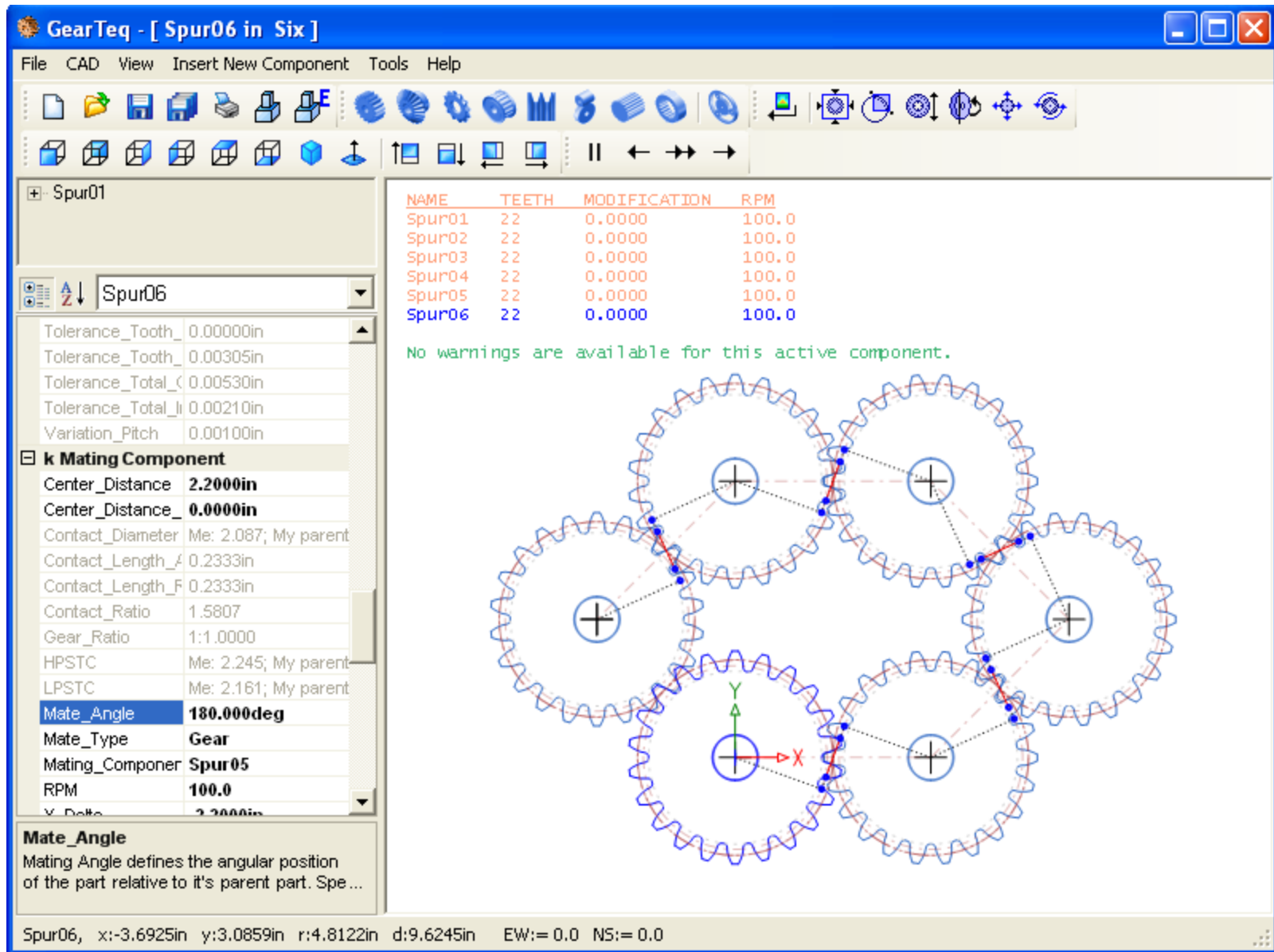
GEARBELT PULLEY SET DISPLAYED IN 3D



CHAIN SPROCKET SET DISPLAYED IN 3D



SPUR GEAR WITH INTERNAL SPLINE COMPONENT AS A BORE MATE



SPUR GEAR CLUSTER SAMPLE

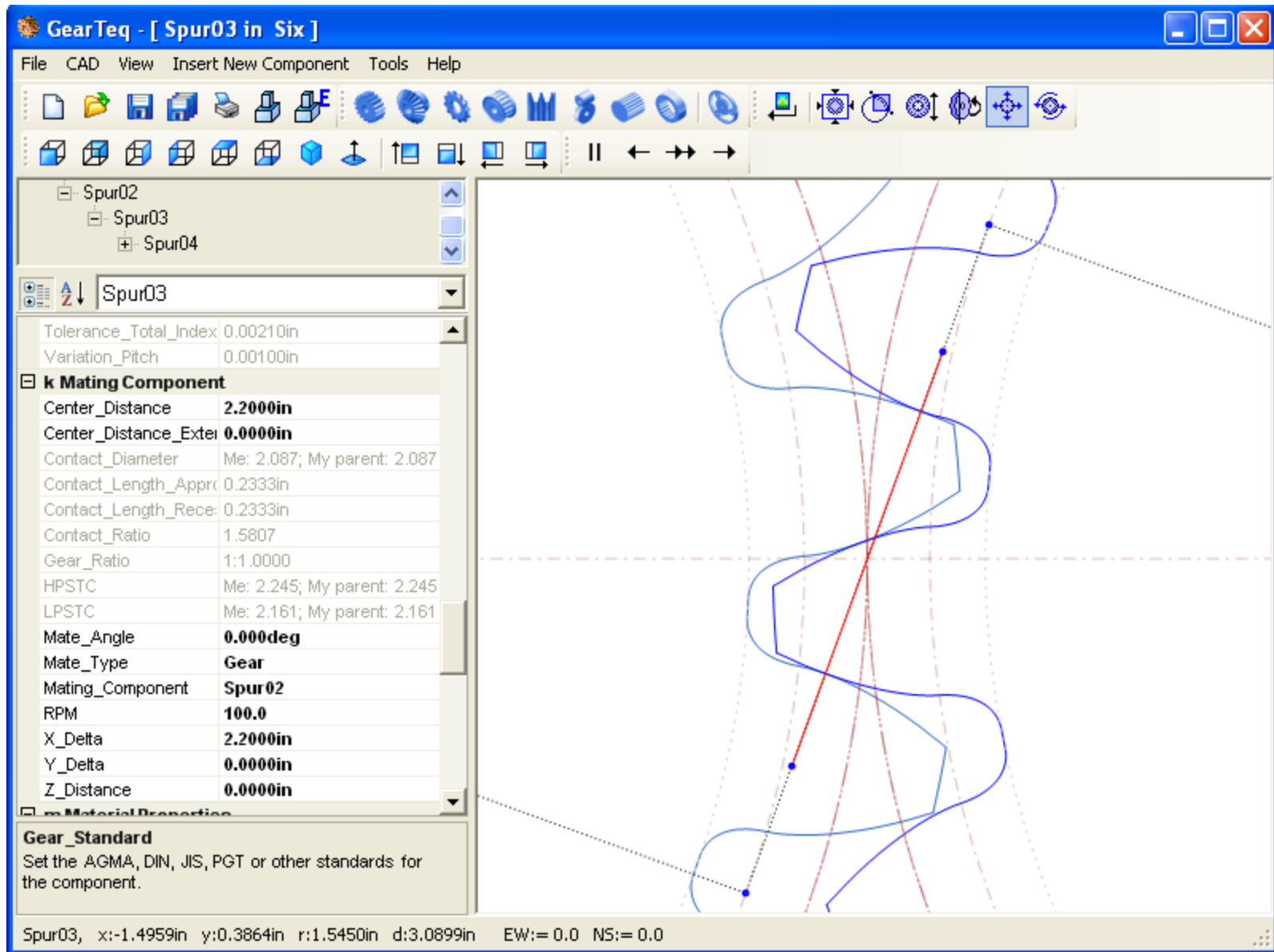
Spur06.txt - Notepad

File Edit Format View Help

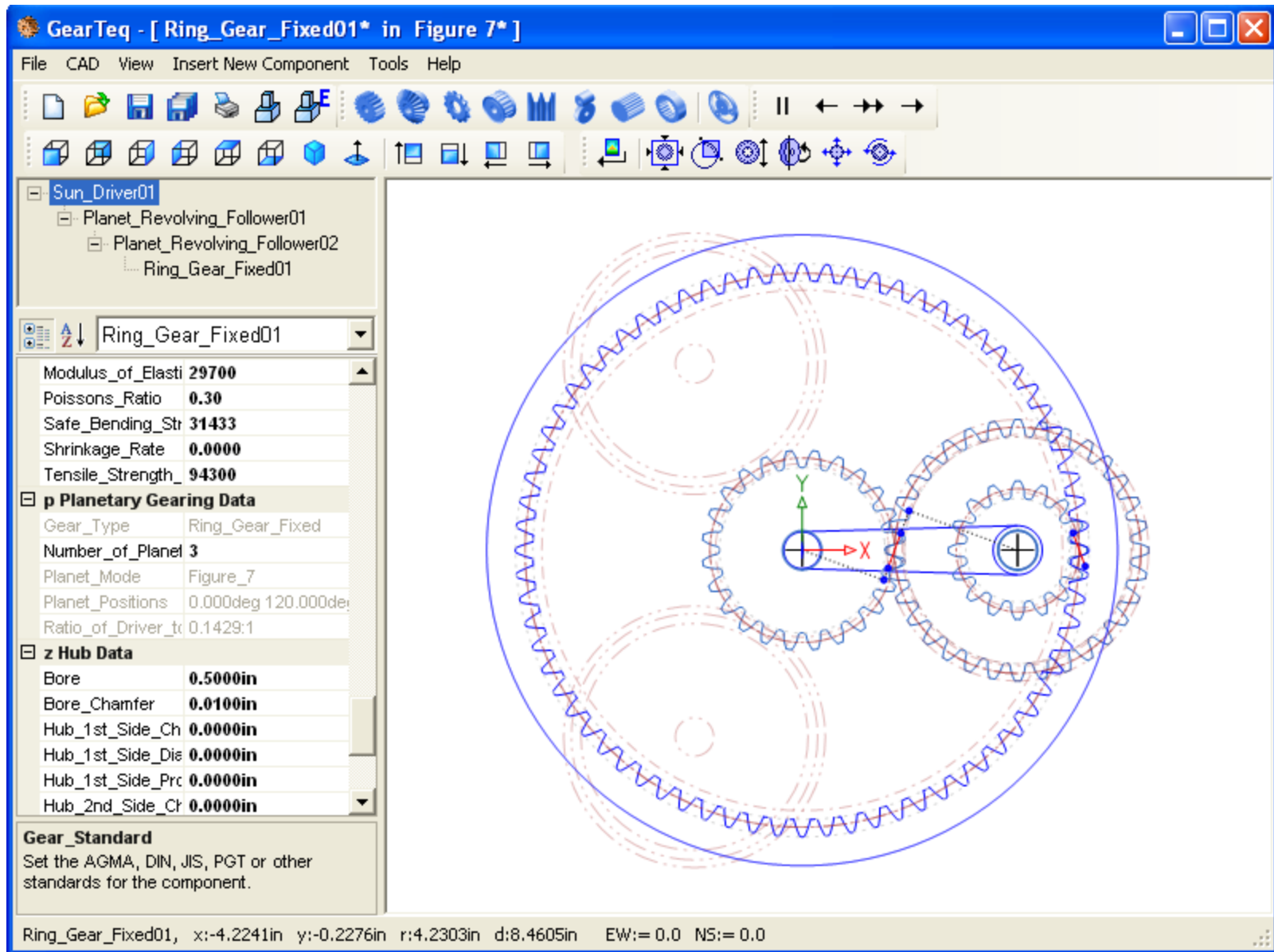
Name: Spur06  
 Path: C:\Documents and Settings\My Documents\GearTeg Samples\Set of Six  
 Date: Monday, March 19, 2007  
 Time: 12:08:41 PM

SYMBOL	VALUE	UNIT	TERM
	Coarse_Pitch_Involute_20deg		Standard
Pdn	10.000000		Normal Diametral Pitch
Pd	10.000000		Diametral Pitch
	2.540000		Normal Modular Pitch
m	2.540000		Modular Pitch
ø <sub>n</sub>	20.0000	deg	Normal Pressure Angle
ø	20.0000	deg	Pressure Angle
	0.0000	deg	Helix Angle
mg	1.0000		Ratio, 1:x
C	2.2000	in	Center Distance
MA	0.2333	in	Approach Length
MR	0.2333	in	Recess Length
mp	1.5807		Contact Ratio
Np	22		Number of Teeth
Dp	2.2000	in	Pitch Diameter
Dpn	2.2000	in	Pitch Diameter, Normal
do	2.4000	in	Major Diameter
dr	1.9500	in	Minor Diameter
a	0.1000	in	Addendum
b	0.1250	in	Dedendum
	0.000000		Addendum Modification Coefficient
	0.0000	in	Addendum Modification
db	2.0673	in	Base Diameter
dbn	2.0673	in	Base Diameter, Normal
ht	0.2250	in	Whole Depth
p	0.3142	in	Circular Pitch

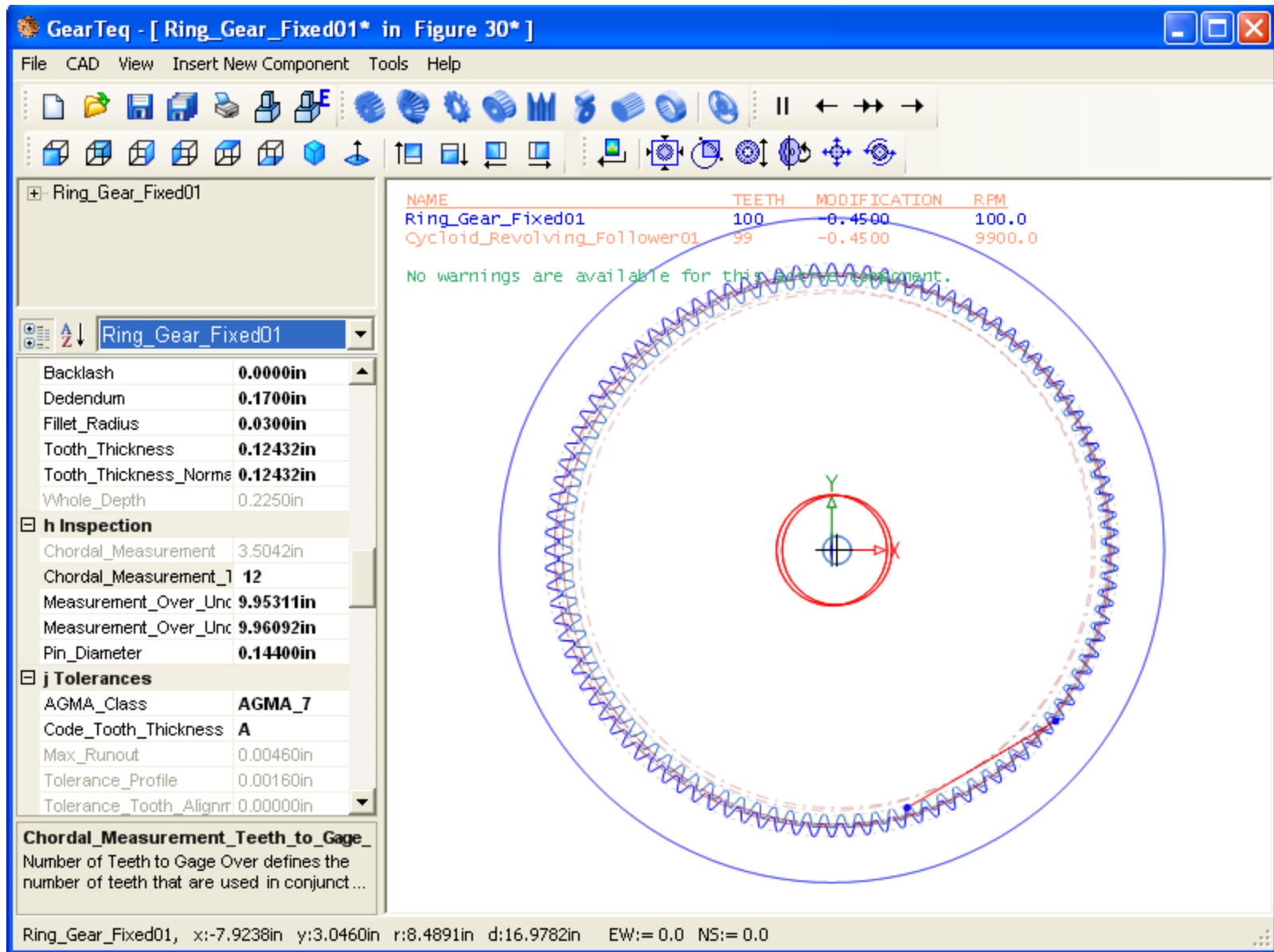
SAMPLE DATA SHEET (TEXT FORMAT)



LINE OF ACTION IN A SPUR GEAR SET



PPLANETARY GEAR SET



CYCLOID GEAR SET