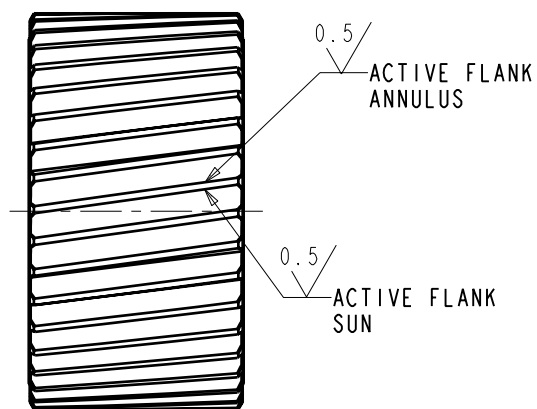
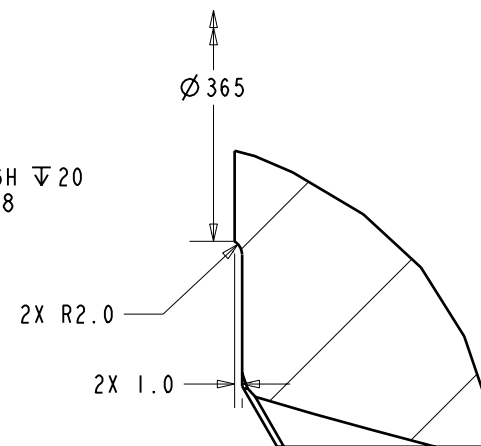
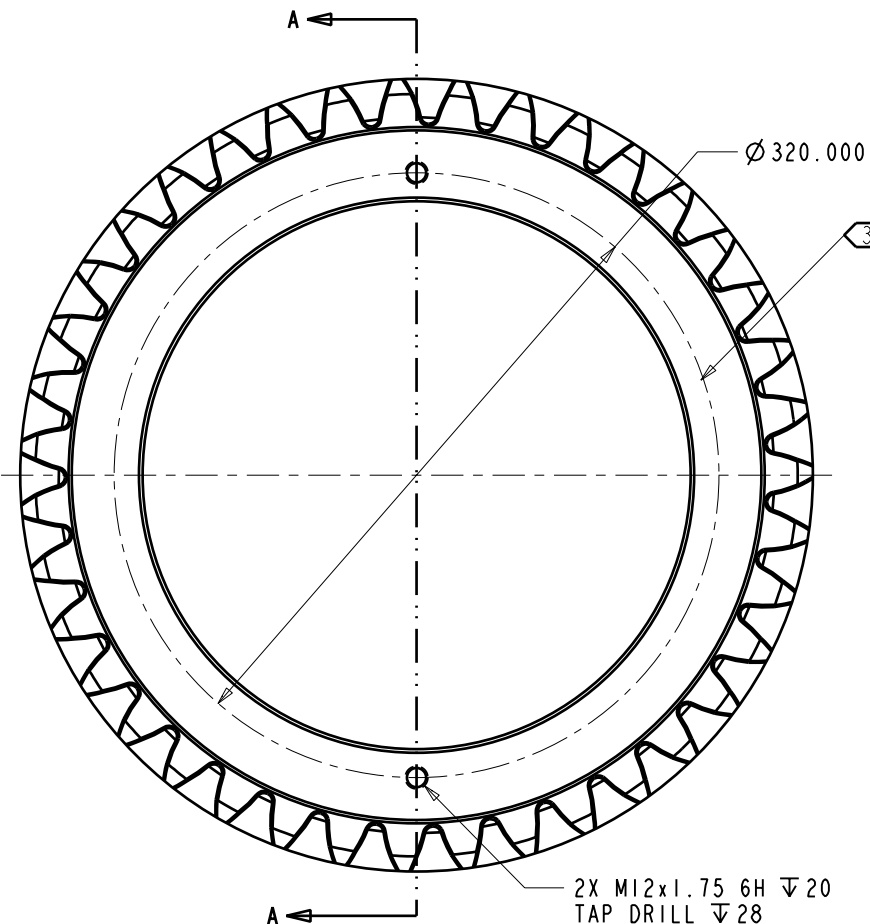


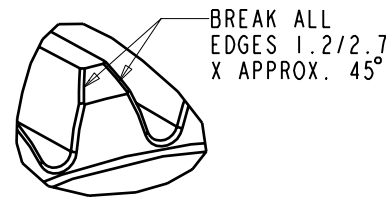
SCALE 0.125



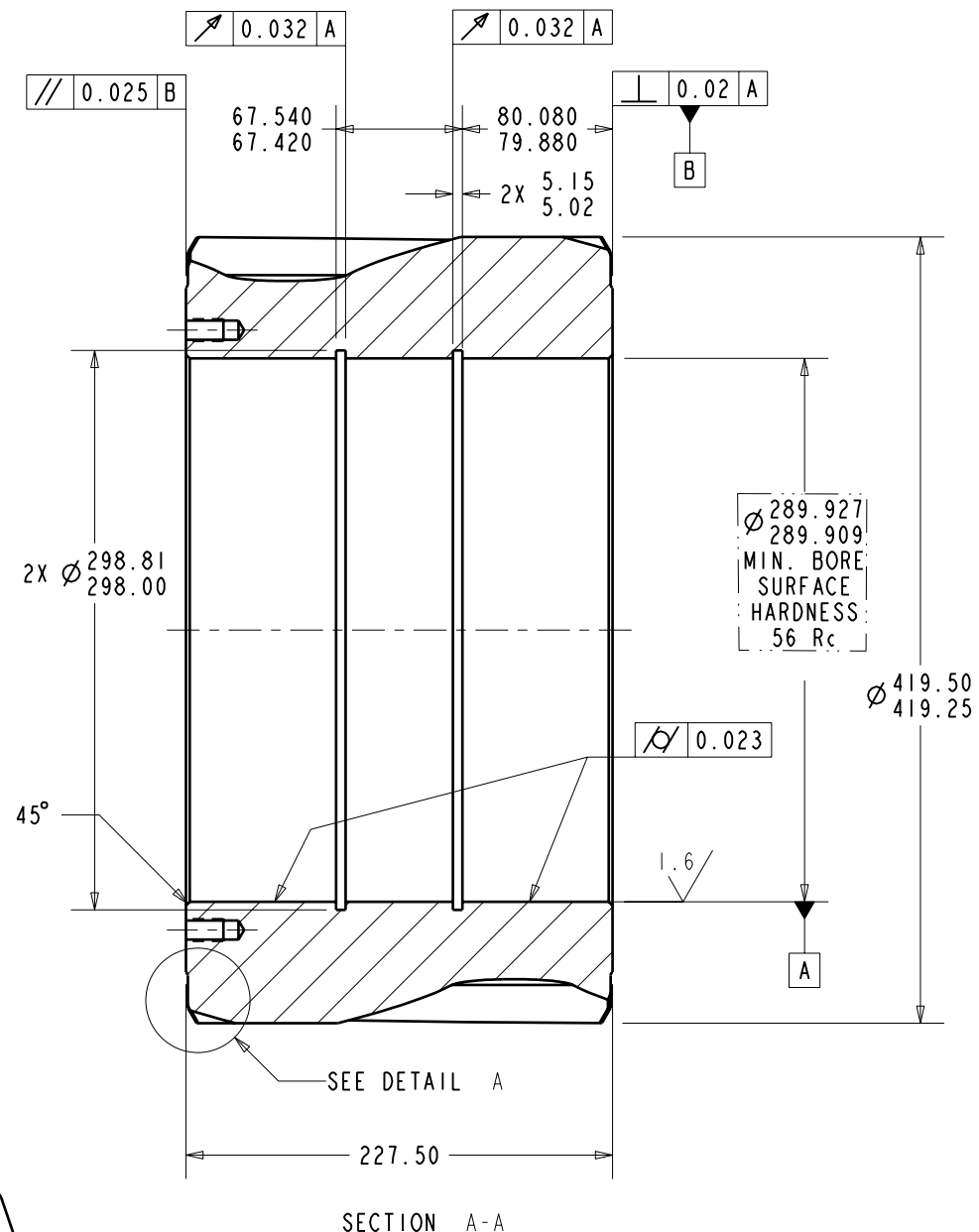
SCALE 0.125



DETAIL A
SCALE 1.000



BREAK ALL
EDGES 1.2/2.7
X APPROX. 45°



NOTES:

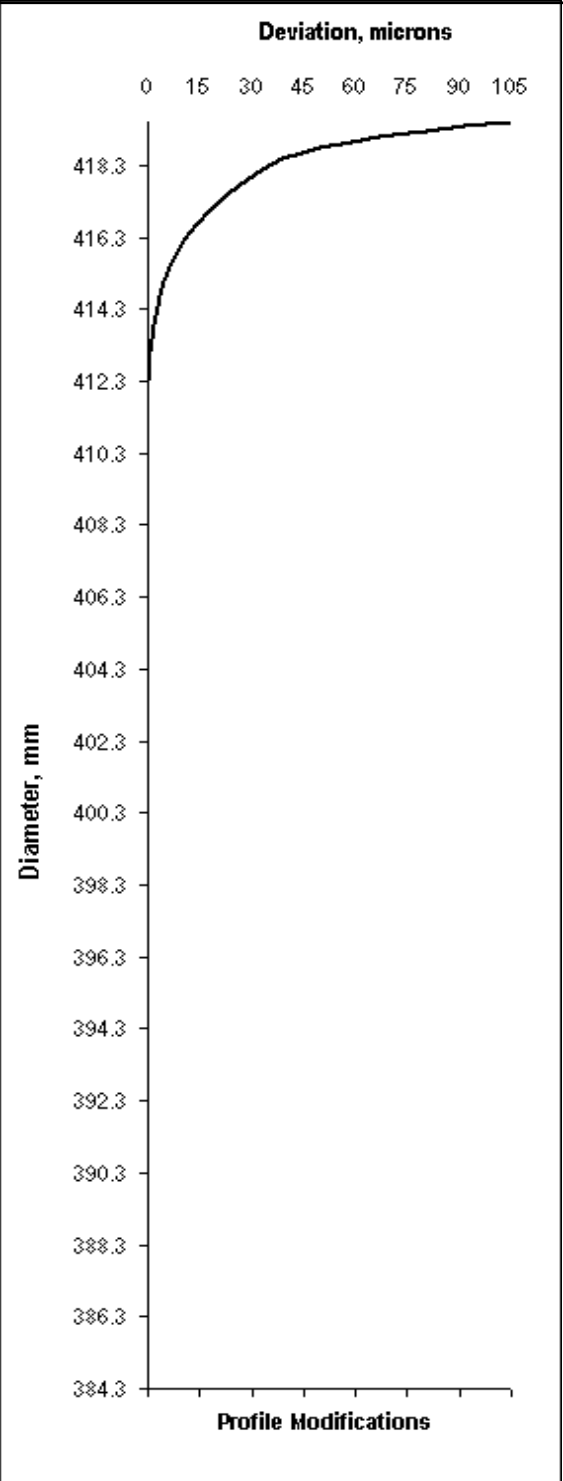
1. MATERIAL: SAE E9310; ALT. E9310H, 4320, 4820, 4320H, 4820H, 18 CrNiMo 6-7, 17 CrNiMo 7 STEEL BAR OR FORGING. CLEANLINESS PER ASTM A534.
2. HEAT TREAT: CARBURIZE TEETH 1.5/2.0 EFFECTIVE CASE DEPTH, HARDEN TO 58/61 Rc. CORE HARDNESS 28 Rc. MIN. $\varnothing 372$ mm, PROCESS PER AGMA 2001 D-04 GRADE 2. CASE DEPTH IS ON FINISHED GEAR TEETH, AFTER GRINDING. KEEP THREADS SOFT.
3. IDENTIFY WITH PART NUMBER, SUPPLIER CODE NUMBER, MANUFACTURERS LOT NUMBER, AND REV. LEVEL.
4. REMOVE SHARP EDGES AND BURRS.
5. GROUND TOOTH FLANKS AND FULL ROOT FILLET MUST BLEND WITHOUT GRIND NOTCH.
6. HELICAL GEAR TEETH MUST MEET GRIND TEMPER REQUIREMENTS OF AGMA 2007 CODE GRADE FB-1.
7. ALIGNMENT OF HOLES TO GEAR TEETH NOT REQUIRED.

REV	CHANGED FROM	BY	DATE	APVD	REPORT ERRORS & CHANGES REMOVE ALL SHARP EDGES DIMENSIONS ARE IN MM UNSPECIFIED TOLERANCES:	Powertrain Engineers Inc W293 N3819 Round Hill Circle Pewaukee Wi, 53072			
G	LEAD MODIFICATION SLOPE .020 WAS .026	PEI	9/16/08		DECIMALS: FINISH: ANGLES:	TITLE			
B	RELEASED FOR DESIGN REVIEW	PEI	11/29/07		X, ±1.0 Ra 6.3 µm < ±0.5 X, ±0.5 XX ±0.25	GEAR, PLANET			
C	REVISED PER DESIGN REVIEW	PEI	12/26/07						
D	ADDED LOCATION FOR SNAP RING GROOVES	PEI	1/10/08						
E	DIM. $\varnothing 289.927/\varnothing 289.909$ WAS $\varnothing 289.953/\varnothing 289.921$, REMOVED NOTE 8	PEI	7/22/08						
F	REVISED GEAR DATA TABLE AND LEAD MODIFICATION GRAPHICS (SHT-2)	PEI	8/11/08						
						COPYRIGHT © NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY.			
						DRAWN CHECKED	PEI	DATE 8/28/07	
						SIZE B	FIRST USED ON	DWG NO. 251242	REV G
						SCALE: 0.250	WEIGHT: 103.964 Kgs	SHEET 1 OF 2	

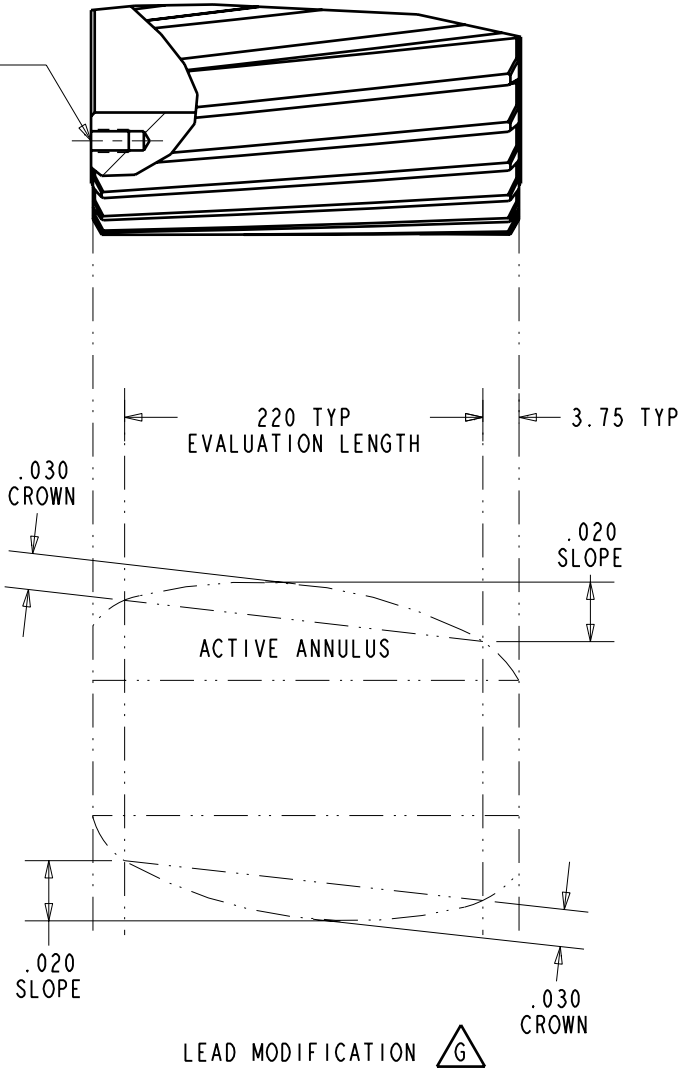
GEAR DATA, PLANET	
NUMBER OF TEETH	39
NORMAL MODULE	10.0000
NORMAL PRESSURE ANGLE	20.0000°
WHOLE DEPTH CONSTANT	2.400
OPERATING PITCH DIA.	400.4000
GENERATING PITCH DIA.	393.3605
PROFILE SHIFT COEFFICENT XI	.390
BASE DIAMETER	369.2643
MAJOR DIAMETER MAX. (REF)	419.5
FORM DIAMETER	384.29
ROOT DIAMETER (REF)	372.86
TOOL TIP RAD. MIN.	3.89
HELIX ANGLE, GENERATED	7.4947
HELIX HAND	LEFT
LEAD	9393.384
NUMBER OF TEETH IN MATE	21
OPERATING CENTER DISTANCE	308.000
BACKLASH W/ MATE (MIN/MAX)	0.29/0.25
QUALITY PER ISO 1328-1, DATUM SURFACE	A-B
BOTH FLANKS, GRADE	5
TRAN. CIR. TT. Ø GEN DIAMETER (MIN)	18.820
TRAN. CIR. TT, Ø GEN DIAMETER (MAX)	18.781
SIZE OVER 17.1 BALLS (MIN/MAX)	423.462/423.55
SPAN OVER 6 TEETH (MIN/MAX)	170.702/170.738

Dia mm	Diameter in.	Relief, tenths	Relief, microns
384.30	15.130	0.0	0
412.31	16.233	0.1	0
413.09	16.263	0.2	1
413.88	16.294	0.6	1
414.67	16.325	1.3	3
415.07	16.341	1.8	5
415.46	16.357	2.4	6
415.87	16.373	3.3	8
416.27	16.388	4.3	11
416.67	16.404	5.6	14
417.08	16.420	7.2	18
417.48	16.436	9.0	23
417.89	16.452	11.2	28
418.30	16.469	13.7	35
418.36	16.471	14.2	36
418.48	16.476	15.3	39
418.54	16.478	15.9	41
418.60	16.480	16.7	43
418.66	16.483	17.5	45
418.78	16.487	19.5	50
418.84	16.490	20.6	53
418.90	16.492	21.8	56
418.96	16.494	23.1	59
419.08	16.499	26.1	67
419.14	16.502	27.8	71
419.20	16.504	29.6	75
419.26	16.506	31.5	80
419.38	16.511	35.9	92
419.44	16.513	38.4	98
419.50	16.516	41.0	105

START OF INVOLUTE (ROOT)	384.30	mm
END OF INVOLUTE (TIP)	419.50	mm



TAPPED HOLE
SHOWN FOR
ORE INTATION



REPORT ERRORS & CHANGES REMOVE ALL SHARP EDGES DIMENSIONS ARE IN MM. UNSPECIFIED TOLERANCES: DECIMALS: FINISH: ANGLES:			Powertrain Engineers Inc W293 N3819 Round Hill Circle Pewaukee Wi, 53072			
X, ±1.0 ,X ±0.5 ,XX ±0.25			TITLE GEAR, PLANET			
Ra 6,3 µm < ±0.5			SIZE B	FIRST USED ON	DWG NO. 251242	REV G
DRAWN CHECKED	PEI	DATE 8/28/07	SCALE: 0.250	WEIGHT: 103.964 kgs	SHEET 2 OF 2	