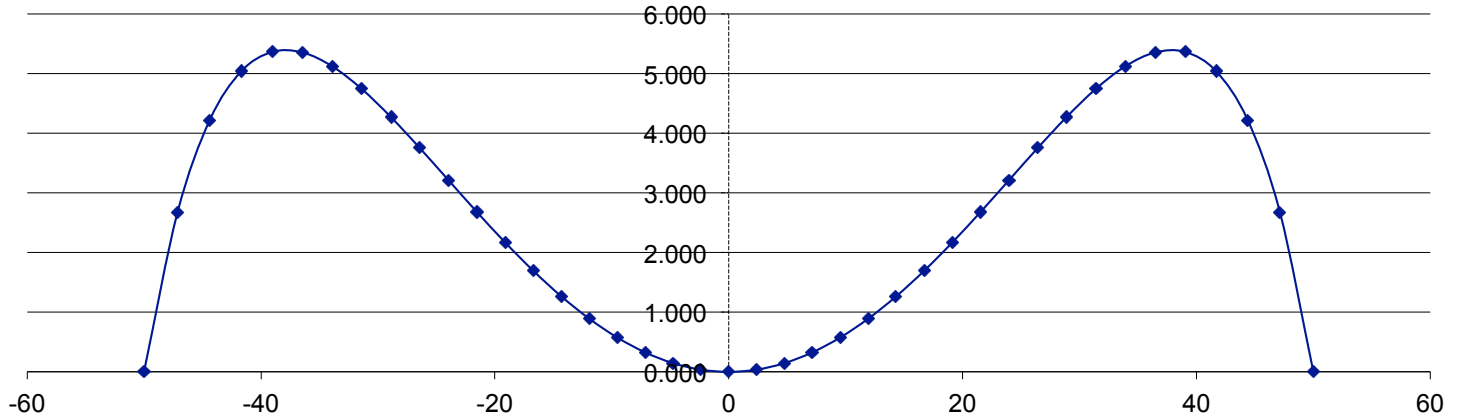




Calculation of Elliptical Form for a Conical Tool

Radius	1	mm	0.039370079	in	Original Height	1.200	Original Radius	3.000
Front CI	12.5	Degrees			New Height	0.900	New Radius	2.933
Rake	-20	Degrees						
Arc (+/-)	50	Degrees						
Best fit Radius	0.90840332	mm			Maximum Deviation	5.361634	um	



X	X(mm)	Arc(RAD)	Arc(DEG)	Deviation (um)	Radius	mm	
-1	-0.717315481	-0.872664626	-50	0.000	0.5		
-0.95	-0.681449707	-0.822843653	-47.1454685	2.671	12.5	Degrees	0.218166156 rads
-0.9	-0.645583933	-0.774563408	-44.37921423	4.222	-20	Degrees	-0.34906585 rads
-0.85	-0.609718159	-0.727522675	-41.68397877	5.038	50	Degrees	0.872664626 rads
-0.8	-0.573852385	-0.681490798	-39.04654653	5.362	90		1.570796327
-0.75	-0.537986611	-0.636287165	-36.4565691	5.352			
-0.7	-0.502120837	-0.591767784	-33.90579645	5.120			
-0.65	-0.466255063	-0.547816178	-31.38755493	4.741			
-0.6	-0.430389289	-0.504336994	-28.89638122	4.271			
-0.55	-0.394523514	-0.461251397	-26.42775832	3.752			
-0.5	-0.35865774	-0.418493657	-23.97792027	3.214			
-0.45	-0.322791966	-0.376008573	-21.54370428	2.681			
-0.4	-0.286926192	-0.333749474	-19.12243626	2.169			
-0.35	-0.251060418	-0.291676636	-16.71184024	1.693			
-0.3	-0.215194644	-0.249756008	-14.30996518	1.264			
-0.25	-0.17932887	-0.207958153	-11.91512449	0.889			
-0.2	-0.143463096	-0.166257358	-9.525844941	0.574			
-0.15	-0.107597322	-0.124630864	-7.140822524	0.326			
-0.1	-0.071731548	-0.083058183	-4.758883358	0.145			
-0.05	-0.035865774	-0.04152048	-2.378948289	0.036			
0	0	0	0	0.000			
0.05	0.035865774	0.04152048	2.378948289	0.036			
0.1	0.071731548	0.083058183	4.758883358	0.145			
0.15	0.107597322	0.124630864	7.140822524	0.326			
0.2	0.143463096	0.166257358	9.525844941	0.574			
0.25	0.17932887	0.207958153	11.91512449	0.889			
0.3	0.215194644	0.249756008	14.30996518	1.264			
0.35	0.251060418	0.291676636	16.71184024	1.693			
0.4	0.286926192	0.333749474	19.12243626	2.169			
0.45	0.322791966	0.376008573	21.54370428	2.681			
0.5	0.35865774	0.418493657	23.97792027	3.214			
0.55	0.394523514	0.461251397	26.42775832	3.752			
0.6	0.430389289	0.504336994	28.89638122	4.271			
0.65	0.466255063	0.547816178	31.38755493	4.741			
0.7	0.502120837	0.591767784	33.90579645	5.120			
0.75	0.537986611	0.636287165	36.4565691	5.352			
0.8	0.573852385	0.681490798	39.04654653	5.362			
0.85	0.609718159	0.727522675	41.68397877	5.038			
0.9	0.645583933	0.774563408	44.37921423	4.222			
0.95	0.681449707	0.822843653	47.1454685	2.671			
1	0.717315481	0.872664626	50	0.000			