



TOLERANCE CHARTS

GAGEMAKER'S TOLERANCE CHART						
Above	To & Includ.	CL - XXX	CL - XX	CL - X	CL - Y	CL - Z
0.010"	0.825"	.000010	.000020	.000040	.000070	.0001
.254mm	20.95mm	0.25um	0.5um	1.0um	1.75um	2.5um
0.825"	1.510"	.000015	.000030	.000060	.000090	.00012
20.95mm	38.35mm	0.38um	0.75um	1.5um	2.25um	3.0um
1.510"	2.510"	.000020	.000040	.000080	.00012	.00016
38.35mm	63.75mm	0.50um	1.0um	2.0um	3.0um	4.0um
2.510"	4.510"	.000025	.000050	.0001	.00015	.00020
63.75mm	114.55mm	0.63um	1.25um	2.5um	3.75um	5.0um
4.510"	6.510"	.000033	.000065	.00013	.00019	.00025
114.5mm	165.35mm	0.83um	1.625um	3.25um	4.75um	6.25um
6.510"	9.010"	.000040	.000080	.00016	.00024	.00032
165.35mm	228.85mm	1.00um	2.0um	4.0um	6.0um	8.0um
9.010"	12.010"	.000050	.0001	.0002	.0003	.0004
228.85mm	305.05mm	1.25um	2.5um	5.0um	7.5um	10um
12.010"	15.010"	.000075	.00015	.0003	.00045	.0006
305.05mm	381.25mm	1.88um	3.75um	7.5um	11.25um	15um
15.010"	18.010"	.0001	.0002	.0004	.0006	.00080
381.25mm	457.45mm	2.50um	5um	10um	15um	20um
18.010"	21.010"	.000125	.00025	.0005	.00075	.001
457.45mm	533.65mm	3.13um	6.25um	12.5um	18.75um	25um
21.010"	24.010"		.0003	.0006	.0009	.0012
533.65mm	609.85mm		7.5um	15um	23um	30um
24.010"	27.010"		.00035	.0007	.00105	.0014
609.85mm	686.05mm		8.9um	18um	27um	36um
27.010"	30.010"		.0004	.0008	.0012	.0016
686.05mm	762.25mm		10um	20um	30um	41um

STANDARD PLUG AND RING GAGE CLASSES FOR PRODUCT TOLERANCES

The chart of Product Tolerances for plain plug and ring gages may be used as a guide for recommended gage tolerance. This assumes a given product tolerance. Wear allowance and other similar concerns should be included when gage specifications are being defined. These are left for the user to determine. Plain plug gages normally use a plus tolerance to be considered the "Go" and a minus tolerance constitutes the "Nogo" status. Ring gages normally use a minus tolerance to be considered "Go" and a plus tolerance for the "Nogo". These descriptions are fitting with normal practice that allows 10% of the product tolerance to be equally divided between "Go" and "Nogo" conditions.

Product Tolerances	Class of Gage for Size Range			
	.010-.825	.825-1.510	1.510-2.510	2.510-4.510
.0002	XXX			
.0003	XXX			
.0004	XX	XX		
.0005	XX	XX		
.0006	XX	XX	XX	
.0007	X	XX	XX	
.0008	X	XX	XX	XX
.0009	X	XX	XX	XX
.0010	X	X	XX	XX
.0012	Y	X	XX	XX
.0014	Y	X	X	XX
.0016	Y	Y	X	X
.0018	Z	Y	X	X
.0020		Y	X	X
.0022		Z	Y	X
.0024			Y	X
.0026			Y	Y
.0028			Y	Y
.0030			Z	X
.0032				Y
.0034				Y
.0036				Z

