

Geometrical Casting Tolerance Grades (GCTG)



For raw castings according to ISO 8062-3:2007

Nominal dimension related to the moulded part, mm		Casting tolerances for straightness						Casting tolerances for flatness						Casting tolerances for roundness, parallelism, perpendicularity and symmetry						Casting tolerances for coaxiality					
		GCTG						GCTG						GCTG						GCTG					
		2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7
-	≤ 10	0.08	0.12	0.18	0.27	0.40	0.60	0.12	0.18	0.27	0.40	0.60	0.90	0.18	0.27	0.40	0.60	0.90	1.40	0.27	0.40	0.60	0.90	1.40	2.00
> 10	≤ 30	0.12	0.18	0.27	0.40	0.60	0.90	0.18	0.27	0.40	0.60	0.90	1.40	0.27	0.40	0.60	0.90	1.40	2.00	0.40	0.60	0.90	1.40	2.00	3.00
> 30	≤ 100	0.18	0.27	0.40	0.60	0.90	1.40	0.27	0.40	0.60	0.90	1.40	2.00	0.40	0.60	0.90	1.40	2.00	3.00	0.60	0.90	1.40	2.00	3.00	4.50
> 100	≤ 300	0.27	0.40	0.60	0.90	1.40	2.00	0.40	0.60	0.90	1.40	2.00	3.00	0.60	0.90	1.40	2.00	3.00	4.50	0.90	1.40	2.00	3.00	4.50	7.00
> 300	≤ 1000	0.40	0.60	0.90	1.40	2.00	3.00	0.60	0.90	1.40	2.00	3.00	4.50	0.90	1.40	2.00	3.00	4.50	7.00	1.40	2.00	3.00	4.50	7.00	10.00
> 1000	≤ 3000	-	-	-	3.00	4.00	6.00	-	-	-	4.00	6.00	9.00	-	-	-	6.00	9.00	14.00	-	-	-	9.00	14.00	20.00

By the standard recommended geometrical tolerance grades for different casting methods for light metals.

GCTG 5-7 Sand casting, hand molding

GCTG 4-6 Sand casting, machine molding and shell molding

GCTG 3-5 Permanent mold casting. Gravity and Low pressure die casting

GCTG 2-4 Pressure die casting: Use of tight tolerance grade (DCTG 5) to be agreed by case. Note 4.

For pressure die casting following apply:

Grade GCTG 2 Should be used by special agreement

Grade GCTG 3 Ordinary castings without slides for the contour

Grade GCTG 4 Complex castings as well as castings with side slides for the contour