

To reference the International Standards Organization 3290 Grades/Tolerances for Steel Balls, download this PDF:



Global Precision Ball and Roller ISO 3290 Tolerances for Steel Balls

ISO 3290-1:2008(E) (Values In Micron)

Sr. No.	Ball Grade	Variation of ball Diameter $\sqrt{DWS_{max}}$	Deviaion from Spherical from ΔRSW_{max}	Surface Roughness (arithmetic average) Ra_{max}	Lot dia Variation $\sqrt{DWL_{max}}$
01.	G 3	0.08	0.08	0.01	0.13
02.	G 5	0.13	0.13	0.014	0.25
03.	G 10	0.25	0.25	0.02	0.5
04.	G 16	0.4	0.4	0.025	0.8
05.	G 20	0.5	0.5	0.032	1
06.	G 24	0.6	0.6	0.04	1.2
07.	G 28	0.7	0.7	0.05	1.4
08.	G 40	1	1	0.06	2
09.	G 60	1.5	1.5	0.08	3

10.	G 100	2.5	2.5	0.1	5
11.	G 200	5	5	0.15	10