

Terms and definitions ISO 3290 – AFBMA – DIN 5401

Nominal ball diameter Dw.	The diameter value that is used for the purpose of general identification of a ball size, es 1/4", 6 mm. etc.
Single diameter of a ball.	The distance between two parallel planes tangent to the surface of the ball.
Mean diameter of a ball.	The arithmetic mean of the largest and the smallest actual single diameters of the ball.
Ball diameter variation VDws.	The difference between the largest and the smallest actual single diameters of the ball .
Deviation from spherical form tDw.	The greatest radial distance in any radial plane between a sphere circumscribed around the ball surface and any point on the ball surface.
Ball Lot.	A definite quantity of balls manufactured under conditions which are presumed uniform and which is considered and identified as an entity.
Lot mean diameter.	The arithmetic mean of the mean diameter of the largest ball and that of the smallest ball in the lot.
Lot diameter variation VDwl.	The difference between the mean diameter of the largest ball and that of the smallest ball in the lot.
Ball grade G.	A specific combination of dimensional, form, surface roughness and sorting tolerances. Ball grade is identified by letter G and a number.
Ball gauge.	The prescribed small amount by which the lot mean diameter should differ from nominal diameter, this amount being one of an established series of amounts.
Deviation of a ball lot from ball gauge.	The difference between the lot mean diameter and the sum of the nominal diameter and the ball gauge.
Surface roughness.	Consists of all those irregularities which form surface relief and which are conventionally defined within the area where deviations of form and waviness are eliminated.
Waviness.	Surface irregularities of random or periodical deviation from the ideal spherical form.
Hardness.	The measure of resistance to penetration of the ball surface or truncated flat of the ball by a specific indenting shape as determined by specified methods.