

TERMS AND DEFINITIONS

ball gauge	amount by which the mean diameter of ball lot should differ from the nominal ball diameter, this amount being one of an established series
ball gauge interval	absolute difference of two consecutive ball gauges
ball grade	specific combination of dimensional, form, surface roughness and sorting tolerances for balls
ball lot	definite quantity of balls manufactured under conditions presumed uniform and which is considered as an entity
ball subgauge	amount, of an established series of amounts, which is the nearest to the actual deviation from the ball gauge of a ball lot
ball subgauge interval	absolute difference of two consecutive ball subgauges
deviation from spherical ball surface	various types of deviation from the perfect spherical ball surface, uniformly or non-uniformly distributed and repeated around the ball surface
deviation of a ball lot from ball gauge	difference between the mean diameter of a ball lot and the sum of the nominal ball diameter and the ball gauge
hardness	<rolling bearings> measure of resistance to penetration as determined by a specific test method
mean ball diameter	arithmetical mean of the largest and the smallest of the single diameters of a ball
mean diameter of ball lot	arithmetical mean of the mean diameters of the largest ball and the smallest ball in a ball lot

定义和符号

Definitions and Symbols

nominal ball diameter	diameter value which is used for the general identification of a ball size
single ball diameter	distance between two parallel planes tangential to the actual surface of a ball
variation of ball diameter	difference between the largest and the smallest of the single diameters of a ball
variation of ball lot diameter	difference between the mean diameters of the largest ball and the smallest ball in a ball lot

SYMBOL	DEFINITION
D_w	Nominal ball diameter
D_{wm}	mean ball diameter
D_{wmL}	mean diameter of ball lot
D_{ws}	single ball diameter
G	ball grade
Ra	arithmetical mean deviation of surface texture
S	ball gauge
V_{DwL}	variation of ball lot diameter
V_{Dws}	variation of ball diameter
Δ_{RSw}	deviation from spherical form
Δ_S	deviation of a ball lot from the ball gauge
NOTE	$\Delta_S = D_{wmL} - (D_w + S)$