

Areal Parameters



Amplitude Parameters		
	Description	Comment
Sq	Root mean square deviation of the surface	Used to discriminate between different surfaces based on height information and to monitor manufacturing stability
Ssk	Skewness of the surface	Indicates aspects of load carrying capacity/lubrication
Sku	Kurtosis of the surface	Indicates 'spikiness' of the surface
Sp	Highest peak	Largest peak height within the definition area
Sv	Lowest valley	Largest valley depth within the definition area
Sz	Maximum height of the surface	Used to evaluate extreme surface height deviations $Sz = (Sp + Sv)$
Sa	Average absolute deviation of the surface	Non-preferred parameter
Spatial Parameters		
Sds	Density of summits of the surface	Used to evaluate the density of peaks and pits in the surface
Str	Texture aspect ratio of the surface	Measures the isotropy of a surface
Sal	Fastest decay autocorrelation length	Describes the most significant length component of texture
Std	Texture direction of the surface	Indicates the direction of the significant lay of the surface
Hybrid Parameters		
Sdq	Root mean square slope of the surface	Evaluates contact or optical properties
Ssc	Arithmetic mean summit curvature	Measures the openness or closeness of the texture
Sdr	Developed surface area ratio	Understanding of deformation of surface regions
Functional Parameters (characterizing bearing and oil retention properties)		
Vvc	Core void volume	Difference in void volume per unit area measured at 10% and 80% material ratio
Vvw	Valley void volume	Volume of the voids per unit area at 80% material ratio
Vmp	Peak material volume	Material volume per unit area at 10% material ratio
Vmc	Core material volume	Difference in material volume per unit area measured at 10% and 80% material ratio