Application recommendations
Inserts

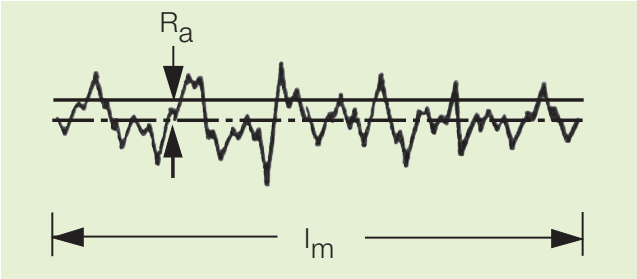
Examples for achievable surface qualities

depending on the corner profile of the inserts:

Aluminium		**Cutting data** f_z = 0.14 mm, v_c = 2.000 m/min	
		PCD-inserts with corner radius 0.4 =>	R_a = 3.2 µm R_z = 17.0 µm
		PCD-inserts with chamfer and wiper geometry =>	R_a = 0.25 µm R_z = 2.0 µm
Cast iron		**Cutting data** f_z = 0.13 mm, v_c = 250 m/min	
		Inserts with corner radius 0.4 =>	R_a = 1.7 µm R_z = 11.5 µm
		Inserts with chamfer and wiper geometry =>	R_a = 0.9 µm R_z = 6.0 µm
Steel		**Cutting data** f_z = 0.13 mm, v_c = 180 m/min	
		Inserts with corner radius 0.4 =>	R_a = 1.4 µm R_z = 10.0 µm
		Inserts with chamfer and wiper geometry =>	R_a = 0.7 µm R_z = 5.5 µm

Mean value of roughness R_a

is the arithmetical mean value of the absolute values of all distances of the roughness profile R from the centre line within the total measuring length l_m



Average peak-to-valley height R_z

is the average value of the single peak-to-valley heights of five successive single measuring lengths l_e