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The influence of the surface roughness of hard coatings on the coefficient of friction during the initial running-in period.

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The aim of the study is to estimate the influence of the surface geometry of coatings on tribological properties. Two different types of hard coatings TiN and AlTiN were deposited by means of lateral rotating cathode arc method on WC-Co substrates. It reveals that during initial running-in period the coefficient of friction (COF) depends on the surface roughness of coatings, namely macroparticles and defect-free area of the surface of coatings.