# Surface Machining after Deposition of Wear Resistant Hard Coats by High Velocity Oxygen Fuel Technology

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**The article deals with some aspects related to the machining of surfaces that have been deposited by wear-resistant hard coats using HVOF (high velocity oxygen fuel) technology. HVOF coating is a thermal spray process used to improve a component's surface properties, thus extending equipment life by significantly increasing errosion and wear resistance, along with corrosion protection. For a purpose of this research, the chromium-cobalt alloy - Stellite 6 was used as a sprayed material. Considering that the parts made of stellites are widely used in various industries and very popular in specific applications, it is a big drawback that adequate machining processes for stellites have not yet been developed other than the costly and time-consuming technique of grinding. However, in this research, an attempt has been made to reveal the optimal machining parameters for a lower value of surface roughness for the purpose of successful machining of Stellite 6 using inserts with various radii of cutting edge. Authors have evaluated the quality of machined surface not only by means of Abbott curve, but they have also observed the dependency of arithmetical mean roughness value on both cutting-edge radius and feed. The analyses of cutting tips wear at changeable inserts have shown that typical wear appears in the form of a notch.**

**Keywords:** Hard coats, High velocity oxygen fuel, Surface quality, Cutting tip, Wear

## Acknowledgement

***The paper originates thanks to project ED2.1.00/03.0093 - Regional Technological Institute covered by the European Regional Development Fund and the state budget of the Czech Republic, and thanks to the support of Ministry of Education of Slovak republic by grants VEGA 1/0614/15 and KEGA 087TUKE-4/2015.***

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**Paper number: M2017179**