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## Analysis of HVOF Coating on Molds Used for Refractory Fireclay Shapes

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Molds used for pressing refractory fireclay shapes are exposed to very strong abrasive wear, which is given by the combination of applied pressure of more than 60MPa and processed materials like alumina ( $\text{Al}_2\text{O}_3$ ) and silica ( $\text{SiO}_2$ ). Typical lifespan of molds is in several thousand cycles, our aim was to improve the lifespan 10 fold at minimum. To increase the lifespan of the critical parts of the molds, it was decided to use HVOF coating technology based on WC. This article evaluates the quality of the coating on the pins for pressing tools based on the technology used for deposition. An analysis was made on two sets of HVOF coated pins from different suppliers marked as a sample "A and B". Pins were analysed on tactile CMM with scanning system and samples from these pins were analysed on a multisensor CMM.

**Keywords:** HVOF Coating Thickness, Flatness, Mold Lifespan Increase

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