

AISI H13 tool steel has widely been used in industry especially to manufacture moulds/dies due to its good resistance. This paper presents an experimental study on rough turning of AISI H13 tool steel in order to investigate influence of machining parameters and coating grades on machining performance. Experimental design was made as full factorial at three different cutting speed, feed rate levels and two different coating grades. CVD-Ti(C,N) + Al₂O₃ + TiN and PVD-Oxide coated tungsten carbide tools were used and machining performance measures such as cutting forces, surface roughness and tool life were measured during the turning tests. The experimental results have shown that cutting forces and surface roughness for both coating grades have exhibited similar trends but CVD-Ti(C,N) + Al₂O₃ + TiN coating grade has provided longer tool life about 8 times higher than the other one.