

Tool Deterioration of Stainless Steel 316 in Wet Milling Operation Using Carbide Tool

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Abstract:

Tool deterioration of cutting insert is one of the crucial problem in machining stainless steel due to its excellent mechanical properties. This current work presents a study of tool deterioration of stainless steel 316 in milling using carbide tools. Experiments were conducted in wet condition where tool progression was monitored carefully in every milling passes and the wear criterion was measured. Result shows that the dominant tool deterioration mechanism of carbide tool is tool wear at the flank area where the tool gradually wear from the first milling passes to the final pass

Keywords: Tool Deterioration; Stainless Steel 316; Carbide Tool; Milling

Acknowledgments

The author gratefully acknowledges Universiti Malaysia Pahang (UMP) for funding this project under internal research grant (RDU1703132).