

RESEARCHES REGARDING THE DURABILITY OF THE TITANIUM NITRIDE COATED HELICAL CUTTING TOOLS, ON THE 32Cr10 STEEL MACHINING

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Abstract

The paper presents some results obtained within the researches regarding the comparative behavior of the high speed steel helical cutting tools and respectively titanium nitride coated, and their durability, by machining the 32Cr10 steel, frequently used on the cogs of the car gearboxes. The researches had the scope to determine the durability equations for the uncoated high speed steel helical cutting tools and respectively titanium nitride coated, with the aim to offer to the designers data which will allow their utilization in optimal conditions.

Keywords

Durability, coated helical cutting tools, teething.