

Hard Machinable Machining of Cobalt-based Superalloy

Robert Cep¹, Adam Janasek¹, Jana Petru¹, Lenka Cepova¹, Andrej Czan², Jan Valicek³

¹ VSB - Technical University of Ostrava, Faculty of Mechanical Engineering, Department of Machining and Assembly, 17. listopadu 15/2172, 708 33 Ostrava - Poruba, Czech Republic. robert.cep@vsb.cz

² Faculty of Mechanical Engineering of University of Zilina, Department of Machining and Manufacturing Technology, Univerzitna 1, 010 26 Zilina, Slovak Republic.

³ VSB - Technical University of Ostrava, Faculty of Mining and geology, Institute of Physics, 17. listopadu 15/2172, 708 33 Ostrava - Poruba, Czech Republic.

The main aim is testing the basic properties of cobalt super alloys, under its own brand name HAYNES, marking No. 188, at machining and propose the most suitable cutting materials and machining parameters. The superalloys are developed for elevation of temperature service where relatively severe mechanical stressing is encountered and high surface stability is frequently required. The cobalt-based alloys have been in use for several decades in the manufacturing of various components. Although technology development rises in chipless machining such as moulding, precision casting and other manufacturing methods, the machining is still number one, at piece production which is typical for energy and chemical engineering. The driving force for their development still has been requirement of higher operating temperatures for many manufacturing fields in industry area.

Keywords: geometric accuracy, testing, milling machine, tool wear, superalloy

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