INFLUENCE OF THE THERMO-PHYSICAL CHARACTERISTICS OF COOLERS ON THE REAL SOLIDIFICATION MODULE OF CAST PARTS

D.P. FERARU¹ C.A. SZABO¹ I. CIOBANU¹ A. CRIŞAN¹

Abstract: The paper presents the results of a study concerning the influence of the thermo-physical characteristics of coolers on the solidification of hot spots for cast parts. The analysis of the solidification part was achieved by the method of the real solidification module. The use of four different cooler types was analyzed, made of different materials (cast iron, steel, aluminium, copper). When used as exterior coolers, non-ferrous alloys (based on aluminium and copper) ensure a considerably greater cooling coefficient of the parts surface, due to their significantly larger heat accumulation coefficient.

Key words: casting, cooler, solidification.

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¹ Dept. of Technological Equipment and Materials Science, *Transilvania* University of Braşov.