

Influence of the Selected Technological Factors on the Elimination of Misruns

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High pressure die-casting of aluminum alloys is a complicated process depending on a number of factors which relate between each other. That is why these factors must be regulated in the process of casting. This contribution focuses on the possibilities of eliminating the defects of short run. This defect is located on the edge of the flow opening of the casted body STIRNPLATTE 033. From the view of functionality this kind of defect is inadmissible. Experimental castings from the AlSi12CuNiMg alloy were casted by using different technological parameters where the work surface temperature of the mould and the profile layout of the piston path differed. Experimental measurements of the mechanical properties and RTG analysis were conducted. From the measured values it is possible to state that by infringing the optimal temperature in the mould and the incorrect setting of the piston path parameters has the biggest influence on the amount of misruns.

Keywords: cast, misruns, mould, temperature, pressure

Acknowledgement

This article was created according to grant project VEGA 1/0363/13. Authors are grateful to the grand commission for their assistance.

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Paper number: M201649

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