Qualitative Evaluations of the AlSi7Mg0.3 Microstructure by the X-Ray Diffractometry

Jan Lago1, Ondřej Řidký2, Otakar Bokůvka1, František Nový1
1University of Žilina, Faculty of Mechanical Engineering, Department of Materials Engineering, Univerzitná 8215/1, 010 26 Žilina. E-mail: jan.lago@fstroj.uniza.sk
2Faculty of Mechanical Engineering, Technical university in Liberec. Student 1402/2, 461 17 Liberec I. Czech Republic. E-mail: ondrej.ridky@tul.cz

Nowadays it’s very important to minimalize the costs of casted parts, what obviously conclude to reduction in time that is necessary for the heat treatment. Despite this fact it’s necessary to keep or moreover increase mechanical properties like a strength, ductility, toughness and dimensional stability. Better mechanical properties lead to the quality index and increase of this parameter conclude to weight reduction of casted part. For obtaining good microstructure and diffraction. Great advantage of the X-ray diffraction is that the testing surface doesn’t needs to be specially treaded. This technology is non-destructive for the surface analyses so for the testing of the internal material composition it’s necessary etching.

Keywords: AlSi7Mg0.3, X-ray, diffractometry, microstructure, evaluation

Acknowledgement

This research was supported by Scientific Grant Agency of the Ministry of Education, Science and Sports of the Slovak Republic and Slovak Academy of Sciences, grant No.:  1/0123/15 (50 %) and No.: 1/0533/15 (50 %).

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Indexing: indexed on: http://www.scopus.com