

Study of interactions between molding materials and magnesium alloys melt metal

Jaroslav Beňo, Petr Lichý, Michal Cagala, Kateřina Konečná, Marek Břuska

Department of Metallurgy and Foundry, VSB – Technical University of Ostrava, 17. listopadu 15/2172, 708 33 Ostrava - Poruba, Czech Republic. petr.lichy@vsb.cz

For production of castings from magnesium alloys it is necessary to use covering or protective materials, which prevent reaction of the melt with air (air oxygen). With respect to the surface quality of castings it is absolutely necessary to monitor also the mutual interaction of the alloy with material of the mould or the core. The objective of this paper consists in investigation of influence of cores based on inorganic salts on the structure and surface quality of the castings made of the magnesium alloy AZ91 at gravity casting. Within the frame of experiment we studied by metallographic and SEM analyses the surface quality of castings from the side of cores and changes of structure of the castings' surface.

Keywords: magnesium alloys, casting surface quality, salt cores, microstructure

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