

Influence the Composition of the Core Mixture to the Occurrence of Veining on Castings of Cores Produced by Cold-Box-Amine Technology

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Method of cold-box-amine is widespread and frequently used technology for the production of cores. [1] Characteristic defect castings of ferrous alloys, which often accompanies the use of amine - Cold box cores are veining. Survey, it was found that 77 % of those surveyed foundries have problems with veining, 71 % foundries solves this problem (or try to tackle) anti veining ingredients in nuclear and molding compounds, but only 29 % considered their " antiveining " method for successful and favourable. [2] Article discusses the possibilities of elimination veining. Ingredients called additives lower the temperature at which the SiO₂ begin to soften and form a melt at the surface of the grains, reduce the reactivity and increase the temperature of transition to a tridimit and cristobalit. These passages encourage increased tensions subsurface sand and reduce stress for the formation of veining on the surface of the core or mold. Experiments were performed to assess the impact of silica sands and the impact of additives on the quality of the casting surface.

Keywords: core mixture, veining, cold-box-amine

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