

## Effect of Technological Parameters on the Heat Transfer Coefficient in Alloy AlCu4Ti using Squeeze Casting Technology

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The paper deals with the methodology of heat transfer coefficient measuring while using squeeze casting process. The casting with crystallization under pressure was used, specifically direct squeeze casting method. The pressure applied to the melt causes a significant increase (up to ten times) of the coefficient of heat transfer between the casting and the mold. The paper deals also with obtained results of the measured temperatures in the mold and the casting. The goal was to affect crystallization by pressure with value 100 MPa. On the basis of the measured variables were calculated values of heat flux between casting/mold, and consequently also the values of heat transfer coefficient.

**Keywords:** AlCu4Ti alloy, heat transfer coefficient, squeeze casting, heat flux

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