The Impact of Technological Parameters on Casting Integrity and Mechanical Properties of AlSi7Mg0.3 Alloy by Using Squeeze Casting Technology

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The article deals with the effect of variaton of the technological parameters on the change mechanical properties and density of the AlSi7Mg0.3 alloy using squeeze casting technology. The AlSi7Mg0.3 alloy has been chosen because the acting pressure has the most significant impact on Al-Si alloys. For the make a samples was used a direct squeeze casting technology. Differently casting temperatures and mold temperatures at the acting pressure of 30 MPa were varied for individual samples. From the mechanical properties was specifically evaluated tensile strength and elongation.

Keywords: Squeeze Casting, Al-Si Alloys, Mechanical Properties, Casting Integrity

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