

Die Casting Plunger Pressing Velocity and Analysis of Its Influence on a Permanent Deformation Value of a Casting Made from an ENAC 47100 Alloy

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A die casting plunger velocity inside a filling chamber of a pressure die casting machine is one of the most significant factors of a pressure die casting. This velocity determines the regime of a die cavity filling, thus influencing both inner and surface quality of castings. A selection of a correct velocity of a die cavity filling depends on such factors as an alloy type, a casting complexity, a ratio of a slot area to a casting area, etc. A static pressure test can be used to determine a permanent deformation value by which a casting quality can be considered.

Keywords: die casting plunger pressing velocity, ENAC 47100 alloy, permanent deformation, homogeneity of a casting

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