

Mould design and injection parameters directly affect product properties in aluminium die casting. In this study, effect of the mould design and injection parameters on product quality were investigated by tensile, Charpy, microhardness experiments together with microstructure analyses in forming of Al150 aluminium alloy preferred for the manufacture of automobile parts. As a result, the effects of air pockets volume and their positions in mould design and injection pressure and velocity, cooling state on the product strength and porosity formation were observed in tests. Besides, the best strength and low pore amount are obtained with parameters of high injection pressure and velocity, cooling water of products ejected from mould.