

PROCESSING MACRO-COMPOSITES BY INFILTRATION AND THEIR PROPERTIES

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Abstract: *The infiltrated alloy is based on Al-Si system. The infiltrated porous is based on SiO₂, steel and ZrO₂. The infiltration parameters are analyzed, too. The macro-composites quality was evaluated by means of a structural analysis and by establishing the density values and thermal properties. The obtained results revealed that it is possible to preordain the thermal dilatation of macro-composites by judiciously choosing the metallic and non-metallic matrix ratio.*

Key words: *composite materials, infiltration, ZrO₂, alpax.*

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