

## Pengaruh Kadar Besi terhadap pembentukan Fasa Intermetalik Al-Fe-Si dan Nilai Fluiditas Paduan Hipoeutektik Aluminium Silikon

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### Abstrak

*In casting process, fluidity is the most important property to determine the flowability of molten metals. The aims of the research are to understand the influence of iron content addition of 0.5 wt%, 1.0 wt%, 1.4 wt% and 1.8 wt%, on the fluidity and morphology of intermetallic phases formed in master alloy Al-7wt%Si. The research was conducted by using the vacuum suction test at varied temperatures, 660°C, 680°C, 700°C and 720°C. The results showed that increasing of iron content will reduce fluidity of Al-7wt%Si alloy due to the increasing of size and amount of intermetallic phases, specially B-Al<sub>5</sub>FeS phase. The other hand increasing of iron content will increase volume fraction of intermetallic phases that cause the increasing of viscosity.*