

## INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh variasi penambahan unsur perak (Ag) pada proses pengecoran aluminium (Al) terhadap sifat fisis dan mekanisnya.

Benda uji dibuat dari coran Aluminium (Al) dengan penambahan unsur perak (Ag) sebesar 1%, 2%, 3%, dan 4%. Jenis pengujian yang dilakukan adalah kekuatan tarik, kekerasan, struktur mikro, porositas, dan massa jenis hasil coran.

Hasil penelitian menunjukkan bahwa penambahan perak akan menurunkan kekuatan tarik, mengurangi porositas, menaikkan regangan bahan dan menaikkan massa jenis hasil coran.

## **ABSTRACT**

The aim of this research is to know the influence by adding variation of silver (Ag) element at aluminum molding process to its nature of physical and mechanical properties.

The test was object made by Aluminum with the addition of silver element equal to 1%, 2%, 3%, and 4%. The type of examination was tensile strength, hardness, micro structure, porosity, and density result of the casting.

Result of this research showing that addition of silver will degrade tensile strength, lessening porosity, and boosting the materials strain and the density result of casting.