

EXCERPT

Aluminum is used a lot in many aspects in human life, e.g.: in health departments, industry, sports, automotive, transportation, etc. There are two alloy of aluminum, i.e.:

1. non-heat treatable aluminum
2. heat treatable aluminum

For all human necessities, some characters of aluminum alloy need to be enhanced. Giving it heat treatment for instance does this enhancement, i.e.:

1. mechanical heat treatment
2. chemical heat treatment

The heat treatment given to the alloy in this research is the mechanical one. That is treating the alloy by giving it an aging treatment, which is objected to assess the impact of the aging temperature towards the mechanical properties of the alloy. The aging temperature used for the experiment is 25 centigrade, 100 centigrade and 150 centigrade for an hour each. The experiment resulted in finding that the pulling force was affected by the treatment. The point, for which the force was affected, ranged between 0.31% and 0.77% and the reduction of the hardness ranged between 7.7% and 9.5%, from its previous status.

Based on the experiment, it is concluded that the aluminum alloy, which was used as the object of the experiment, categorized within non-heat treatable classification. Also, concluded that heat treatment is unnecessary for this type, as it will only reduce the alloy strength.