



International Journal on Recent Researches In Science, Engineering & Technology

(Division of Mechanical Engineering)

A Journal Established in early 2000 as National journal and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy.

It is an absolutely free (No processing charges, No publishing charges etc) Journal Indexed in JIR, DIIF and SJIF.

Research Paper

Available online at: www.jrrset.com

ISSN (Print) : 2347-6729

ISSN (Online) : 2348-3105

**Volume 5, Issue 1,
January 2017**

JIR IF : 2.54

DIIF IF :1.46

SJIF IF: 1.329

Critical reviews on influence of alloying elements on the microstructure of aluminum alloys

Ramana and Palaniappan

A critical reviews on the influence of alloying elements on the microstructure and mechanical properties of Al Alloys and composites were made by the authors. Al and Al alloys are widely used in automotive industries. They are light in weight with good malleability, high corrosion resistance and high thermal conductivity. However they still have some problems such as relatively low strength and unstable mechanical properties. To address this, the authors have tried adding alloying elements to Al alloys with a view to improve the mechanical properties. They have presented in their paper, a detailed review of influence of alloying elements, addition on microstructure and mechanical properties .The main alloying elements are silicon which is responsible for good castability, interlocking of grain boundaries.