Scope Database Link: https://sdbindex.com/documents/00000002/00000-47546
Article Link: http://iaeme.com/MasterAdmin/Journal_uploads/IJMET/VOLUME_8_ISSUE_5/IJMET_08_05_036.pdf

Manuscript ID : 00000-47546

Source ID : 00000002

International Journal of Mechanical Engineering and Technology

Volume 8, Issue 5, May 2017, Pages 344-350, Page Count - 7

STRUCTURE AND PROPERTY RELATION OF HYBRID ALUMINIUM COMPOSITE

Kammuluri.Baburaja [(1)] G.Arun Kumar [(2)] Lanka Venkatesh [(3)] Mekala Yogesh [(4)] Moparthi Ganesh Sai Gowtham [(5)] Dhayapulley Sai Chaitanya kishore [(6)]

[(1)] Department of Mechanical Engineering, K L (Deemed to be University), Green Fields, Vaddeswaram, Guntur District,Andhra Pradesh, India.
[(2)] Department of Mechanical Engineering, K L (Deemed to be University), Green Fields, Vaddeswaram, Guntur District,Andhra Pradesh, India.
[(3)] Department of Mechanical Engineering, K L (Deemed to be University), Green Fields, Vaddeswaram, Guntur District,Andhra Pradesh, India.
[(4)] Department of Mechanical Engineering, K L (Deemed to be University), Green Fields, Vaddeswaram, Guntur District,Andhra Pradesh, India.
[(5)] Department of Mechanical Engineering, K L (Deemed to be University), Green Fields, Vaddeswaram, Guntur District,Andhra Pradesh, India.
[(6)] Department of Mechanical Engineering, K L (Deemed to be University), Green Fields, Vaddeswaram, Guntur District,Andhra Pradesh, India.

Abstract

Manufacture of hybrid aluminium material is discussed in this paper. Hybrid aluminium is a combination of two different materials one will be of biological origin and the other from the natural elements of earth`s crust. Increasing usage of hybrid aluminium metal matrix composites due to enhanced material properties like malleability, ductility, plasticity, elasticity, toughness, hardness, compressive strength, tensile strength resistance to corrosion, resistance to creep and fatigue. Incorporated tailor made properties for hybrid aluminium may not be machined by using conventional machining process where the cutting tool should be harder, tougher and stronger than the work piece material which is to be machined, newer machining technologies like Wire EDM, Laser beam machining , water jet machining are preferred machining technologies available for these kind of hybrid materials

Author Keywords

Bamboo leaf ash,hardness,Al6061,In-situ

Index Keywords

Wire EDM, Laser beam machining, water jet machining

ISSN Print: 0976-6340
ISSN Online: 0976-6359
Source Type: Journals
Document Type: Journal Article
Publication Language: English
DOI:
Abbreviated Journal Title: IJMET
Access Type: Open Access
Publisher Name: IAEME Publication
Resource Licence: CC BY-NC
Major Subject: Physical Sciences
Subject Area classification: Engineering and Technology
Subject area: Mechanical Engineering
Source: SCOPEDATABASE