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A Review of Recent Trendson Reinforcement of Fibre Metal Laminates withNanoclay andMulti Walled Carbon Nanotubes

[1]K.Logesh, [2]V.K.Bupesh Raja, [3]R.Arun Raj, [4]P.B.Senthilkumar

[1]Department of Mechanical Engineering, Sathyabama University, Chennai, Tamil Nadu, India
[2]Department of Automobile Engineering, Sathyabama University, Chennai, Tamil Nadu, India
[3,4]Department of Automobile Engineering, VeltechDr.RR& Dr.SR University, Chennai, Tamil Nadu, India

Abstract: In this paper the Fibre-metal laminates have showed itsgreat importance in high-performance, lightweight structures likeaircrafts and military applications. Hybrid composite materials are built up from interlacing layers of Fibre reinforced adhesives and thin metals to form Fibre metal laminates. The combined effect of metalsand Fibre-reinforced laminate offer meritslikeenhanced resistance to fatigue crack growth and impact damage for industrial applications. MWCNT, Nanoclay reinforced FMLs are economical than other FMLs like GLARE and CARALL. Using classical techniques Metallic layers and Fibre reinforced laminate can be bonded. Adhesively bonded Fibre metal laminates have shown more fatigue resistant than their equivalent mechanically formed laminates. FML's are chemically stable, conduct electricity and mechanically very strong. Due to these reasons they found their candidature to enhance the properties of FMLs.
Keywords: Nano clay, MWCNT, FML, GLARE, CARALL.

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