Material Processing Technologies

Table of Contents

Characterization of Nanostructured and Conventional TiAlN Coatings Deposited on AISI-304 Boiler Steel	
J.S. Grewal, B.S. Sidhu and S. Prakash	1
Effect of Cryogenic Treated Electrodes on Sensitization in Resistance Spot Welding of Stainless Steel	4.7
R. Singh and R. Sharma	15
Effect of Sliding Velocity on Wear Behaviour of TiAlN Coatings J.S. Grewal, B.S. Sidhu and S. Prakash	24
Investigations on Effect of Electrode Polarity on Machining Performance of Ti-5Al-2.5Sn Alloy Using Electric Discharge Machining Process S. Kumar, R. Singh, A. Batish and T.P. Singh	39
Experimental Investigations for Fabrication and Comparison of Fatigue Properties of an Open Cell Porous Regular Metallic Structure and with Inner Solid Core through Rapid Manufacturing	50
J.P. Singh and P.M. Pandey	52
Ultrasonic Machining: A Review R. Kataria and J. Kumar	61
Investigation of Penetration Rate and Surface Topography in Ultrasonic Drilling of WC-Co Composite	
R. Kataria, J. Kumar and B.S. Pabla	79
Performance of 75Cr ₃ C ₂ -25NiCr Coating Produced by HVOF Process in a Coal-Fired Thermal Power Plant	
S.S. Chatha, H.S. Sidhu and B.S. Sidhu	88
Modeling and Analysis for Hardness and Structure of Nonferrous Alloy Castings Produced Using Zcast Metal Casting Process through Response Surface Methodology	101
R. Kumar, R. Singh and I.P.S. Ahuja	101
Parametric Optimization in Drilling Operation Using Response Surface Approach K.S. Boparai, S. Singh and A. Singh	117
Investigations for Statistically Controlled Hot Chamber Die Casting Solution of Aluminium	
Alloys R. Singh	132