## INTERNATIONAL JOURNAL OF ADVANCED MECHATRONICS AND ROBOTICS

VOLUME 9

No. 1

JANUARY-JUNE 2017

## CONTENTS

| Enhancement of M   | laterial Removal Rate by Using Cryogenically Treated Wire in Wire EDM Process  Kultar Singh Saini and Parlad Kumar Garg  | 1-7   |
|--|--|-------|
| Effect of Cryogenic  | cally Treated Wire on Surface Roughness in Wire EDM Process  Kultar Singh Saini and Parlad Kumar Garg  | 9-14  |
| Process Improvem   | ent and Setup Time Reduction in Manufacturing Industry: A Case Study  Jaskaran Singh and Gurinder Singh Brar   | 15-23 |
| Enigma of Quality  | Control Tools in Manufacturing Industry of Northern India-A Case Study Jagdeep Singh, Harwinder Singh, Jatinder Pal and Preetraj Singh Sidhu                       | 25-28 |
| AND THE PARTY OF T | estigation for Shore Hardness of ABS Replicas Fabricated by Fused Deposition or Smoothing Process  Jaspreet Singh, Rupinder Singh and Harwinder Singh              | 29-34 |
| Effect of process pa   | arameters on Ra of FDM fabricated and Vapor Smoothened ABS Replicas  Daljinder Singh, Kamaljit Singh and Rupinder Singh  | 35-40 |
| Comparison of pos<br>developed on FDM  | t processing techniques for improving surface roughness of ABS replicas<br>[<br>Ranvir Singh, Rupinder Singh and J.S. Dureja                                       | 41-45 |
| Non-destructive T  | echniques for Corrosion Monitoring in RC structural members  Yuvraj Singh and Harvinder Singh  | 47-51 |
| Assessment of lear   | n tools implementations in Auto Parts Industries of Ludhiana<br>Jagdeep Singh and Manmohan Singh Ubhi  | 53-59 |
| Minimum Quantit<br>Tool Inserts  | y Lubrication (Mql) Milling of Stainless Steel 304 Using Coated Carbide  Sukhraj Singh, Pragat Singh, Talwinder Singh, J.S. Dureja Manu Dogra  and Harwinder Singh | 61-66 |
| Automated Mainte   | enance Plan for Thermal Power Plant: A Case Study  Navneet Singh Bhangu, Rupinder Singh and G.L. Pahuja  | 67-72 |
| Optimizing tensile extruder  | e strength of biocompatible FDM feedstock filament developed through twin screw  | 73-77 |
|  | RavinderSharmaandRupinderSingh   |       |
| Rapid Prototyping Techniques for fabrication of Open Cell Porous Metallic Structures and their strength enhancement: A Review $JatenderPalSingh$   |  |       |

| Evaluation of Slurry Erosion Wear of HVOF Sprayed WC-12Co Coatings  **Kanwalpreet Sahni, Prabhjot Singh and Jasmaninder Singh Grewal**   | 85-89   |
|--|---------|
| $Multi-response\ optimization\ using\ grey-fuzzy\ methodology\ for\ pure\ titanium\ in\ finish\ cut\ WEDM$ $Rupesh\ Chalisgaonkar\ and\ Jatinder\ Kumar$                         | 91-98   |
| Experimental investigation on modelling of green manufacturing grinding process  Manjot Singh Bedi, Jasmaninder Singh Grewal and Sehijpal Singh                                  | 99-104  |
| Experimental Studies in Fine Finishing of Balls $Deepak\ Dhand\ and\ Sehijpal\ Singh\ Khangura$  | 105-110 |
| Experimental investigation of the effect of environmental conditions during hard turning of Aisi 4340 steel with CBN inserts  Sanjeev Kumar, Dilbag Singh and Nirmal Singh Kalsi | 111-115 |
| Effect of annealing on surface roughness of additively manufactured plastic parts: a case study $Sunpreet\ Singh\ and\ Rupinder\ Singh$  | 117-122 |
| Surface Roughness Evaluation in Turning of En31 Steels by Using Different Cooling Methods  Gauravdeep Singh and Munish K. Gupta  | 123-126 |