

Automation of a manufacturing process has become the order of the day in industries in order to achieve high production rates and high quality of finished components. However, in order to automate a process it is essential to find the best values of process variables. In turn, this requires the establishment of precise quantitative relationships between the process control variables and the chosen output responses. The scope of the proposed work is intended to develop such relationships for the chosen responses in terms of input variables and utilizes those developed relations to find the optimal set of process variables in Laser welding and Laser machining. Once the optimal values are found, then the process could be automated based on them there by reducing the manpower thus reduces the welding cost.



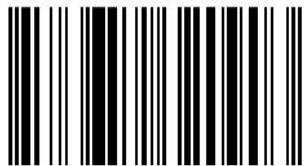
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## A GA approach to the Optimization of Laser Beam Welding process



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