ABSTRACT

Quality and productivity play an important role in the today's field of manufacturing technology and engineering. The main objective of industries reveals with producing better quality product at minimum cost and increase productivity. In the present work an attempt is made to understand various alloy materials and revealed that EN19 steel which has high strength and good ductility. Welding is the most vital and common operation use for joining of dissimilar parts. The EN19 steel has to be welded using Flux core Arc Welding(FCAW) by varying input parameters such as current, voltage and bevel angle. The 8 plates of EN19 steel can be welded on basis of L4 array and testing has to be done to find its mechanical properties such as Hardness, Tensile strength and depth of penetration. The weld strength has to be analysed and determine proper input parameter of EN19 steel using Minitab-17 software and manually.