Abstract Details

Title Optimization of angular deformation of tig welded joint of stainless steel and mild steel

Authors: Sanjay Kumara and Dr. Bhupender Singh

Abstract : Deformation and residual stresses are two major perennial problems faced by engineers in welding works in fabrication & joining process of metals. The change in the shape and dimensions that occur after welding is known as deformation, causing to various undesirable and un predictable problems in above said practice. So it is very imperative to control or eliminates deformation within desired limits. When deformation parameters cross the acceptable limits, correction of deformation after the complete fabrication cause in major reworking to the process to complete the process that may cause in larger operation time and cost of the process will increase the cost of the process also. Welding deformation control in fabrication of complex structures has always been a challenge for fabrication engineers, especially to those who are dealing with ship structures, machinery constructions, railroad, aerospace, pressure vessels, pipes and automotive parts fabrication.