

The Influence Of SMAW And OAW Welding Technology Variation On Crack Growth With Fatigue Testing On Acer Plate

Wiji Budiyanto

*Automotive Engineering Study Program
Engineering Department*

ABSTRACT

The current welding method is widely used in human life from simple to complex, the SMAW welding process is welding using heat to melt the base material or parent metal from an electrode (filler). Specimens were made with 3mm thick acer plates, with SMAW and OAW welding treatments, visual tests, and fatigue tests. This research continues the previous research from Adam, (2011). Effect of Cooling Media Variations on Acetyline Welding Against Crack Growth by Fatigue Testing on Acer Plates. In this research after the fatigue crack test of the acer plate specimens on OAW welding, it was seen that there was a crack beginning until it broke, whereas in the SMAW welding method only caused the fulcrum to cause bending in the specimen. The test results can be concluded that, the specimens in the SMAW welding method are stronger in resisting loads that are done repeatedly (fatigue

Keywords: *Welding methods, welding SMAW, OAW, and fatigue test.*