

**CURRENT VARIATION OF ASTM A36 STEEL WELDING WITH SMAW
METHOD TOWARDS POROCITY AND PULLING STRENGTH**

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ABSTRACT

Welding is a technique of joining two or more components into one desired component. Welding itself has various types, one of which is SMAW (Shielded Metal Arc Welding). The joining of the arc of the electrode uses the same material as the ASTM A36 steel plate with a plate thickness of 2 mm by using a type electrode of E7016 LB-520 with a diameter 3.2. The method used is from the specimen based on the porosity test and tensile test. With the results for porosity with the highest average current at 100 amperes with a porosity value of 0.58146%, while the lowest was at 90 ampere currents with a porosity value of 0.45459% and with the highest Ultimate Tensile Strength read in 100 amperes with 446 N / mm² value and the lowest Ultimate Tensile Strength at 110 amperes with a value of 420 N / mm².

Keywords: SMAW, ASTM A36 Steel, E7016 LB-520, Porosity, Tensile Tes