

***TESTING OF GOOD ELECTRODE RESULTS WITH ELECTRODE  
CONTAMINATED WITH WATER ON WELDING BY IMPACT TEST AND  
TENSILE TEST***

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**Abstract**

*Good welding results are also determined by the electrodes used in the welding process. For this reason, this study examined the effect of the type and condition of the covered electrode on SMAW welding on low carbon steel ST42. The ST-42 low carbon steel metal joining process uses electrodes of types E7016 and E7018. The two types of electrodes used are treated with various conditions on the electrodes, including the condition of the new electrode being removed from the package, the electrode being moistened in free air, the electrode being immersed in water beforehand and the electrode being heated in an electrode heating oven to a temperature of 150°C.*

*After that, an analysis of the defects from the welding results was carried out and an analysis of the hardness, tensile strength and impact value of the welding results. From the results of mechanical testing there are differences between the conditions of the electrodes and it can be recommended that the preheated electrode has better toughness and weldability.*

*Keywords :Glassing, Condition of Electrodes, Mechanical Properties*