

STUDY ON TENSILE CHARACTERISTICS OF BASIC FLUX COATED ELECTRODE FOR MANUAL METAL ARC WELDING

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ABSTRACT

Manual metal arc welding is a common type welding which is used everywhere in fabrication industries. The flux used for electrode has a vital role in its tensile strength characteristics besides its main function. This work focuses on the effect of basic flux coated electrodes on weld strength. The fifteen types of basic flux coated electrodes are manufactured and used for MMAW. Flux with BI of 3.38 is shown to have the maximum tensile strength of 740N/mm². Tensile strength is improved with the basicity index of flux. BI plays an important role in achieving even better mechanical properties.

KEYWORDS: *Manual Metal Arc Welding (MMAW), Basicity Index (BI), Tensile Strength*