

**PENGARUH ARUS PENGELASAN LAS SMAW PADA *STAINLESS*
STEEL 304 TERHADAP UJI *IMPACT* DAN STRUKTUR *MIKRO***
(THE EFFECT OF SMAW WELDING CURRENTS ON STAINLESS STEEL 304
ON THE IMPACT TEST AND MICRO STRUCTURE)

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ABSTRACT

In stainless welding, the microstructure is one of the important things in the observation to determine the micro condition of a metal. In the metal that is affected by welding heating, there will be a change in the micro structure of the part being welded. Not only is the micro structure to determine whether the material being welded can be said to be good, but there is another method, namely by means of the impact test.

The test method used is using the Charpy method. The charpy method is a collision test by placing the test specimen position on a pedestal in a horizontal / horizontal position, and the loading direction is opposite to the notch direction.

The results of the overall microstructure observation of all specimens, the visible phases were austenite (white), Cr carbide (chromium) with fine grains (black spots), and ferrite (dark). Based on research conducted on the impact test and microstructure, it can be concluded that the results vary according to the welding current.

Keywords: Welding, Stainless, Microstructure, Impact test, Charpy method Charpy.