

**DEVELOPING DOMESTIC WELDING ELECTRODE TO SUBSTITUTE
JAPAN MADE WELDING ELECTRODE AT OVERLAP SEAM WELDING
MACHINE IN CONTINUOUS GALVANIZING LINE MACHINE**

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ABSTRACT

Nowadays, efficiency improvement is a main necessity. Continuous Galvanizing Line is a machine that produces galvanized iron sheet using continuous hot dip galvanizing as the coating process. A welding machine is equipped to join the strip of coil and make sure the process in Continuous Galvanizing Line machine runs continuously. The welding machine use Japan made welding electrode that is very expensive and have a long lead time. The purpose of this research is to develop a domestic welding electrode to substitute Japan made welding electrode and resolve its weakness. The domestic welding electrode developed is an alloy that made of 98.9% of Cu, 1% of Cr and 0.1% of Zr elements. The domestic welding electrode has a good welding quality to substitute the original Japan made welding electrode and reduce the cost of the welding electrode from Rp. 110.000.000 to Rp. 7.000.000.

KEYWORDS: *Continuous Galvanizing Line machine, welding, welding electrode, efficiency*

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