PRODUCT MAKING PROCESS OF THE PRESSURE WELDING CONTACT ELECTROD USING THE CLADDING BY M.M.A WELDING

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In the paper is presenting the product making process of the pressure welding contact electrodes using the cladding by manual metal arc (M.M.A.) welding with special consumables. Through the proposed and experimented technology can be manufactured the interchangeable (detachable) heads for electrical pressure spot welding from cooper bars (pure or electrolytic) with adequate diameter, clad with manual welding on the both heads (which will be the future active parts of the electrode) with special consumables. By using these special consumables (cladding electrodes with copper base and tungsten carbide addition in the cover) we can manufacture the contact electrodes for spot welding, having the active parts realized for tungsten carbide in the copper metallic matrix that acts like a composite material, with superior features compared to the basic material.
The pressure welding contact electrodes were been introduced in laboratory exploitation for preliminary testing in real conditions. The preliminary experimental results didn't accentuate differences concerning the behaviour of these contact electrodes pending welding operations and neither dimension errors of the welding spots towards specified limits.

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