CONNECTION BETWEEN PREHEATING TEMPERATURE AND CURRENT IN WELDING PROCESS

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Abstract: This paper presents a research developed in Theory of Welding Processes Laboratory at Iasi Technical University, to establish mathematical relation between two factors (current intensity I_S and preheating temperature T_{PR}) from used technological process, electric arc with shielded electrode and their influence to other important feature of metallic material from a welded joint, the hardness. Based on factorial experiment 2^2 data for practitioners are presented, which could be applied to manufacture installations very used in industry like boilers, heaters and heat exchangers.
Key words: electric arc, preheating, current, temperature.