

THE INFLUENCE OF ENTRANCE PARAMETERS ABOVE THE ALUMINIUM ULTRASONIC WELDING RESISTANCE

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Abstract: The ultrasonic welding of metals ensures a superior quality of the welded joint, a good reproducibility, short machining time and reduced energy consumption, in comparison with same indicators valid for the classic welding. The paper presents the influence of some entrance parameters above the joint resistance of the aluminum ultrasonically welded. The macro and microstructural analysis of ultrasonically welded aluminum is proving an excellent metallurgical bonding. There were made microhardness tests wich are demonsttraing a high quality of the ultrasonic welded joint. All the experiments were made in the National Research and Development Institute for Welding and Material Testing (ISIM) from Timișoara.

Key words: ultrasonic welding, entrance parameters, joint resistance.