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MECHANICAL RESISTANCE OF SPOT COLD ALUMINIUM WELDED JOINTS

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ABSTRACT

Although the manner of joining the two parts is different in case of one-side welding comparing with both-sides variant, the specialist did not shown if there are differences between the shearing strength of the joints obtained using these techniques (as we know). The case of different thickness joint's shearing strength was not presented in paper by now as too The welded joints were tensile tested until they cracked: with both sides indentation, with thinner plate indentation and with thicker plate indentation. In case of equal thickness of the plates, for the one-sides joint resulted a little bit small values than the both-sides joints. In case of different plates thickness, the decreasing of the shearing force appears for the thinner plate side indentation variant only. The difference increases when the thickness of the thinner plate decreasing. When the indentation is done on the thicker plate side, the shearing force always increases with an important percentage.

KEYWORDS: Shearing Strength, Spot Cold Welding.

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