고전류 GTA의 키홀 용접에 대한 기초 연구

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Feasibility Study of Keyhole Welding Process Using High Current GTA

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Abract

In order to achieve deep penetration welds in thick thickness of stainless steel and carbon steel,

keyhole welding was conducted using high current GTA and mixed shielding gas. Results of bead on plate welding in austenitic stainless steel were shown to be penetrated deeper than conventional GTAW. In pure Ar shielding gas, arc was more fluctuated at high current level, while Ar-H₂ mixed shielding gas assisted in maintaining stable arc.

Key Words: Keyhole welding, GTAW, Ar shielding gas, $Ar-H_2$ mixed shielding gas