

GMA Underwater Dry Welding - Mechanical Properties of Butt Joints

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ABSTRACT

Since '90, authors developed an underwater research program in the Department of Robotics and Welding, Dunarea de Jos University of Galati, Romania. Several laboratory stands were achieved and the results of the researches were or will be presented in different issues. First, the paper is presenting a laboratory-testing stand able to simulate water depths by 100 m and its main elements. The underwater influence on mechanical properties of butt joints is studied for different depths simulation and compared with air (controlled atmosphere) results. GMA welding process used for joints achievement was entirely mechanized for air and water cases. Several conclusions are finally presented.

Keywords: GMAW, underwater welding, welding torch, mechanized welding

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