

NT06

Influence of marine corrosion on the roughness of the dry hyperbaric underwater MAG welding joints

M. C. Gheonea¹, S. N. Florescu², D. Mihailescu¹ and V. Teodor¹

¹"Dunarea de Jos" University of Galați, Faculty of Engineering, Domneasca Street, 47, RO-800008, Galați, Romania

²National Institute of Marine Geology and Geo-Ecology (GeoEcoMar), 23-25 Dimitrie Onciul St., 024053 Bucharest, Romania

E-mail: marius.gheonea@ugal.ro

Abstract. The first part of the study covers the behavior of the EH 36 shipbuilding steel subjected to MAG dry hyperbaric underwater mechanized welding. Hereinafter, the authors analyze, by using the electrochemical method, the behavior of the welded joints to marine corrosion. At the end of the article, the corrosion influence on the roughness of the test bars' surfaces depending on the potentiodynamic polarization curves is approached. With the increase of pressure, these curves indicate an increase in corrosion resistance and the decrease of the roughness of the test bars' surfaces.

The full paper is published in IOP Conf. Series: Materials Science and Engineering, Volume 968:

<https://iopscience.iop.org/article/10.1088/1757-899X/968/1/012009/pdf>
