

Etude de l'influence du traitement thermique sur les propriétés mécaniques et électrochimiques d'un rechargement E-309L / 316L-17 sur l'acier 25CrMo4

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Abstract: The main concerns of industrialists having a relationship with the field of oil drilling is wear and corrosion a set of phenomena that act alone or in combination. We propose through this work in addition to the fact of making bi-materials by the hard reloading process to the MMA coated electrode (Manuel Métal arc), using the electrode E309L-17 in the first pass and 316L-17 in finish on low alloy chromium nickel 25CrMo4 steel, This type of steel is used during maintenance on borehole head preventers. In this welding configuration, see quality on the weld by discussing the effect of the chosen parameters on the cohesion at the substrate-input metal and the optimization of the welding process. Three essential steps to be considered in this study: the production of bi-materials by MMA reloading, microstructural, mechanical characterization of compounds and the electrochemical study in NaCl has 3.5%

Keywords : 25CrMo4, Interface, reloading, corrosion, tribology, heat treatment