

## Experimental Research of Corrosion Resistance Desalination Plant Pipe According to Weld Overlay Layers

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**Abstract :** Overlay welding for improving surface properties is a method of the surface treatments which improve surface properties of material by welding materials of alloy having corrosion resistance on the basic material surface. Overlay welding affects contents of chemical components and weld hardness from different parts by dilution of the lamination layer thickness, and it determines surface properties. Therefore, overlay welding has to take into account thickness of the lamination layers with the process. As a result in this study examined contents of Fe, weldability of the base metal and monel materials, hardness and surface flatness from different parts according to each the lamination layer parameters by overlay welding monel materials with corrosion resources to the base material of carbon steel. Through this, evaluated effect by the lamination layer parameters of welding and presented decision methods of the lamination layer parameters of the overlay welding by the purpose of use.

**Keywords :** clad pipe, lamination layer parameters, monel, overlay welding

**Conference Title :** ICFMA 2016 : International Conference on Fluid Mechanics and Applications

**Conference Location :** Copenhagen, Denmark

**Conference Dates :** August 15-16, 2016