

## Effect of Heat Treatment on the Microstructural Evolution in Weld Region of X70 Pipeline Steel

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**Abstract :** Welding is one of the most important technological processes used in many branches of industry such as industrial engineering, shipbuilding, pipeline fabrication among others. Generally, welding is the preferred joining method and most common steels are weldable. This investigation is a contribution to scientific work of welding of low carbon steel. This work presents the results of the isothermal heat treatment effect at 200, 400 and 600 °C on microstructural evolution in weld region of X70 pipeline steel. The welding process has been realized in three passes by industrial arc welding. We have found that the heat treatments cause grain growth reaction.

**Keywords :** heat treatments, low carbon steel, microstructures, welding

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