

Mechanical and Microstructural Properties of SA 210 Gr. C Pipes Welded by Tungsten Inert Gas

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Abstract : Welding failures of steel pipes in power plants usually occur in weld zones. This is similar for the economizer, water walls and superheaters in the power plants where SA 210 Gr. C steel pipes are used. Although these steel pipes have very good welding properties, the welding parameters are also important for the welding life. Welding processes of this pipes are carried out by TIG and SMA techniques. In this study SA 210 Gr. C steel pipes were welded by TIG method and investigated how PWHT affected the welding properties. The results show that this steel does not require post weld heat treatment.

Keywords : SA 210 Gr. C steel pipes, TIG welding, HAZ region, Widmanstätten ferrite

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020