

STRESS AND TEMPERATURE FIELD MODELLING AT WEB STIFFENERS WELDING

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ABSTRACT

The paper focuses on the simulation of a typical welded joint performed between stiffeners and web plate. This weld type is often used in the naval industry. Stiffener plates can be applied to either just one side of the web or to both sides. The welding process has an important influence on the material behaviour and an investigation of these modifications is needed to evaluate the quality of the metal structure. Using the finite element method, temperature and Von Mises stress fields were evaluated and analysed. Finally, the numerical results on the temperature field and stress level are discussed.

KEY WORDS: FEA, temperature field, Von Mises stress, web stiffeners.

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