Experimental investigation of the thickness effect for large as-welded SAW S355 steel specimens - DTU Orbit (09/11/2017)

Experimental investigation of the thickness effect for large as-welded SAW S355 steel specimens

The presented work aims to investigate and establish a pre-cise, thorough and detailed database from series of experimental testing of submerged arc welded (SAW) specimens of various thicknesses typically applied in ships and offshore structures and foundations. Welded structures of all sizes and shapes exhibit fatigue failure primarily in the welded region, rather than in the base material, due to imperfections and flaws relating to the welding procedure. The welded region has therefore received much attention from universities, re-search institutions along with industry as it is of significant practical importance for all fatigue loaded structures, such as e.g. marine structures.

General information

State: Published Organisations: Department of Mechanical Engineering, Solid Mechanics, Fluid Mechanics, Coastal and Maritime Engineering Authors: Ólafsson, Ó. M. (Intern), Jensen, J. J. (Intern), Berggreen, C. (Intern) Number of pages: 7 Publication date: 2016

Host publication information

Title of host publication: Proceedings of the 13th International Symposium on Practical Design of Ships and Other Floating Structures (PRADS'2016)

Publisher: Technical University of Denmark (DTU)

Editors: Dam Nielsen, U., Juncher Jensen, J.

ISBN (Electronic): 978-87-7475-473-2

Main Research Area: Technical/natural sciences

Conference: 13th International Symposium on Practical Design of Ships and Other Floating Structures (PRADS'2016), Copenhagen, Denmark, 04/09/2016 - 04/09/2016

Welded steel joints, Submerged arc welding (SAW), Fatigue testing, Thickness effect, S-N curves, Standard recommendations

Electronic versions:

 $\label{eq:specimental_Investigation_of_the_Thickness_Effect_for_Large_As_Welded_SAW_S355_Steel_Specimens.pdf. Embargo$

ended: 08/09/2016

Publication: Research - peer-review > Article in proceedings - Annual report year: 2016