C-X Meeting, IIW on-line Annual Assembly
– Agenda –
15 (Thursday) July, 2021

Session 1: Modelling and Analysis of Fracture
13:35 - 14:00 X-1987-2021 (iiw2021_C-X_1987.mp4)
Crack growth analysis for welded structures using characteristic tensor
(Hidekazu Murakawa, JWRI, Osaka University, JAPAN
Ramy Gadallah, Masakazu Shibahara, Osaka Prefecture University, JAPAN)

14:00 - 14:25 X-1989-2010 (iiw2021_C-X_1989.mp4)
Characteristic tensor method for singularity evaluation of two dimensional cracks
with welding residual stress
(Kei Saito, Tei Hirashima, JSOL, JAPAN
Ninshu Ma, Hidekazu Murakawa, JWRI, Osaka University, JAPAN)

14:25 - 14:45 Break

Session 2: Welding Residual Stresses in Components
Numerical analysis on the redistribution of welding residual stresses in pipe girth welds
(F. Dittmann, R.R. Kancharakuntla, I. Varfolomeev, Fraunhofer IWM, GERMANY)

ANN based framework for evaluating welding residual stresses in austenitic pipe welds
(R.R. Kancharakuntla, F. Dittmann, I. Varfolomeev, Fraunhofer IWM, GERMANY)

Final report of WG-A, Welding residual stress in thick steel structures
(Jeong-Ung Park, Gyubaek Ann, Chosun University, KOREA
Hidekazu Murakawa, JWRI, Osaka University, JAPAN
Wanchuck Woo, Korea Atomic Research Institute, KOREA)

16:00 End of the Day
Commission X
Structural Performance of Welded Joints — Fracture Avoidance

C-X Meeting, IIW on-line Annual Assembly

– Agenda –
16 (Friday) July, 2021

Session 3: Development of Fracture Mechanics Test (Part 1)

Local compression process avoiding toughness change
(Takumi Ozawa, National Maritime Research Institute, JAPAN
Tomoya Kawabata, The University of Tokyo. JAPAN
Yoshiki Mikami, JWRI, Osaka University, JAPAN)

Proposal of a new judgment criterion for pop-ins in fracture toughness test of welded joints
(Tomoya Kawabata, Toru Yagi, The University of Tokyo. JAPAN
Yasuhiro Iimai, Tokyo Gas, JAPAN)

Small specimen test technique for brittle fracture assessment of structural component based on the local approach
(Mitsuru Ohata, Hiroto Shoji, Kazuma Shiiizu, Osaka University, JAPAN
Takashi Nozawa, Taichiro Kato, Hiroyasu Tanigawa, National Institute for QST, JAPAN)

14:15 - 14:35 Break

Session 4: Development of Fracture Mechanics Test (Part 2)

14:35 - 14:50 Visit of IIW Secretariat and WiW Editor in Chief

A study on Kca value of brittle crack arrest steel plates for large ships
(Kazuyuki Matsumoto, Yoshiya Yamaguchi, Tsutomu Fukui, Nippon Kaiji Kyokai, JAPAN
Motomichi Yamamoto, Hiroshima University, JAPAN
Tadakazu Tanino, National Institute of Technology, Kurume College, JAPAN
Hiroshi Yajima, Yajima Material Integrity Laboratory, JAPAN)

In-situ DIC investigation on local stress-strain behavior in creep-fatigue test of dissimilar steel welded joint
(Mingzhe Fan, Chendong Shao, Yaqi Wang, Shanghai Jiao Tong University, PR CHINA
Xin Huo, Shanghai Turbine Plant of Shanghai Electric Power Generation Equipment, PR CHINA
Ninshu Ma, JWRI, Osaka University, JAPAN
Fenggui Lu, Shanghai Jiao Tong University, PR CHINA)

15:40 - 15:50 Resolutions

15:50 - 16:00 Next Meeting

16:00 End of the Meeting

C-X meeting, IIW on-line Annual Assembly, 15-16 July, 2021