

C-IX BEHAVIOR OF METALS SUBJECTED TO WELDING

IX-2665-19

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Authors: Hee Jin Kim
KISWEL, Korea
Phone: +82-10-5308-7180
kimheejin0827@gmail.com

Program Summary

July 08, 2019 (Mon.)	14:15 - 18:15	Commission IX-L meeting <i>Hall 3, London, CROWNE PLAZA</i>
July 09, 2019 (Tue.)	14:15 - 18:15	Commission IX-H meeting <i>Hall 11, Berlin, CROWNE PLAZA</i>
July 10, 2019 (Wed.)	08:15 - 12:30	Joint meeting of IX-C and C-XI <i>Hall 14, Salonik Grand, TATRA</i>
	14:15 - 16:15	Commission IX-NF meeting Commission IX-L meeting (cont.) <i>Hall 6, Sal LUX, TATRA</i>
	16:45 - 18:15	Commission IX-H meeting (conti.) <i>Hall 6, Sal LUX, TATRA</i>
	18:15 - 18:20	Summary meeting of C-IX <i>Hall 6, Sal LUX, TATRA</i>

IIW Antitrust policy

IIW activities are based on a close, voluntary cooperation of its worldwide members with the overall target to improve the knowledge and skills in joining. To maintain these fruitful activities, it is strictly necessary to meet the obligatory terms of antitrust laws during IIW working sessions, meetings and other events. Thus, any commercial oriented discussion (including, but not limited to market shares, prices, turnovers, production quantities, costs, suppliers and/or customers) is strictly banished



Monday, July 08, 2019

I. Opening Session

1. Opening and welcome by the chair
2. Approval of Agenda (IX-2665-19)
3. Approval of Minutes of AA Meeting (IX-2661-18) of Bali 2018
4. Approval of Minutes of Intermediate Meeting (IX-2664-19) of Miami 2019

II. Commission IX-L: Low alloy steel welds

1. Administration matters of IX-L by Prof. Norbert Enzinger, Chair of IX-L
2. Presentation of documents:

IX-2666-19 (IX-L-1209-19)	WeldForming - A new inline process combination to improve weld seam properties <i>T.-E. Adams, S. Härtel, A. Hälsig, B. Awiszus, P. Mayr</i>
IX-2667-19 (IX-L-1207-19)	Usage of surface-modified filler material to increase the joint-strength of HSLA steels under different load types <i>K. Treutler, V. Wesling</i>
IX-2668-19 (IX-L-1213-19)	Effects of Niobium in Submerged Arc Weld Metal <i>T. Patterson, X. Liu, and J.C. Lippold</i>
IX-2669-19 (IX-L-1215-19)	Local Variation of Impact Toughness in tandem Electro-gas welded Joint <i>K. Seo, H. Ryoo, H. J. Kim, C. Park and C. Lee</i>
IX-2670-19 (IX-L-1220-19)	Tensile and microstructural characteristics of 24Mn steel welds at 110 and 298 K <i>K. M. Choi, M. Kim, N. Kang, C. Kang, D. Cho, D. Nam</i>
IX-2671-19 (IX-L-1208-19)	Multi-Material Design in welding arc additive manufacturing <i>K. Treutler, S. Kamper, M. Leicher, C. Poser, T. Bick, V. Wesling</i>
IX-2672-19 (IX-L-1211-19)	Effects of workpiece-vibration on penetration shape change of MAG welds <i>K. Ito, H.H. Zargari, H. Yamamoto, T. Miwa, P. K. Parchuri, M. Kumar, A. Sharma</i>
IX-2673-19 (IX-L-1212-19)	Effect of Mn and Al on acicular ferrite formation in SAW weld metal <i>N. Fuyijama, G. Shigesato</i>

Continued on July 10, 2019 (Wednesday)

IX-2674-19 (IX-L-1214-19)	Microstructure and toughness of C-Mn steel weld metal obtained by the SAW process, with and without titanium addition <i>J.C.F. Jorge, I.S. Bott, L.F.G. Souza, M.C. Mendes, L.S. Araújo, G.M. Evans</i>
IX-2675-19 (IX-L-1217-19)	Characterization of bainite-ferrite structures formed in the heat-affected zone of a dissimilar weld of high-strength steel (S700MC/S960QC) and their dependency on the cooling rate <i>K. F. N. Bayock, P. Kah, B. Mvola, H. Eskelinen, and X. Cai</i>

Tuesday, July 09, 2019

I. Commission IX-H: Welding of stainless Steels and Nickel-base Alloys

1. Administration matters of IX-L by Prof. Norbert Enzinger, Chair of IX-L
2. Presentation of documents:

IX-2677-19	Influence of the process parameters on the corrosion behavior of quality 2205 duplex stainless steel in laser beam welding with highest focusability <i>Stefan Ulrich, S. Jahn, P. Schaaf</i>
IX-2678-19	Bead by bead study of a multipass shielded metal arc welded super duplex stainless steel <i>Vahid Hosseini, Kjell Hurting, Leif Karlsson</i>



IX-2679-19	Evaluation of test results and ranking criteria for Vareststraint testing of an austenitic high temperature alloy <i>Mikael M. Johansson, Peter Stenvall, Leif Karlsson, Joel Andersson</i>
IX-2681-19	Advanced microstructural characterization of cast ATI 718Plus® – effect of homogenization heat treatment temperature on HAZ cracking during manual TIG repair welding <i>Fabian Hanning, A.K. Khan, O.A. Ojo, Joel Andersson</i>
IX-2688-19	Liquation cracking in Cast Haynes 282 <i>Sukhdeep Singh, Joel Andersson</i>
IX-2682-19	Investigation of Standardizing for Evaluation Method of Vareststraint Test Kota Kadoi
IX-2683-19	Solidification Cracking Susceptibility of Grain Boundary Engineered Fully Austenitic Stainless Steel <i>Shun Tokita, Kota Kadoi, Yudai Kanno, Hiroshige Inoue</i>
IX-2684-19	Hot Cracking Susceptibility of Alloy 617 by Vareststraint Test <i>Shotaro Yamashita, Takahiro Niki, Kenji Kamimura, Tomo Ogura, Kazuyoshi Saida</i>
IX-2685-19	<u>Hot Cracking Susceptibility in Duplex Stainless Steel Welds</u> <i>Dong-Cho Kim, Tomo Ogura, Shotaro Yamashita, Kazuyoshi Saida</i>

Continued on July 10, 2019 (Wednesday)

2686-19	Evaluation of variations in Trans-Vareststraint Test <i>Daisuke Abe, Yu Murakami, Takaaki Matsuoka, Takanori Kanehiro, Boian T. Alexandrov, Benjamin Shutton and Steve McCracken</i>
IX-2687-19	Experimental and Numerical Modeling Study of Solidification Cracking in Alloy 52M Filler Metal in the Cast Pin Tear Test <i>Huimin Wang, Boian T. Alexandrov, Eric Przybylowicz</i>
IX-2689-19	Nitrogen effect on pitting corrosion resistance of tube welded joints in super-austenitic stainless steels <i>Zhiliang Zhou, Andreas Rahm Yhr</i>
IX-2690-19	Application of laser peening to grain boundary engineering process of 304 austenitic stainless steel <i>Hiroyuki Kokawa, Shun Tokita, Shohei Kodama, Yutaka S. Sato, Yuji Sano, Zhuguo Li, Kai Feng</i>
IX-2680-19	Failure analysis of duplex 2205 gas separator welds operating in process plan conditions <i>Pekka Nevasmaa and S. Yli-Olli</i>

Wednesday, July 10, 2019

(Morning session)

Joint Meeting of Commission IX-C (Creep and Heat resistant welds) & Commission XI (Pressure Vessels, Boilers and Pipelines)

1. Administration matters of IX-C by Prof. Peter Mayre, Chair of IX-C
2. Presentation of documents of IX-C

IX-2691-19 (IX-C-1091-19)	Solidification phenomena in creep resistant 9Cr weld metals and their implications on mechanical properties <i>A. Nitsche</i>
IX-2692-19 (IX-C-1091-19)	Utility properties of creep resistant boron and nitrogen containing martensitic steel base metal and weld deposits <i>P. Brziak, L. Parilak, P. Pastier, P. Beraxa, P. Bekec, J. Pecha, M. Domankova</i>
IX-2693-19 (IX-C-1092-19)	Hydrogen diffusion in creep-resistant 9%-Cr steel welds <i>M. Rhode, T. Richter, A. Nitsche, P. Mayr</i>
IX-2696-19 (IX-C-1095-19)	Microstructural evolution of creep resistant 2.25Cr-1Mo-0.25V weld metal <i>H. Schönmaier, F. Grimm, R. Krein, K. Kirchheimer, R. Schnitzer</i>



IX-2697-19 (IX-C-1096-19, XI-1095-19)	Solid experience in the use of continuous monitoring systems pipeline thermal station during the operation on the basis of SHM technologies <i>L.M. Lobanov, A.Y. Nedoseka, S.A. Nedoseka, S.I. Motrunich</i>
IX-2698-19 (IX-C-1097-19)	Assessment of phase transformation at partially melted zone of dissimilar creep resistance P91 and alloy 800 to mitigate cracks <i>E. M. Mvola Belinga, P. Kah, P. Layus, C. R. Das, J. Hald</i>
IX-2699-19 (IX-C-1098-19)	Effect of Long-term Exposure at 650°C on Microstructural and Creep Characteristics of T92/ Super304H Dissimilar Welds <i>N. Kumar, G.D. Janaki Ram, K. Devakumaran, R. S. Kottada</i>

(Morning session)

I. Commission IX-NF: Non-ferrous materials

1. Administration matters of IX-NF by Dr. Jorge F. dos Santos, Chair of IX-NF
2. Presentation of documents:

IX-2694-19	Theoretical analysis of keyhole dynamics in laser spot welding for aluminum <i>H. Mori, Q. Zhou, F. Miyasaka</i>
IX-2695-19	Thermodynamic generation properties of multiple connected structure of copper-constantan laser welded joint <i>S. Meguro, S. Nigo, T. Nakamura</i>

II. Doc. Presentation of IX-L (continued)

III. Doc. Presentation of IX-H (continued)

VI. Meeting Summary and Others

1. Administration matters of IX-NF by Dr. Jorge F. dos Santos, Chair of IX-NF
2. Review of Resolutions
3. Review of Administrative matters
4. Plan for Intermediate Meeting(s) of 2019
5. Any other business
6. Adjournment of Commission IX

