COMMISSION IX

BEHAVIOR OF METALS SUBJECTED TO WELDING

IX-2665-19

DRAFT AGENDA FOR 2019 MEETING OF COMMISSION IX, 72TH ANNUAL ASSEMBLY IN BRASILAVAI, SLOVAKIA, ON JULY 07-12, 2019

(As of June 23, 2019)

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Program Summary

July 08, 2019 (Mon.) 14:15 - 18:15 Commission IX-L meeting
Hall 3, London1, CROWNE PLAZA

July 09, 2019 (Tue.)  14:15 - 18:15 Commission IX-H meeting
Hall 11, Berlin, CROWNE PLAZA

July 10, 2019 (Wed.) 08:15 - 12:30 Joint meeting of IX-C and C-XI
Hall 14, Salonik Grand, TATRA

14:15 - 16:15 Commission IX-NF meeting
Commission IX-L meeting (cont.)
Hall 6, Sal LUX, TATRA

16:45 - 18:15 Commission IX-H meeting (conti.)
Hall 6, Sal LUX, TATRA

18:15 - 18:20 Summary meeting of C-IX
Hall 6, Sal LUX, TATRA

IWW Antitrust policy

IWW 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 IWW 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 Maimi 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

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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

K. F. N. Bayock, P. Kah, B. Mvola, H. Eskelinen, and X. Cai

Tuesday, July 09, 2019

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

1. Administration matters of IX-H by Dr. Elin Westin, Chair of IX-H

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
| Stefan Ulrich, S. Jahn, P. Schoof

IX-2678-19 | Bead by bead study of a multipass shielded metal arc welded super duplex stainless steel
| Vahid Hosseini, Kjell Hurting, Leif Karlsson

IX-2679-19 | Evaluation of test results and ranking criteria for Varestraint testing of an austenitic high temperature alloy
| Mikael M. Johansson, Peter Stenvall, Leif Karlsson, Joel Andersson

IX-2681-19 | Advanced microstructural characterization of cast ATI 718Plus® – effect of homogenization heat treatment temperature on HAZ cracking during manual TIG repair welding
| Fabian Hanning, A.K. Khan, O.A. Ojo, Joel Andersson

IX-2688-19 | Liquation cracking in Cast Haynes 282
| Sukhdeep Singh, Joel Andersson

IX-2682-19 | Investigation of Standardizing for Evaluation Method of Varestraint Test
| Kota Kadoi

IX-2683-19 | Solidification Cracking Susceptibility of Grain Boundary Engineered Fully Austenitic Stainless Steel
| Shun Tokita, Kota Kadoi, Yudai Kanno, Hiroshige Inoue

IX-2684-19 | Hot Cracking Susceptibility of Alloy 617 by Varestraint Test
| Shotaro Yamashita, Takahiro Niki, Kenji Kamimura, Tomo Ogura, Kazuyoshi Saida

IX-2685-19 | Hot Cracking Susceptibility in Duplex Stainless Steel Welds
| Dong-Cho Kim, Tomo Ogura, Shotaro Yamashita, Kazuyoshi Saida
Continued on July 2019 (Wednesday)

**Evaluation of variations in Trans-Varestraint Test**
Daisuke Abe, Yu Murakami, Takaaki Matsuoka, Takanori Kanehiro, Boian T. Alexandrov, Benjamin Shutton and Steve McCracken

**IX-2687-19**
Experimental and Numerical Modeling Study of Solidification Cracking in Alloy 52M Filler Metal in the Cast Pin Tear Test
Huimin Wang, Boian T. Alexandrov, Eric Przybylowicz

**IX-2689-19**
Nitrogen effect on pitting corrosion resistance of tube welded joints in super-austenitic stainless steels
Zhiliang Zhou, Andreas Rahm Yhr

**IX-2690-19**
Application of laser peening to grain boundary engineering process of 304 austenitic stainless steel
Hiroyuki Kokawa, Shun Tokita, Shohei Kodama, Yutaka S. Sato, Yuji Sano, Zhuguo Li, Kai Feng

**IX-2680-19**
Failure analysis of duplex 2205 gas separator welds operating in process plan conditions
Pekka Nevasmaa and S. Yli-Olli

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

Solid experience in the use of continuous monitoring systems pipeline thermal station during the operation on the basis of SHM technologies
*L.M. Lobanov, A.Y. Nedoseka, S.A. Nedoseka, S.I. Motrunich*

Assessment of phase transformation at partially melted zone of dissimilar creep resistance P91 and alloy 800 to mitigate cracks
*E. M. Mvola Belinga, P. Kah, P. Layus, C. R. Das, J. Hald*

Effect of Long-term Exposure at 650°C on Microstructural and Creep Characteristics of T92/Super304H Dissimilar Welds
*N. Kumar, G.D. Janaki Ram, K. Devakumaran, R. S. Kottada*

(Afternoon 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 (IX-C-1096-19) | Theoretical analysis of keyhole dynamics in laser spot welding for aluminum
*H. Mori, Q. Zhou, F. Miyasaka*

| IX-2695-19 (IX-C-1097-19) | Thermodynamic generation properties of multiple connected structure of copper-constantan laser welded joint
*S. Meguro, S. Nigo, T. Nakamura* |

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

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

VI. Meeting Summary and Others

1. Review of Recommendations
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