



IIW COMMISSION II

"ARC WELDING AND FILLER METALS"

Chair: Gerhard Posch (Austria)

IIW 2020 virtual Annual Assembly

AGENDA

Time schedule for Social Events and Commission II activities (Central European Summer Time)

Wednesday, 15 th July	13:00 – 16:00	IIW General Assembly & Opening <i>Venue: virtual</i>
Monday, 20 th July	13:00 – 16:00	Commission II regular meeting (C-II A) <i>Venue: virtual</i>
Tuesday, 21 th July	13:00 – 15:30	Commission II regular meeting (C-II C) <i>Venue: virtual</i>
	15:35 – 16:00	Commission II regular meeting (C-II E) <i>Venue: virtual</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.

By attending the meeting, you commit to follow the terms of prevailing antitrust laws (relevant antitrust laws can be found at www.iiwelding.org)



IIW Commission II

SUBCOMMISSION II-A MEETING Metallurgy of Weld Metals

Agenda (II-A-374-2020)

Chair: Thomas Kannengiesser (Germany)

Monday, 20th July 2020, 13:00-16:00 CEST

Venue: virtual

1. Opening remarks

- IIW Antitrust policy

Welding in the World Editor`s message (J. Lippold)

2. Administrative matters of Sub Commission II-A

- II-2149r2-2020 (II-A-374r1-2020): Approval of the agenda
- II-2155-2020 (II-A-375-2020): List of documents of subcommission II-A by T. Kannengiesser
- II-2156-2020 (II-A-376-2020): List of members of subcommission II-A by T. Kannengiesser
- II-2145-19: Executive Summary Commission II, Annual Assembly 2019, Bratislava, Slovakia, Sub commission II-A by G. Posch

3. Hydrogen in weld metal

- II-2157-2020 (II-A-381-2020): Modified TEKKEN test for studying hydrogen-assisted cracking in high-strength structural steels by T. Schaupp, N. Schroeder and Th. Kannengiesser

4. The Constitution of Weld Metal

- II-2158-2020 (II-A-383-2020): Influence of Carbon and Manganese on the microstructure evolution of C-Mn-Ti steel weld deposits by J.C.F. Jorge, I.S. Bott, L.F.G. Souza, M.C. Mendes, L.S. Araújo, G.M. Evans
- II-2159-2020 (II-A-385-2020): Influence of specimen geometries and test conditions in the physical simulation of HAZ microstructures using a Gleeble machine by the example of super duplex stainless steel 1.4410 by J. Stützer, M. Dieckmann, M. Zinke and S. Juettner
- II-2160-2020 (II-A-386-2020): Development of shielded metal arc welding electrodes to achieve carbide free bainitic weld microstructures by S. Sudharsanan, G. D. Janaki Ram and M. Amirthalingam
- II-2174-2020 (II-A-389-2020): Welding of High-Entropy Alloys - New material concept vs. old challenges by M. Rhode, T. Richter, D. Schroepefer and A. Manzoni



5. Metallurgy of Additive Manufactured Components

- II-2161-2020 (II-A-378-2020): Effect of different variants of filler metal S Ni 6625 on properties and microstructure by additive layer manufactured using CMT process by M. Zinke, S. Burger, M. Dieckmann and S. Juettner
- II-2162-2020 (II-A-384-2020): Influence of arc energy and filler metal composition on the microstructure in wire and arc additive manufacturing of duplex stainless steels by B. Wittig, M. Zinke and S. Juettner

6. Weld metal cracking

- II-2163-2020 (II-A-379-2020): Determination of LME sensitivity of zinc coated steels based on the programmable deformation cracking test by M. Dieckmann, M. Zinke and S. Juettner
- II-2164-2020 (II-A-380-2020): Influence of welding stresses on relief cracking during heat treatment of a creep-resistant 13CrMoV steel, Part III: Assessment of residual stresses in real scale component welds by D. Schroepfer, A. Kromm, T. Lausch, M. Rhode and Th. Kannengiesser
- II-2165-2020 (II-A-382-2020): Solidification cracking of ferritic steel welds for shipbuilding by K. Han and H. Jeong *document cancelled*

7. Development and behaviour of filler metals for HSS

No document

8. Working program of Sub Commission II-A

- II-2166-2020 (II-A-388-2020): CII-A proposed working program 2020/2021 by T. Kannengiesser

9. Date and venue of next meetings

Intermediate meeting - proposal: CW 10 / 2021 Inchon/South Korea (together with IIW C IX)



IIW Commission II

SUBCOMMISSION II-C MEETING Testing and Measurement of Weld Metal

Agenda (II-C-582-2020)

Chair: Zhuyao Zhang (United Kingdom)

Tuesday, 21st July 2020, 13:00-15:30 CEST

Venue: virtual

1. Opening remarks

- IIW Antitrust policy

IIW Secretary's message (CEO L. Costa, E. Sciaccaluga)

2. Administrative matters of Sub Commission II-C

- II-2149r2-2020 (II-C-582-2020): Approval of the agenda
- II-2167-2020 (II-C-583-2020): List of members of Sub commission II-C by Z. Zhang
- II-2168-2020 (II-C-584-2020): List of documents of Sub commission II-C by Z. Zhang
- II-2145-19: Executive Summary Commission II, Annual Assembly 2019, Bratislava, Slovakia, Sub commission II-C by G. Posch

3. Ferrite in high alloyed weld metal

No document

4. Testing of weld metal for hot cracking and micro fissuring

- II-2147-2020 (II-C-589-2020): "Microstructure evolution and liquidation cracking in the PMZ of deposited metal with ERNiCrFe-13 filler metal", by X. Guo, P. He, K. Xu, P.Y. Chen and S.B. Huo

5. Corrosion testing of weld metal

No document

6. Procedures for weld metal chemical analysis and weld metal sample preparation – Comparison of analysis methods

No document

7. Testing of high-strength weld metals

II-2148-2020 (II-C-590-2020): "Effect of Chemical Composition of Welding Consumable on Slag Formation and Corrosion Resistance", by Yoona Lee, Jonghoon Jang and Stephen Liu



8. Testing of Creep- and heat resistant weld metal

- II-2169-2020 (II-C-581-2020): “Physical background and simulation of creep in steels and welds”, by Stan T. Mandziej
- II-2170-2020 (II-C-585-2020): “Development of the matching filler metal for MARBN – new advanced creep resisting alloys”, by Zhuyao Zhang and Vincent van der Mee
- II-2171-2020 (II-C-586-2020) “All-positional flux cored wire with lower trace element contents and improved ambient temperature toughness for welding P91 steels for thermal power plant”, by Zhuyao Zhang, Sorin Craciun, Vincent van der Mee

9. Testing of non-ferrous weld metal

No document

10. Measuring of δ -ferrite in austenite and duplex stainless steel weld metals

- II-2172-2020 (II-C-587-2020): “Proposed ISO Technical Report: Welding – Guidance on specification and measurement of ferrite in stainless steel weld metal” by Dr D. Kotecki

11. Working program of Sub Commission II-C

- II-2173-2020 (II-C-588-2020): Working Program of SC II-C for 2020 - 2021 by Z. Zhang

12. Date and venue of next meetings

Intermediate meeting - proposal: CW 10 / 2021 Incheon/South Korea (together with IIW C IX)



IIW Commission II

SUBCOMMISSION II-E MEETING Standardization

Agenda (II-E-817-2020)

Chair: David Fink (USA)

Tuesday, 21st July 2020, 15:30-16:00 CEST

Venue: virtual

1. Opening remarks

- IIW Antitrust policy

2. Administrative matters of Sub Commission II-E

- II-2149r2-2020 (II-E-817-2020): Approval of the agenda
- II-2150-2020 (II-E-818-2020): List of documents of Subcommission II-E by D. Fink
- II-2145-19: Executive Summary Commission II, Annual Assembly 2019, Bratislava, Slovakia, Sub commission II-E by G. Posch

3. Update standards for welding consumables in review

- II-2152-2020 (II-E-819-2020): "2020 Update on Standards for Welding Consumables under Review" by D. Fink
- Standards for Systematic Review (Route 2) for 2020
 - ISO/DIS 6847:2019 Welding consumables -- Deposition of a weld metal pad for chemical analysis

4. Matrix filler metal classification standards

- II-2153-2020 (II-E-820-2020): Matrix of filler Metal Classifications by D. Kotecki

5. Diffusible Hydrogen Testing

No document

6. Standards for Systematic Review for 2020 – for information

- ISO 6848:2015 Arc welding and cutting -- Nonconsumable tungsten electrodes – Classification (*SR ballot not yet issued by ISO*)

7. Working program of Sub commission II-E

- II-2154-2020 (II-E-821-2020): SC II-E Proposed working program for 2020/21 by D. Fink

8. Date and venue of next meetings

Intermediate meeting - proposal: CW 10 / 2021 Incheon/South Korea (together with IIW C IX)