



INTERNATIONAL INSTITUTE OF WELDING

A world of joining experience

Doc. I-1508-2022

Annual Assembly 2022

Tokyo, Japan and Online

Final Agenda

C-I: Additive Manufacturing, Thermal Cutting and Thermal Spray

July 20, 2022

Chatelet Room

Chair: Doug Kautz (USA)

Wednesday, July 20

Session 1: Introductions and Approvals

0830: Opening of the Meeting

Request Meeting Secretary to write the Minutes of Meeting
Attendees and Apologies, Identification of C-I delegates
Approval of the minutes from the last annual assembly online (Doc. I-1456-2021)
Adoption and Agreement of Agenda (Doc. I-1474-2021)
List of Documents (Doc. I-1457-2021)
Discussion of Joint Intermediate Meeting held on-line March 21-22
Structure of Commission I: Discussion of chairs and sub-chairs

0845: Presentation of documents:

Session 2: Technical Papers (25 minutes per paper including questions)

0845: Numerical study of a plasma jet for plasma-assisted laser cutting

S. Manzke, M. Krümmer, U. Füssel, F. Urlaub, C. Leyens, A. Mahrle (Germany) (in-person live)
Doc. I-1493-2022

0910: WAAM of Volumetric elements – strategies for geometrically complex parts

Johanna Müller, Jonas Hensel (Germany) (in-person live)
Doc. I-1495-2022

0935: 3-D printing of spatial products made of steel and non-ferrous alloys using electric arc heat

Ivan Lahodzinskyi, Volodymyr Korzhyk, Viktor Kvasnytskyi, Andrij Perepichay, Andrij Grynyuk, Yevhenii Illiashenko, Sviatoslav Peleshenko (Ukraine) (Recorded video)
Doc. I-1502-2022

1000: Influence of Heat Control on Properties and Residual Stresses of Additive-Welded High-Strength Steel Components

Ronny Scharf-Wildenhain, André Haelsig, Jonas Hensel, Karsten Wandtke, Dirk Schroepfer,

Arne Kromm, and Thomas Kannengiesser (Germany) (in-person live)

Doc. I-1503-2022

Break: 1030 – 1100

Session 3: Technical Papers

1100: Commission I Meeting Restart

1100: Visualization of gas flow inside the kerf using Schlieren method and image processing in thermal cutting

Sang-Hyun Ahn, Upendra Tuladhar, Dae-Won Cho, Young-Whan Park, Seokyoung Ah (South Korea) (recorded video)

Doc. I-1504-2022

1125: Application of plasma-arc atomization of compact and flux-cored wires to obtain spherical granules and powders

Dmitry Strogonov (Ukraine) (recorded video)

Doc. I-1506-2022

1150: Chaboche viscoplastic material model for process simulation of additively manufactured Ti-6Al-4V parts

S. Springer, B. Seisenbacher, M. Leitner, F. Grün, T. Gruber, M. Lasnik, B. Oberwinkler (Austria) (recorded video)

Doc. I-1510-2022

Session 4: Commission Business

1215: Activities of Commission I : Discussion on Terms of Reference for Commission and Sub-Commissions.

1225: Other Business

- Recommendations for Welding in the World
- Resolutions by Commission I from 2022 Meeting
- Satisfaction Survey
- Preparations for Upcoming Annual Assemblies and Intermediate Meetings with Other IIW Units

1230: Adjournment of Commission I meeting