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Doc.I-1507-2022/IV-1524-2022/XII-2555-2022

**Agenda of
2022 Annual Assembly Additive Manufacturing Symposium
July 19, 2022
Tokyo, Japan
Palais Royal D and ON-LINE**

TUESDAY, July 19, 2022, 08:30-12:30 JST

1. Opening by D. Kautz, Chairman of IIW Comm.I
2. Agenda
3. Presentation of documents

Session1 (Session chairman :Prof.S.Asai , Chairman of IIW Comm.XII)

- [1] Numerical modeling and development of a cooling gas nozzle set for WAAM
S. Manzke, M. Trautmann, E. Spaniol, U. Füssel, M. Gierth, J. Reimann, J. P. Bergmann (Germany)
Doc. XII-2543-2022 / IV-1518-2022 / I-1497-2022
- [2] Analysis of residual stress distributions in wire arc additive manufactured stainless wall and cylinder
Wenjia HUANG, Qian WANG, Ninshu MA, Houichi KITANO (Japan)
Doc.XII-2544-2022 / IV-1519-2022 / I-1498-2022
- [3] Transformation controlled substrate deformation reduction in wire arc additive manufacturing
Lukas Oster, Samuel Mann, Rahul Sharma, Uwe Reisgen (Germany)
Doc. XII-2545-2022 / IV-1520-2022 / I-1499-2022
- [4] Optimization of additive manufacturing building conditions using machine learning
Tomonori Kimura, Hirotsugu Kawanaka, Yusuke Yasuda, Shinji Matsushita and Seung Hwan C. Park (Japan)
Doc. XII-2546-2022 / IV-1521-2022 / I-1500-2022

- [5] Additive manufacturing of copper with high intensity blue diode lasers
Yuji Sato, Keisuke Takenaka, Masahiro Tsukamoto (Japan)
Doc. XII-2548-2022 / IV-1517-2022 / I-1501-2022

Coffee break

Session2 (Session chairman: Dr.H.Stauffer, Chairman of IIW Comm.IV)

- [6] Multi-material additive manufacturing with 3DPMD – Process, Structure, Properties techniques
K. Hofer, A. Haelsig, J. Hensel (Germany)
Doc. XII-2549-2022 / IV-1522-2022 / I-1483-2022
- [7] Strength enhancement in laser-based powder bed fusion processed Ti via interstitial solutes by Laser Ultrasonic Technique
A. Issariyapat, S. Kariya, J. Umeda, K. Kondoh (Japan)
Doc. XII-2550-2022 / IV-1523-2022 / I-1494-2022
- [8] Effects of manufacturing parameters on surface and fatigue of DED-arc steel components
J. Hensel, Johanna Müller, Ronny Scharf-Wildenhain, Lorenz Uhlenberg, André Hälsig (Germany)
Doc. XII-2552-2022 / IV-1525-2022 / I-1496-2022 / XIII-2927-2022
- [9] Material Test Plan for Additive Manufacturing Code Development in JSME
Keiji Matsunaga, Makoto Nakajima (Japan)
Doc. XII-2553-2022 / IV-1526-2022 / I-1505-2022
- [10] Zero Programming Laser Cladding Repairs
Daniel Ramirez, Syed Irtiaz Alam, Patricio Mendez
Doc. XII-XXXX-2022 / IV-XXXX-2022 / I-1509-2022

4. Miscellaneous

5. Closing by D.Kautz, Chairman of IIW Comm.I