



Annual Assembly 2021

Doc. 212-1693-2021

Agenda
Study Group 212 "Physics of Welding"
July 14, 2021
ON-LINE

Wednesday 14 July 2021, 13:00 – 16:00 CEST @ Room 5

1. Opening
2. Agenda (Doc. 212-1693-2021)
3. Minutes of previous meeting (Doc. 212-1677-20)
4. Brief report on Intermediate ON-LINE Meeting on March, 2021
5. Presentation of documents:
 - [1] 13:10-13:30
Non-equilibrium modeling of gas metal arc welding process with molten metal behavior
Satoshi Eda, Yosuke Ogino, Satoru Asai and Tomokazu Sano (Japan)
Doc. 212-1698-2021
 - [2] 13:30-13:50
Development of a Computational Model of Wire–Arc Additive Manufacturing
Anthony B Murphy, Fiona F Chen, David G Thomas and Dayalan Gunasegaram (Australia)
Doc. 212-1699-2021
 - [3] 13:50-14:10
Real-time observation and numerical simulation of molten pool flow and mass transfer behavior during wire arc additive manufacture
Jiankang Huang, Zhuoxuan Li, Shurong Yu, Ding Fan (China)
Doc. 212-1697-2021
 - [4] 14:10-14:30
Physical mechanisms of fluid flow and joint inhomogeneity in variable polarity plasma arc welding of thick aluminum alloy
Bin Xu, Shinichi Tashiro, Manabu Tanaka, Fan Jiang, and Shujun Chen (China)
Doc. 212-1696-2021

Coffee Break (14:30 – 14:45)

- [5] 14:45-15:05
Validation of evaporation-determined model of arc-cathode coupling in the peak current phase in pulsed GMA welding
Oleg Mokrov, Marek Simon, Rahul Sharma, Uwe Reisgen, Guokai Zhang, Gregor Goett, Dirk Uhrlandt (Germany)
Doc. 212-1700-2021
- [6] 15:05-15:25
Spattering behavior caused by zinc evaporation in laser overlap welding of zinc-coated steels
Yu Hao, Zhuguo Li, Fenggui Lu (China)
Doc. 212-1695-2021
6. The current status and future plans regarding “Welding in the World”: Prof. Lippold
7. Recommendation of publication for IIW Journal “Welding in the World”
8. Disbandment of Study Group 212 and the future
9. Date and place of the next Annual Assembly (75th Annual Assembly, July 17-22, 2022, Tokyo, Japan)
10. Miscellaneous
11. Closure