

Interreg
Sudoe



EUROPEAN UNION

ADDISPACE

European Regional Development Fund

DISSEMINATION REPORT

**International conference of
welding and additive
manufacturing (ICWAM)**

REPORTED BY

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1. EVENT INFO



DAY 1 - Wednesday 5 th June, 2019 - CONFERENCES & EXHIBITION				
Time		Room 1 (R1)	Room 2 (R2)	Room 3 (R3)
08:30	09:30	WELCOME COFFEE & REGISTRATION - METZ CONGRÈS Robert Schuman (Reception Hall)		
09:30	09:50	WELCOME - S0-R1-W - CONGRESS OPENING A. CHEHAIBOU - General Manager (INSTITUT DE SOUDURE, France) P. MAGNIN - Chairman of ICWAM 2019 (STELIA AEROSPACE, France)		
09:50	10:20	KEYNOTE 1 - S0-R1-K1 - "How modern NDT help to understand the welding processes applied in Greek and Roman large bronze statuary" by B. MILLE (MUSEE DU LOUVRE, France), introduced by F. CHAMPIGNY (COFREND)		
10:20	10:50	KEYNOTE 2 - S0-R1-K2 - "A review of new techniques for the manufacturing, welding and non-destructive testing of thermoplastic composites of tomorrow" by J-P. CAUCHOIS (INSTITUT DE SOUDURE, France), introduced by F.REUX (JEC GROUP)		
10:50	11:20	COFFEE BREAK - Exhibit Hall (Hall 2.1)		
11:20	11:50	KEYNOTE 3 (IIW JAEGER LECTURE) - S0-R1-K3 - IIW presentation by S. EGERLAND (FRONIUS, Austria), introducing the IIW Jaeger Lecture : "A review of Wire based DED Additive Manufacturing, recent advances and future developments" by S. WILLIAMS (CRANFIELD UNIVERSITY, United Kingdom)		
11:50	12:30	REGIONAL CEREMONY - S0-R1-G - Welcome from Institutional and Regional partners		
12:30	13:30	LUNCH - Exhibit hall (Hall 2.1)		
		WIRE-BASED ADDITIVE MANUFACTURING: EQUIPMENT AND CONSUMABLES	POWDER BED ADDITIVE MANUFACTURING: METALLURGY, MICROSTRUCTURES & PROPERTIES	COMPOSITE ADDITIVE MANUFACTURING
13:30	13:50	S1-R1-01	S1-R2-01	S1-R3-01
13:50	14:10	S1-R1-02	S1-R2-02	S1-R3-02
14:10	14:30	S1-R1-03	S1-R2-03	S1-R3-03
14:30	14:50	S1-R1-04	S1-R2-04	S1-R3-04
14:50	15:10	S1-R1-05	S1-R2-05	S1-R3-05
15:10	15:30	S1-R1-06	S1-R2-06	S1-R3-06
15:30	16:00	COFFEE BREAK - Exhibit hall (Hall 2.1)		
		NON-DESTRUCTIVE TESTING: TOMOGRAPHY AND ASSOCIATED TECHNIQUES	WELDING AND LASER PROCESSES	NON-DESTRUCTIVE TESTING & MONITORING IN COMPOSITE MANUFACTURING PROCESSES
16:00	16:20	S2-R1-01	S2-R2-01	S2-R3-01
16:20	16:40	S2-R1-02	S2-R2-02	S2-R3-02
16:40	17:00	S2-R1-03	S2-R2-03	S2-R3-03
17:00	17:20	S2-R1-04	S2-R2-04	S2-R3-04
17:20	17:40	S2-R1-05	S2-R2-05	S2-R3-05
17:40	18:00	S2-R1-06	S2-R2-06	S2-R3-06
18:00	18:20		S2-R2-07	S2-R3-07
18:20	20:00	FREE TIME		
20:00	23:30	GALA DINNER & AWARDS CEREMONY - METZ CONGRÈS Robert Schuman (Hall 2.2)		

DAY TWO

DAY 2 – Thursday 6th June, 2019 - CONFERENCES & EXHIBITION

Time	Room 1 (R1)	Room 2 (R2)	Room 3 (R3)	Room 4 (R4)
8:00 - 8:30	REGISTRATION - METZ CONGRÈS Robert Schuman (Reception Hall)			
SESSION 3 (S3)	8:30 - 8:50	WIRE-BASED ADDITIVE MANUFACTURING: PROCESSES [PART 1] S3-R1-01	MONITORING IN METALS MANUFACTURING PROCESSES S3-R2-01	FRICTION STIR WELDING S3-R3-01
	8:50 - 9:10	S3-R1-02	S3-R2-02	S3-R3-02
	9:10 - 9:30	S3-R1-03	S3-R2-03	S3-R3-03
	9:30 - 9:50	S3-R1-04	S3-R2-04	S3-R3-04
	9:50 - 10:10	S3-R1-05	S3-R2-05	S3-R3-05
	10:10 - 10:30	S3-R1-06	S3-R2-06	S3-R3-06
SESSION 4 (S4)	10:30 - 11:00	COFFEE BREAK - Exhibit hall (Hall 2.1)		
	11:00 - 11:20	WIRE-BASED ADDITIVE MANUFACTURING: PROCESSES [PART 2] S4-R1-01	ALTERNATIVE ROUTES FOR METAL PROCESSING AND ASSEMBLY S4-R2-01	SIMULATION & MODELLING [PART 2] S4-R4-01
	11:20 - 11:40	S4-R1-02	S4-R2-02	S4-R4-02
	11:40 - 12:00	S4-R1-03	S4-R2-03	S4-R4-03
	12:00 - 12:20	S4-R1-04	S4-R2-04	S4-R4-04
	12:20 - 13:30	LUNCH - Exhibit hall (Hall 2.1)		
SESSION 5 (S5)	13:30 - 13:50	WIRE-BASED ADDITIVE MANUFACTURING: TOWARDS INDUSTRIALIZATION S5-R1-01	NON-DESTRUCTIVE TESTING: VOLUMETRIC METHODS S5-R2-01	INNOVATIVE PROCESSING IN COMPOSITES S5-R3-01
	13:50 - 14:10	S5-R1-02	S5-R2-02	S5-R3-02
	14:10 - 14:30	S5-R1-03	S5-R2-03	S5-R3-03
	14:30 - 14:50	S5-R1-04	S5-R2-04	S5-R3-04
	14:50 - 15:10	S5-R1-05	S5-R2-05	S5-R3-05
	15:10 - 15:30	S5-R1-06	S5-R2-06	S5-R3-06
CLOSING SESSION 6 (S6)	15:30 - 16:00	COFFEE BREAK - Exhibit hall (Hall 2.1)		
	16:00 - 18:20	PLENARY SESSION ON INDUSTRY 4.0 - S6-R1-P&R - "WELDING, ADDITIVE MANUFACTURING & NDT IN INDUSTRY 4.0" introduced by AIF: Alliance pour l'Industrie du Futur, the French Initiative for Industry 4.0 with the points of views and visions of key partners and stakeholders (ARCELORMITTAL, ESI GROUP, EWF, HZG, INORI, KUKA, OSAKA UNIVERSITY) followed by a roundtable with the audience		

DAY THREE

DAY 3 – Friday 7th June, 2019 - VISITS

Time	Visit 1	Visit 2	Visit 3
INDUSTRIAL VISITS	7:30 - 7:45	INDUSTRIAL VISITS: MEETING POINT APPOINTMENT METZ CONGRÈS Robert Schuman	
	7:45 Tour #1	7:30 Tour #2	7:45 Tour #3
	Metal tour - theme 1	Metal tour - theme 2	Composite tour
	Institut de Soudure industriel R&D center (Yutz) & ArcelorMittal Maizières Research (Maizières)	PSA Peugeot Citroën & CEA Tech (Trémery) & Institut de Soudure Industriel R&D center (Yutz)	Composite park (Porcellette): Composite Integrity & IIT M2P & Institut de Soudure Composite Technology Platform (Saint-Avold)
	13:00	LUNCH - Distribution of lunch bag	
GUIDED TOUR	10:00	GUIDED TOUR : MEETING POINT APPOINTMENT METZ CONGRÈS Robert Schuman	
	10:00 - 12:30	Metz tour with a guide Discover the essential sights of Metz	
	12:30	LUNCH - Distribution of lunch bag	

Note: the following program is based on information available at printing time of the present booklet. Slight changes may occur by the conference time.

<https://icwam.com/>

2. SHORT NEWS

The 2nd International Conference of Welding and Additive Manufacturing was held on 5, 6 and 7th June of 2019 in the Metz Congrès Robert Schuman building in Metz (France). The main objective of this conference is the dissemination of the knowledge of the latest works about welding, additive manufacturing and associated NDTs and monitoring. It offers an optimal framework for discussion and interchange of ideas between different companies and professionals about trends on welding, additive manufacturing and inspection of several processes. It is also a good opportunity to create different consortiums or research lines in order to inspire the related industries.

3. FEEDBACK TO ADDISPACE PARTNERS

Relevance of the event to the project.

The event is focused on welding, additive manufacturing using laser, electric arc and hybrid technologies were of great interest. Visibility of SUDOE regions developments in WAAM in the aerospace sector.

Number and profile of attendants.

There attended around 300 people of the world of welding, metals, composites and additive manufacturing.

Description of partner participation: presentation on official programme, stand, attendance, etc. Attach presentation or materials used.

An oral presentation was done presenting the developments performed in the Pilot 3 of WP2 of ADDISPACE done by LORTEK in Ti6Al4V with WAAM.

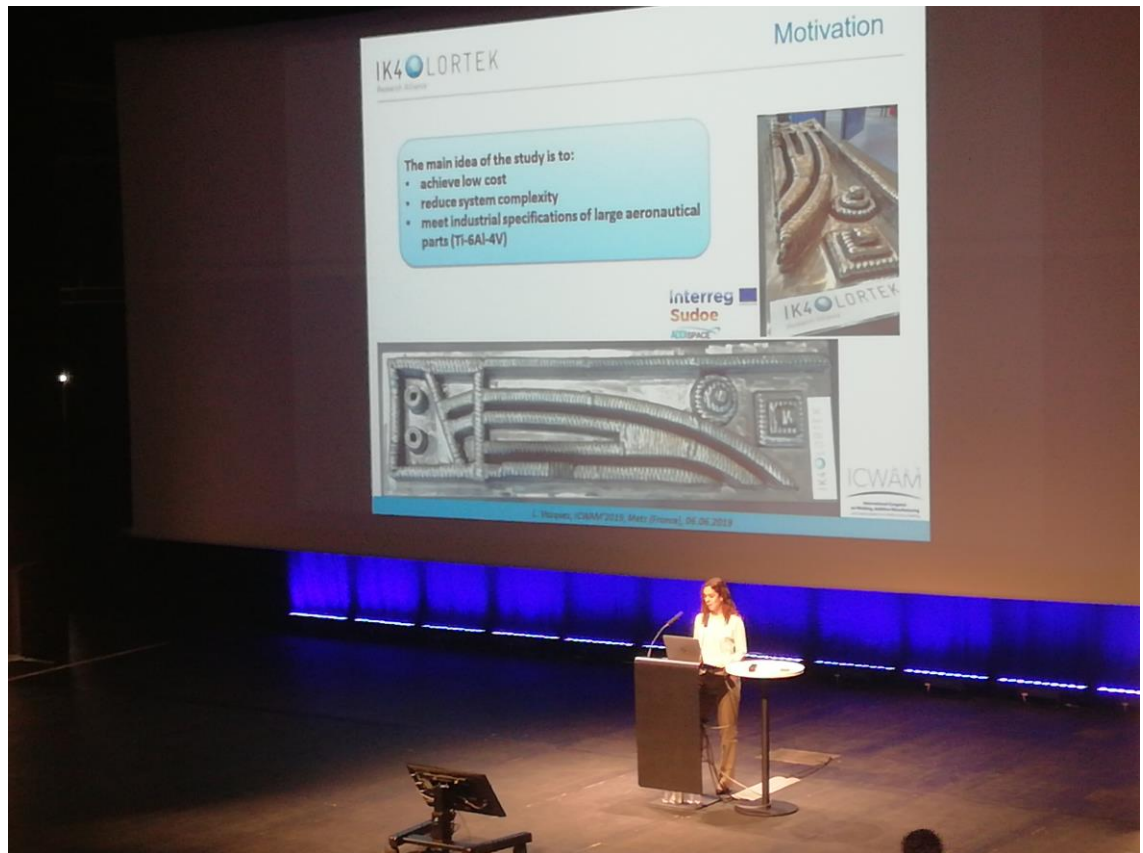


Figure 1 Oral presentation with slide about the part manufactured in the pilot 3 of WP2 of ADDISPACE.

Networking and contacts: relevant contacts made.

Dassault and Cranfield were the most interesting contacts.

Findings: main findings of interest for the project.

- Active cooling for WAAM and control of microstructure.
- Wire laser and arc additive manufacturing developments
- Friction riveting



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