

DREAM SUMMER SCHOOL

Metal Additive manufacturing for
real industrial applications:
from the lab to the product

Maranello (Italy) | 03-07 June 2019



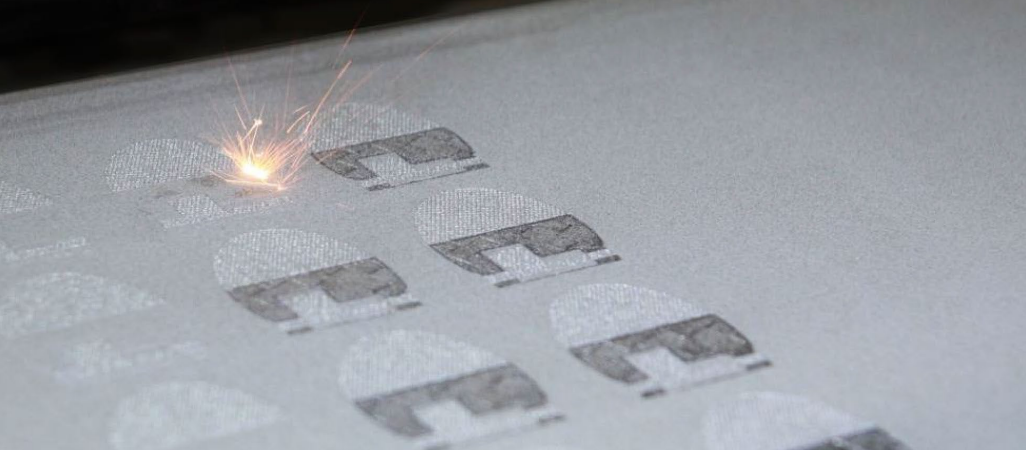
DAY 1

Monday, 03rd June 2019

TIME	ITEM	SPEAKER
12.30 – 13.00	Participant Registration ➤ Free light Lunch available after registration LOCATION: SALA RIUNIONI CISIA – Ground floor Department of Mathematics, University of Modena Via Campi n. 231, Modena	
14.00	STARTING OF THE SCHOOL: SALA MASTER – Ground floor Department of Engineering “Enzo Ferrari” Via Vivarelli 10, Modena	
14.00 – 15.30	Welcome & Participant presentation	<i>Isella Vicini, beWarrant S.L.</i> <i>Elena Bassoli, University of Modena</i>
15.30 – 16.00	DREAM Project: an introduction	<i>Elena Bassoli, University of Modena</i>
16.00 – 16.15	RAM research group	<i>Andrea Gatto, University of Modena</i>
16.15 – 17.00	Basics of AM and PBF	<i>Elena Bassoli, University of Modena</i>
17.00 – 18.00	How to measure residual stresses in PBF parts: theory and practice	<i>Alessio Benincasa, SINT Technology S.r.l.</i>
18.00 – 18.30	Visit to Dept. of Engineering Laboratories	
18.45	TRANSFER TO MARANELLO VILLAGE Via terra delle rosse 12, Maranello (MO)	
20.00	DINNER AT MARANELLO VILLAGE	



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DAY 2

Tuesday, 04th June 2019

TIME	SUBJECT	SPEAKER
8.30	TRANSFER TO FERRARI MUSEUM Via Dino Ferrari, 43 - Maranello (MO)	
9.00 – 10.00	A real case of AM in the automotive sector	<i>Andrea Merulla, Ferrari S.p.A.</i>
10.00 – 11.00	AM components in industrial assembly line	<i>Andrea Merulla, Ferrari S.p.A.</i>
11.00 – 12.00	Electron microscopy approach to raw metal powders quality check	<i>Eleonora Santecchia, Marche Polytechnic University</i>
12.00 – 13.00	Guided tour to Ferrari Museum	
13.00 – 14.00	LUNCH AT RISTORANTE IL CAVALLINO – Via Abetone Inferiore 1, Maranello (MO)	
14.40	TRANSFER TO THE FORMULA SAE PADDOCK (Building 28) Department of Engineering “Enzo Ferrari” - Via Vivarelli 10, Modena	
15.00 – 17.00	Racing Team Experience with the More Modena Racing Formula SAE team	
17.30	TRANSFER TO MARANELLO VILLAGE Via terra delle rosse 12, Maranello (MO)	
20.00	DINNER AT MARANELLO VILLAGE	



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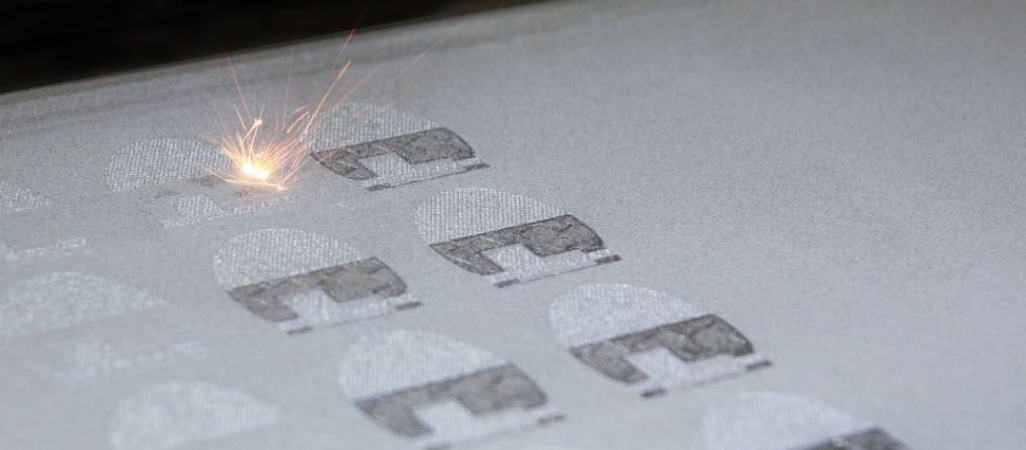
DAY 3

Wednesday, 05th June 2019

TIME	ITEM	SPEAKER
8.30	TRANSFER TO MORE MANUFACTURING LABORATORY (Building 28) Department of Engineering "Enzo Ferrari" - Via Vivarelli 10, Modena	
9.00 – 10.00	Supports generation, AM equipment general set up	<i>Alexis Gardarin, Poly-Shape France</i>
10.00 – 11.00	Group activities: <u>Group 1:</u> Practical experience on the experimental characterization of parts produced by PBF <u>Group 2:</u> Practical experience on the characterization of powders for PBF	
11.00 – 12.00	Group activities: <u>Group 2:</u> Practical experience on the experimental characterization of parts produced by PBF <u>Group 1:</u> Practical experience on the characterization of powders for PBF	
12.00 – 13.00	Optimising Additive Manufacturing with Powder Rheology <u>LOCATION:</u> Room 1.4 (building 25)	<i>Andrea Zappavigna, Alfatest S.r.l.</i>
13.00 – 14.00	LIGHT LUNCH <u>LOCATION:</u> SALA RIUNIONI CISIA – Ground floor Department of Mathematics, University of Modena Via Campi n. 231, Modena	
14.00 – 15.00	Main applications and problems of SLM technology in tools production	<i>Daniele Miceli, RB S.p.A.</i>
15.10	TRANSFER TO RB SPA via Luigi Gavioli 1, Mirandola (MO)	
15.45 – 16.45	Group activities: <u>Group 1:</u> Practical experience on the removal of a finished job <u>Group 2:</u> Visit to RB premises	
16.45 – 17.45	Group activities: <u>Group 2:</u> Practical experience on the removal of a finished job <u>Group 1:</u> Visit to RB premises	
18.00	TRANSFER TO MARANELLO VILLAGE Via terra delle rosse 12, Maranello (MO)	
20.30	DINNER AT MARANELLO VILLAGE	



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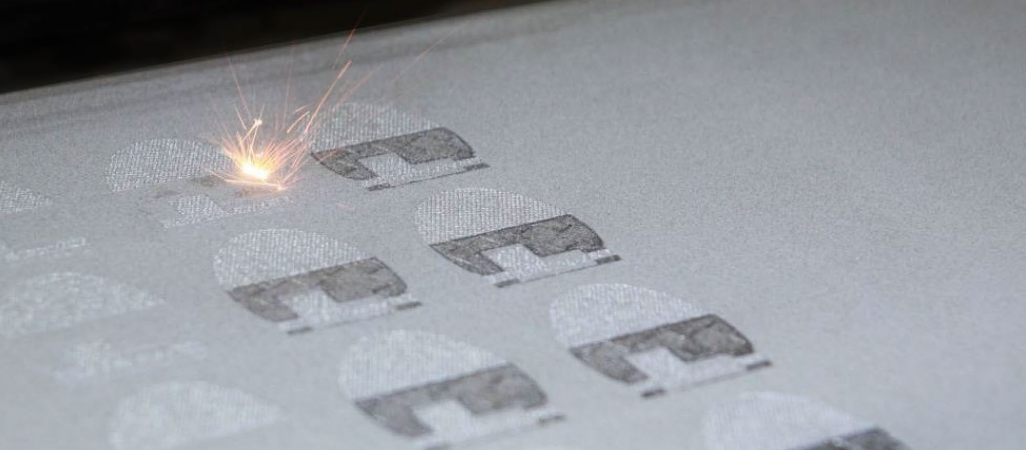
DAY 4

Thursday, 06th June 2019

TIME	ITEM	SPEAKER
8.30	TRANSFER TO THE EVENTS ROOM TECNOPOLO (Building 52) Department of Engineering "Enzo Ferrari" - Via Vivarelli 10, Modena	
09.00 – 09.45	Horizon 2020 "DREAM" project main achievements	Elena Bassoli , University of Modena
09.45 – 10.45	Machine, high level parameters	Olli Nyrhilä , EOS Finland Oy
10.45 – 11.45	Design of novel additive manufacturing materials for biomedical applications	Daniel Cristea and Camelia Gabor , Transilvania University
11.45 – 12.15	Life Cycle Assessment in Additive Manufacturing	Anna Maria Ferrari and Grazia Maria Cappucci , National Interuniversity Consortium of Materials Science and Technology (INSTM)
12.15 – 13.00	Test and certification	Fabio Alemani , Adler Ortho France
13.00 – 14.00	LIGHT LUNCH LOCATION: SALA RIUNIONI CISIA – Ground floor Department of Mathematics, University of Modena Via Campi n. 231, Modena	
14.00 – 14.15	Horizon Europe perspective for Research & Innovation projects	<i>Isella Vicini</i> , beWarrant S.L.
14.15 – 14.30	Additive Manufacturing R&I Group in partnership with the Common Dissemination Booster of the European Commission	<i>Cinzia Iacono</i> , Warrant Hub
14.30 – 15.10	HyProCell Project: Development and validation of integrated multiprocess HYbrid PROduction CELLS for rapid individualized laser-based production	<i>Rodolphe Gie</i> , Poly-Shape France



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15.10 – 15.50	AMOS Project: Additive Manufacturing Optimization and Simulation Platform for repairing and re-manufacturing of aerospace components	<i>Udisien Woy</i> , Nuclear Advanced Manufacturing Research Centre of UK
15.50 – 16.30	Paraddise Project: A Productive, Affordable and Reliable solution for large scale manufacturing of metallic components by combining laser-based ADDitive and Subtractive processes with high Efficiency	<i>Eneko Ukar</i> , University of Basque Country
16.30 – 18.00	Panel Discussion/Round Table: AM future trends for a widespread adoption at industrial level	<p><u>Chair:</u> <i>Elena Bassoli</i>, University of Modena</p> <ul style="list-style-type: none"> ❖ <i>Olli Nyrhilä</i>, EOS Finland Oy ❖ <i>Daniel Cristea</i> and <i>Camelia Gabor</i>, Transilvania University ❖ <i>Fabio Alemani</i>, Adler Ortho France ❖ <i>Isella Vicini</i>, beWarrant S.L. ❖ <i>Rodolphe Gie</i>, Poly-Shape France ❖ <i>Udisien Woy</i>, Nuclear Advanced Manufacturing Research Centre of UK ❖ <i>Eneko Ukar</i>, University of Basque Country
18.00 – 18.30	School closing and graduation	
18.45	TRANSFER TO THE ENZO FERRARI MUSEUM Via Paolo Ferrari 85, Modena	
19.30 – 21.30	Enzo Ferrari Museum Visit and Gala Cocktail	
22.00	TRANSFER TO MARANELLO VILLAGE Via terra delle rosse 12, Maranello (MO)	



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