Università degli Studi di Pavia
Computational Mechanics & Advanced Materials Group - DICAr

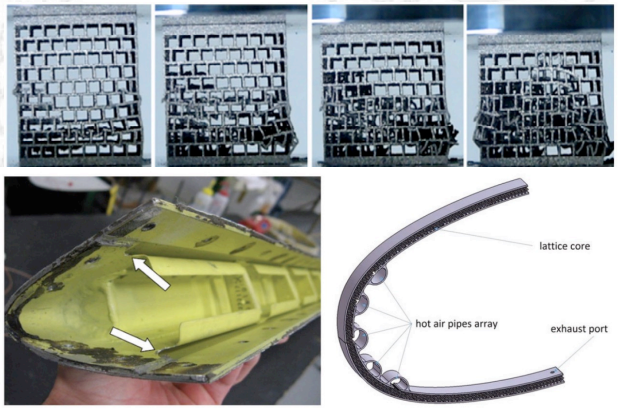
3D@UniPV
Virtual Modeling and Additive Manufacturing for Advanced Materials

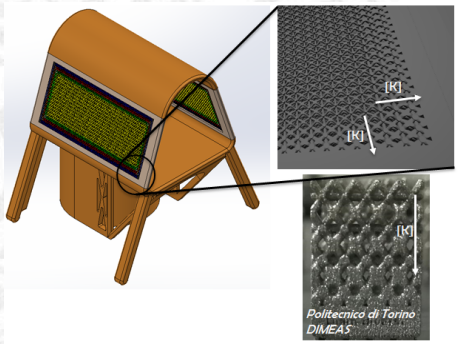
SEMINAR

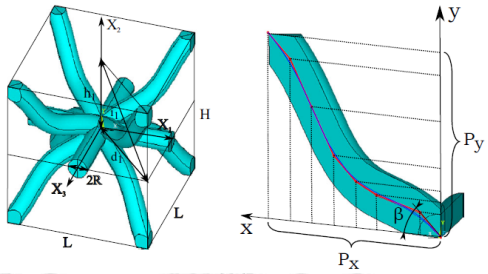
Structural design for additive: methods and case studies

In the last years, the additive manufacturing (AM) processes increased the potentialities of structural design of metal structures. Dedicate design methods have been explored, or resumed from the past, and applied to the freeform capabilities of additive processes. Complex topologies as lattice or cellular structures and hybrid geometries are proposed as constructive solutions. The team operating at Politecnico di Torino (Department of Mechanical and Aerospace Engineering) works on theoretical and experimental projects focused on two main targets: a) to manage application-driven requirements coming from the industrial field, and b) to develop and validate designing tools with general meaning and wide applicability.

The evaluation of costs and benefits associated to the conversion of traditional manufacturing to AM is of primary importance. Usually, this evaluation is not limited to technical issues and it also requires deep comprehension of business strategies, production models and available processes alternatives. In this frame, the main role of the “additive designer” is to drive the industrial partners in the (sometimes) confused scenario of AM processes.







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September 3rd, 14:30 (sharp)
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