

ADDITIVE MANUFACTURING LABORATORY



Università
degli Studi
della Campania
Luigi Vanvitelli

PRESENTATION DOC



Laboratory Head: Prof. Aniello Riccio

Contents

Mission;

Applications;

Organization Chart ;

People;

Competencies;

Facilities;

Industrial Partners, Academic
Partners and Research
institutes;

Contacts.

Mission

The Additive Manufacturing Laboratory was founded in 2022. It is placed in the Department of Engineering in the historical site of “Real Casa dell’Annunziata” in Aversa.

The Laboratory is aimed to perform Teaching Activities, Research Activities and Technology Transfer Activities .

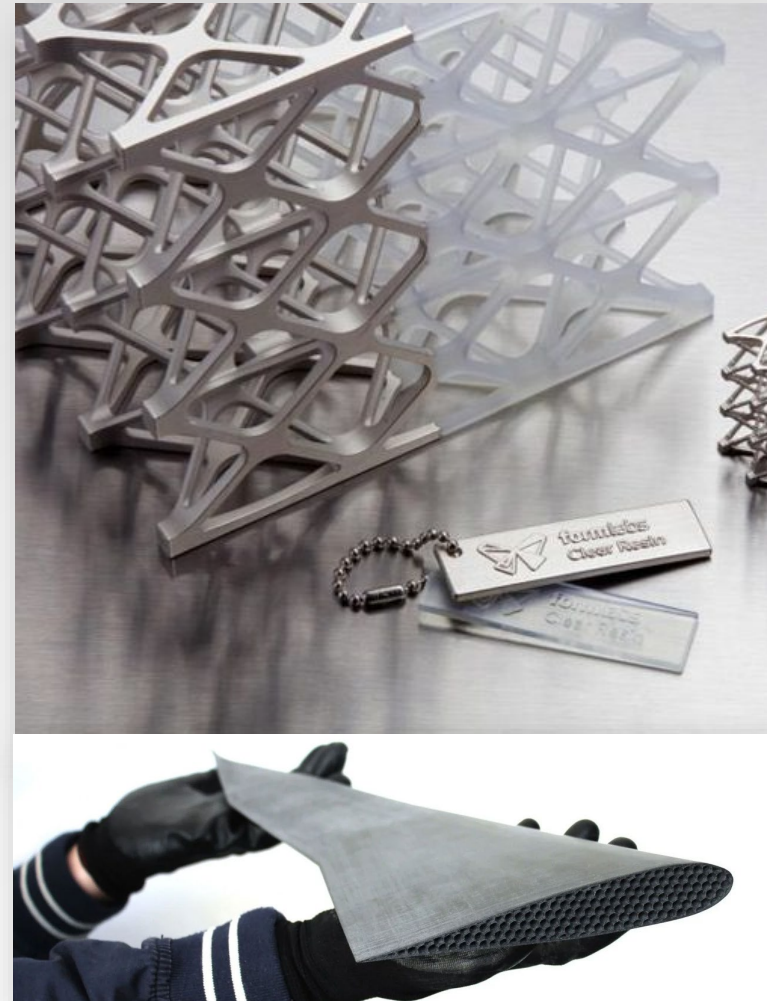
According to its Mission, The Additive Manufacturing Laboratory offers high qualification and specific competencies to Research Groups, OEM (Original Equipment Manufacturer) Industries and SMEs:

- The Additive Manufacturing Laboratory is involved in projects allowing self-sufficiency in terms of technology upgrading and operating personnel;
- The Additive Manufacturing Laboratory acts as high qualification centre in the field Industrial Engineering (Mechanics, Aerospace, etc);
- The Additive Manufacturing Laboratory offers services related to research and advanced consultancy to local, national and international OEMs and SMEs for design and prototyping of structural components;
- The Additive Manufacturing Laboratory has been awarded with “ISO 9001” Quality Certificate

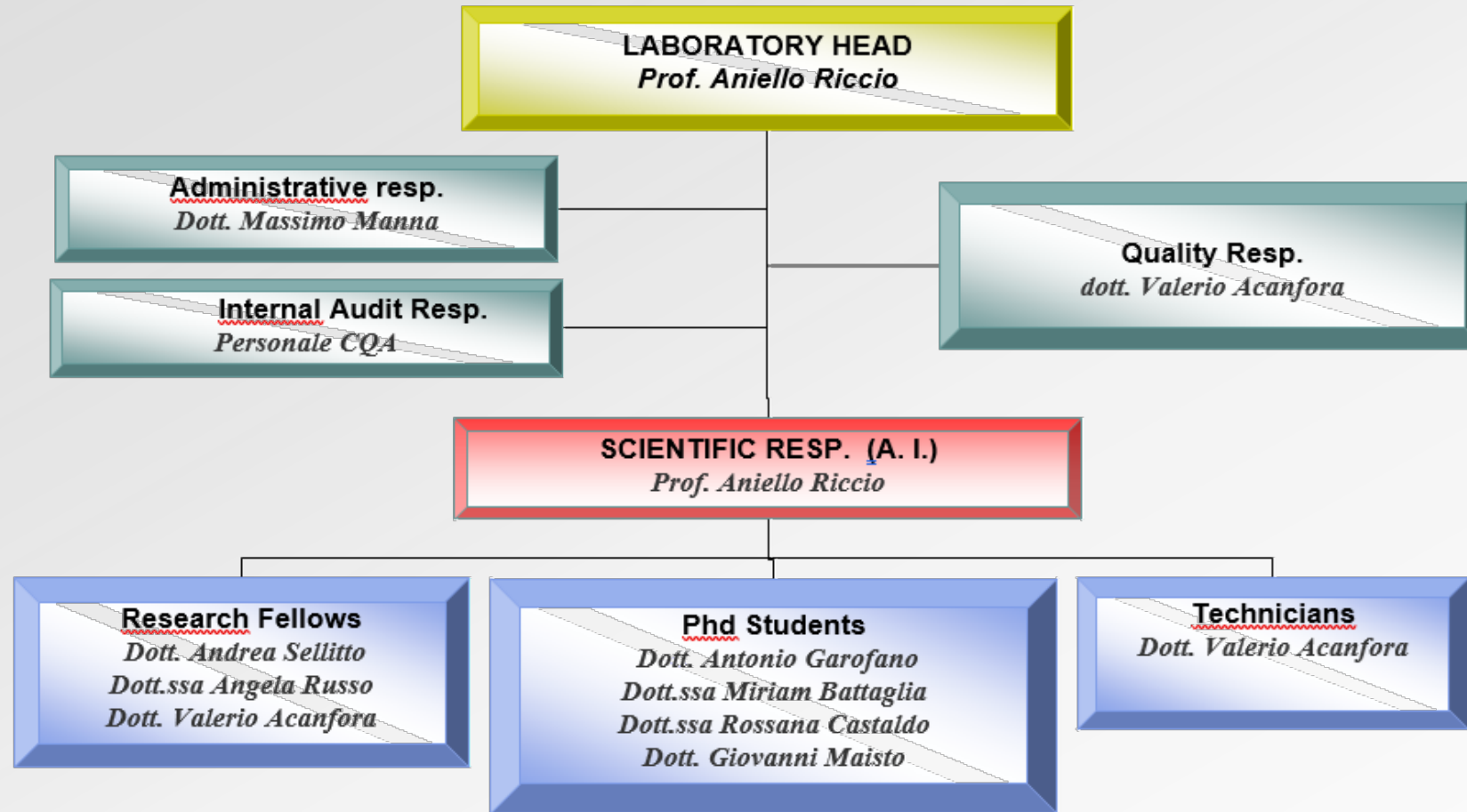


Applications

Prototyping of Structural Components for Engineering Applications Designed for Additive Manufacturing and Produced with Additive Manufacturing technologies



Organization Chart



Personnell

- n.1 Full Professor;
- n.1 Associate Professor;
- n.1 Researcher RTDA;
- n.1 Research Fellow;
- n. 6 PhD Students.



Competencies



Stampa 3D metalli EOS M 290

Volume di stampa: 250 x 250 x 325 mm

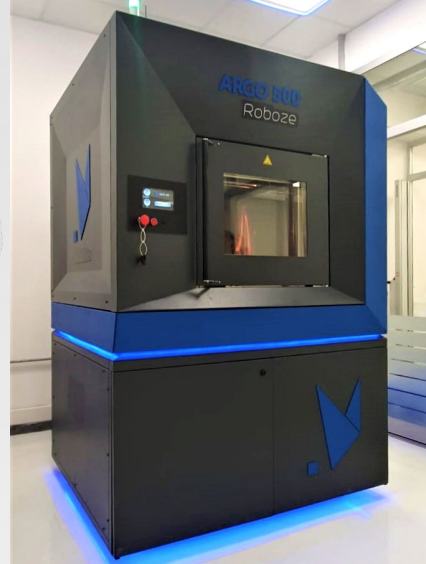
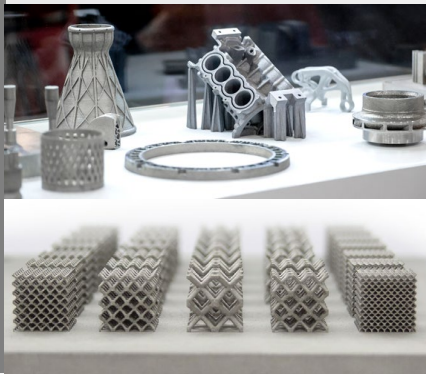
Materiali di Stampa: LEGHE di ALLUMINIO, TITANIO, INCONEL, ACCIAIO.

Alta qualità, elevata potenza del raggio dello spot laser ed eccellente risoluzione dei dettagli. Omogeneità garantita secondo gli standard DMLS EOS.

Possibilità di personalizzare i parametri di processo per polveri custom e monitoraggio del processo online tramite EOSTATE



**Ampia flessibilità
nelle applicazioni**

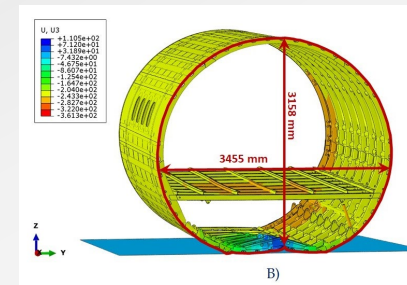
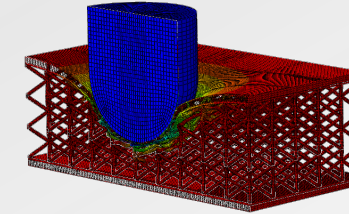


Stampa 3D polimeri ROBOZE ARGO 500

Volume di stampa: 500 x 500 x 500 mm

Materiali di Stampa: polimeri ad alte performance, PEEK, ULTEM™ AM9085F, materiali compositi, CARBON PEEK, CARBON PA

Metal replacement e tecnologia additiva FFF applicati a prototipi di grande formato.



**Analisi numerica ad
elementi Finiti (FEM) e
progettazione CAD in
ottica Design for
Additive Manufacturing**

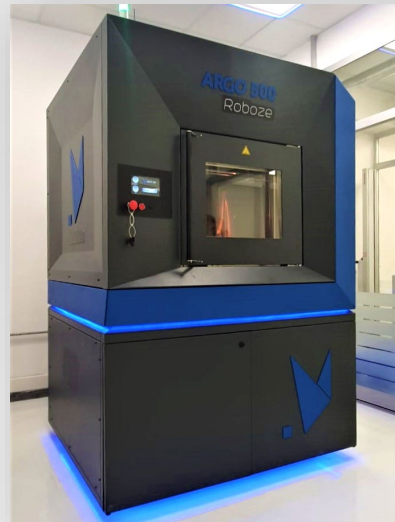
Facilities

EOS M290



Metal 3D printer with **DMLS Technology**

ROBOZE ARGO 500



Polymeric 3D Printer with **FFF Technology**

FORMLABS 3BL



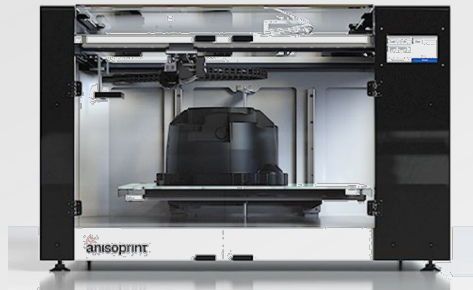
Polymeric 3D printer with **(SLA) Stereolithography Technology**

RAISE 3D PRO 3 PLUS



Polymeric 3D Printer with **FFF Technology**

ANISOPRINT A3



3D printer for **Continous Fibers technology**

5 Workstations
Digital Image Correlation
Olympus Omniscan

Industrial Partners, Academic Partners and Research Institutes

- Centro Italiano Ricerche Aerospaziale (CIRA);
- Imperial collage London;
- University of Bath;
- Università degli Studi di Enna *Kore*;
- Istituto di Scienze e Tecnologie per l’Energia e la Mobilità Sostenibili (CNR-STEMS);
- Lamborghini;
- Geven;
- Roboze;
- Wind aeronautics;
- Scuola specialisti dell’Aeronautica Militare;
- Centro Ricerche Fiat



UNIVERSITÀ
DEGLI STUDI
DI ENNA “KORE”



UNIVERSITY OF
BATH



Imperial College
London



geven



CENTRO
RICERCHE
FIAT

Contacts



**LABORATORIO DI STAMPA 3D – ADDITIVE
MANUFACTURING LABORATORY**

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