

**AMICE** 

# Alliance for Advanced Manufacturing in Central Europe

2017-2020

Summary

The aim of AMiCE is to support SMEs in the adoption of new advanced manufacturing technologies and circular economy principles. By providing the knowledge needed to endeavour such challenge, the Alliance will connect SMEs with innovation actors, namely RTOs and policy, who will give support in terms of expertise and capabilities. To do this, AMiCE will develop three tools for facilitating this process and effectively tackling the challenges of the regions involved.

Project partners - Regional tandems

The partnership of AMiCE is formed by 5 regional tandem partners. Each tandem is formed by an RTO providing the technical expertise plus a BSO.

**SAXONY** 

Chemnitz University of Technology University of Applied Science Zittau/Görlitz

University of Genoa - Polytechnic School

Liguria Regional Chamber of Commerce

**LOWER SILESIA** 

University of Zilina

**BIC** Bratislava

**SLOVAKIA** 

LETIA Technology Park of Legnica Institute of Technology Transfer Ltd. Wroklaw CZECH REPUBLIC Technical University of Liberec

RDA of Usti Region

**CATALONIA** Leitat



Pilot - Ansaldo Energia - AM for gas turbine spare parts manufacturing

### The Challenges of CE

#### Knowledge and technology transfer:

Ansaldo Energia (AEN), international player in the power generation industry, introduced additive manufacturing tecnologies for gas turbine spare parts production

#### How we tackle them

#### Innovation 4.0 knowledge network

The replacement of conventional casting process via SLM opens a door for upgrades of key components. One example is the bunner head wich has the function to mixes fuel and air for the pilot flame.





Learning and demonstration network

The Company attended in several congresses on additive topics to spread his experience, such as:

> RM FORUM 2018 Additive Tecnologies - Milan

National Welding Days 2019 - Genoa

Innovation 4.0 cooperation hotspot

AEN aims to create and promote new knowledge in the area of additive manufacturing to increase its bussiness



The Results

Our supply-chain maturity models, help us to obtain benefits for spare part production with a rapid manufacturing and faster time to market and stock

reduction consequently

Feasibility studies for the development of prototype through non-destructive and destructive laboratory test

The Quality product, witch has always been the goal of AEN, help to maintain Customer satisfaction and

loyalty

# Testing and production facilities

AEN in collaboration with Genoa Additive Manufacturing Laboratory (GEAM) a joint between Italian Institute of Welding (IIS) and University of Genoa, are studing a guide lines for AM process qualification

https://www.ansaldoenergia.com/Pages/ Lighthouse-Plant.aspx

# **Business** development

Additive technology specialization courses for technical coordinators on additive techniques in collaboration with IIS and updates with expert suppliers

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