Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

Federal Ministry
Republic of Austria
Digital and
Economic Affairs

FFG
Promoting Innovation.

COMET-Project

AMALFI: Aluminium and Magnesium ALloys for Future Industrial applications

Main location	LKR Leichtmetallkompetenzzentrum Ranshofen GmbH, 5282, Upper Austria
Other locations	---
Research programme	Development of light metal materials and processes

Planned realisation and outcomes

The Research project AMALFI has the vision to support the Austrian and European Industry in maintaining and expanding their position at the forefront of the international Al and Mg processing industry. AMALFI has three major objectives: (1) improved properties of light metal products; (2) more efficient light-metal processes for gaining this performance gain of semi-finished products for (1); (3) the scientific objective of development of thorough understanding and insight into light-metal semi-finishes, processes and microstructure by means of analytical, experimental, numerical modelling, allowing for virtual investigations to support targeting objectives (1) and (2).

History of establishment	The use of lightweight materials is one of the fastest growing key trends in the aeronautic and automotive industry. The application of light metal materials means a huge reduction in weight, which in turn has a positive effect on the energy efficiency and CO_2-emissions of aircrafts and vehicles. AMALFI is a follow-up project of COMET AmorEE (2014-18) with past as well as new industry and university partners. AmorEE consisted of three major research areas: Al processing, Mg processing and through process modelling. Major goal of all developments and research tasks was to contribute to Energy Efficiency. The project proposal AMALFI was developed and established by the consortium to carry on the research and development work in lightweight materials development, to further enhance achieved materials and process technologies, and to give new materials a technological push with the clear strategic goal “for future industrial applications”.

Selected company partners (max. 10)

1. ALU MENZIKEN EUROMOTIVE
2. HPI - High Performance Industrietechnik GmbH
3. Ebner industrieofenbau GmbH
4. Hammerer Aluminium Industries Extrusion GmbH
5. Pankl Racing Systems AG
6. voestalpine Metal Forming GmbH

Selected scientific partners (max. 5)

1. Montanuniversität Leoben – Chair for non-ferrous metals
2. Paris Lodron University Salzburg, FB Materials Sciences and Physics
3. Friedrich-Alexander Universität Erlangen (FAU)
4. University of Siegen, Institute of Forming Technology

Selected international partners [1] (max. 5)

1. RECARO Aircraft Seating GmbH&Co.KG

Start of the COMET-Project	1.9.2018 (4 years)
Number of personnel	17,6 (FTE) are involved (17 FTE are scientists)
Leader of consortium:	Dr. Stephan Ucsnik, LKR, Senior Engineer
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[1] Partners with headquarters outside Austria

The COMET Project is funded within COMET – Competence Centers for Excellent Technologies – by BMK, BMDW as well as co-financing federal provinces. The COMET programme is managed by FFG. >> www.ffg.at/comet