

HORIZON
2020

Precision Additive Metal Manufacturing

Fact Sheet

Project Information

PAM²

Grant agreement ID: 721383

[Project website](#) 

DOI

[10.3030/721383](https://doi.org/10.3030/721383) 

Project closed

EC signature date

16 August 2016

Start date

1 December 2016

End date

30 November 2020

Funded under

EXCELLENT SCIENCE - Marie Skłodowska-Curie
Actions

Total cost

€ 3 896 180,44

EU contribution

€ 3 896 180,44

Coordinated by

KATHOLIEKE UNIVERSITEIT
LEUVEN



Belgium

Objective

Additive Manufacturing (AM) is a fast-growing sector with the ability to evoke a revolution in manufacturing due to its almost unlimited design freedom and its capability to produce personalised parts locally and with efficient material use. AM companies however still face technological challenges such as limited precision due to shrinkage and build-in stresses and limited process stability and robustness. Moreover often post-processing is needed due to the high roughness and remaining porosity. In addition qualified, trained personnel is hard to find. This ITN project will address both the technological and people challenges.

To quality assure the parts produced, PAM² will, through a close collaboration

between industry and academia, address each of the various process stages of AM with a view to implementing good precision engineering practice.

To ensure the availability of trained personnel, ESRs will, next to their individual research and complementary skills training, be immersed in the whole AM production chain through hands-on workshops where they will design, model, fabricate, measure and assess a specific product.

The expected impact of PAM² thus is:

1. The availability of intersectoral and interdisciplinary trained professionals in an industrial field that's very important for the future of Europe, both enhancing the ESR future career perspectives and advancing European industry.
2. The availability of high precision AM processes through improved layout rules with better use of AM possibilities, better modelling tools for first-time right processing, possibility for in-situ quality control ensuring process stability and, if still needed, optimised post-processing routes
3. As a result of 1: an increased market acceptance and penetration of AM.
4. Through the early involvement of European industry: a growing importance of the European industrial players in this fast-growing field. This will help Europe reach its target of 20% manufacturing share of GDP.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [electrical engineering](#), [electronic engineering](#), [information engineering](#) > [electronic engineering](#) > [sensors](#) > **[optical sensors](#)**

[natural sciences](#) > [mathematics](#) > [pure mathematics](#) > **[topology](#)**

[natural sciences](#) > [mathematics](#) > [pure mathematics](#) > **[geometry](#)**

[engineering and technology](#) > [mechanical engineering](#) > [manufacturing engineering](#) > **[additive manufacturing](#)**

[natural sciences](#) > [physical sciences](#) > [optics](#) > **[laser physics](#)**



Programme(s)

[H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions](#)

MAIN PROGRAMME

[H2020-EU.1.3.1. - Fostering new skills by means of excellent initial training of researchers](#)

Topic(s)

[MSCA-ITN-2016 - Innovative Training Networks](#)

Call for proposal

[H2020-MSCA-ITN-2016](#) 

[See other projects for this call](#)

Funding Scheme

[MSCA-ITN-ETN - European Training Networks](#)

Coordinator



KATHOLIEKE UNIVERSITEIT LEUVEN

Net EU contribution

€ 751 680,00

Total cost

€ 751 680,00

Address

OUDE MARKT 13

3000 Leuven

 **Belgium** 

Region

Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Participants (10)



DANMARKS TEKNISKE UNIVERSITET

 **Denmark**

Net EU contribution

€ 580 163,76

Address

ANKER ENGELUNDS VEJ 101
2800 Kongens Lyngby 

Region

Danmark > Hovedstaden > Københavns omegn

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 580 163,76



UNIVERSITA DEGLI STUDI DI PADOVA

 Italy

Net EU contribution

€ 258 061,32

Address

VIA 8 FEBBRAIO 2
35122 Padova 

Region

Nord-Est > Veneto > Padova

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 258 061,32



KARLSRUHER INSTITUT FUER TECHNOLOGIE

 Germany

Net EU contribution

€ 498 432,96

Address

KAISERSTRASSE 12

76131 Karlsruhe 

Region

Baden-Württemberg > Karlsruhe > Karlsruhe, Stadtkreis

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 498 432,96



TECHNISCHE UNIVERSITEIT DELFT

 Netherlands

Net EU contribution

€ 255 374,28

Address

STEVINWEG 1

2628 CN Delft 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 255 374,28



THE UNIVERSITY OF NOTTINGHAM

 United Kingdom

Net EU contribution

€ 546 575,76

Address

University Park

NG7 2RD Nottingham 

Region

East Midlands (England) > Derbyshire and Nottinghamshire > Nottingham

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 546 575,76



LAYERWISE

 Belgium

Net EU contribution

€ 250 560,00

Address

GRAUWMEER 14

3001 Leuven Heverlee 

Region

Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 250 560,00



NUOVO PIGNONE SRL 

 Italy

Net EU contribution

€ 0,00

Address

VIA FELICE MATTEUCCI 2

50127 Firenze 

Region

Centro (IT) > Toscana > Firenze

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



ALICONA IMAGING GMBH

 Austria

Net EU contribution

€ 255 934,08

Address

DR AUNER STRASSE 21A

8074 Raaba 

Region

Südösterreich > Steiermark > Graz

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 255 934,08



LEGO SYSTEM AS

 Denmark

Net EU contribution

€ 290 081,88

Address

AASTVEJ 1
7190 Billund 

Region

Danmark > Syddanmark > Sydjylland

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

- [Contact the organisation](#) 
- [Website](#) 
- [Participation in EU R&I programmes](#) 
- [HORIZON collaboration network](#) 

Total cost

€ 290 081,88



NUOVO PIGNONE TECNOLOGIE SRL

 Italy

Net EU contribution

€ 209 316,40

Address

VIA FELICE MATTEUCCI 2
50127 Firenze 

Region

Centro (IT) > Toscana > Firenze

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

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- [Participation in EU R&I programmes](#) 

Total cost
€ 209 316,40

Partners (2)



PARTNER 

ASML NETHERLANDS B.V.

 Netherlands

Net EU contribution

€ 0,00

Address

**DE RUN 6501
5504DR Veldhoven** 

Region

Zuid-Nederland > Noord-Brabant > Zuidoost-Noord-Brabant

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



PARTNER 

MAGMA GIESSEREITECHNOLOGIE GMBH

 Germany

Net EU contribution

€ 0,00

Address

**KACKERSTRASSE 11
52072 AACHEN** 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data

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Permalink: <https://cordis.europa.eu/project/id/721383>

European Union, 2025