



## **PAM<sup>2</sup>- Precision Additive Metal Manufacturing**

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, PAM<sup>2</sup> 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 PAM<sup>2</sup> 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.

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DEGLI STUDI  
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**Find out more:** <https://www.pam2.eu/>