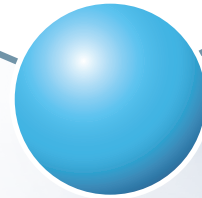
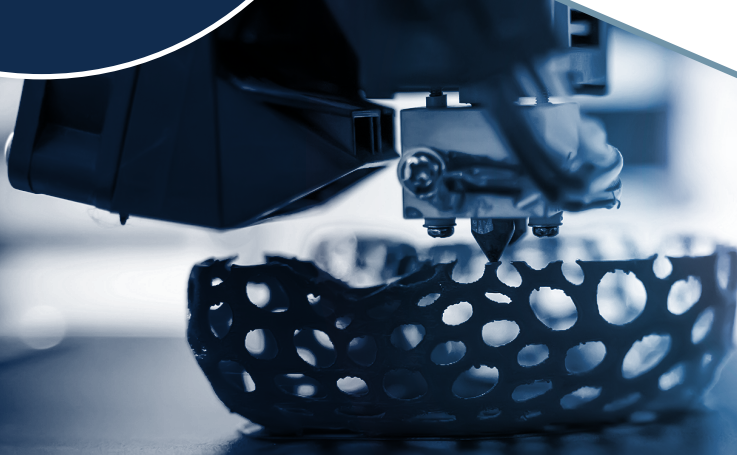


VANGUARD INITIATIVE

New growth through smart specialisation



High Performance Production through 3D-Printing

INTRODUCTION TO THE PILOT

The Vanguard Initiative 3D-printing (3DP) Pilot is a structural and holistic partnership that aims at accelerating market uptake of 3DP applications through the development of industry-led, transregional demonstration platform. By 1) connecting the demand and supply of demonstration services in strategic collaboration areas and 2) addressing major industrial bottlenecks, the 3DP Pilot fosters the creation of new value chains in Europe.

ACTIVITIES

The 3DP Pilot is connecting and strengthening the demand and supply of demonstration services in 5 key strategic collaboration areas ('demo cases'), which facilitates bringing prototypes to production by securing the reproducibility of application. Beyond connecting existing capabilities and addressing information asymmetry, the partnership also aims at fostering co-investment by 1) addressing horizontal challenges (e.g. certification) and 2) ensuring availability and accessibility to equipment and infrastructures that will effectively serve the needs of the industry.

DEMO CASES

Multi-materials components by hybrid 3D Printing manufacturing

This demo case aims at providing SMEs with required knowledge and demonstration facilities to develop 3D Printed innovative ultra-light hybrid components based on different materials and structure combinations (targeted value chains/sectors: automotive, aerospace and machinery and tooling).

Machinery and Tooling - Structural Parts with Complex Shapes

This demo case aims at facilitating the deployment of 3DP complex shapes in Machinery and Tooling, focusing currently on the following aspects: skills/training and certification/standards.

Additive-subtractive high precision & high finish production (high-end metals)

This demo case develops a digitally connected network of pilot lines / production hubs to widely integrate additive and subtractive technologies in production flows (targeted value chains/sectors: automotive, aerospace, transport, energy, machinery).

3D-Printed large parts (mono-material) through emerging 3DP technologies

This demo case aims at offering a set of distinct solutions to industrial players for the printing of components for large parts (targeted value chains/sectors: automotive, aerospace, shipbuilding, construction).

3D-Printed customised components for orthosis, exoskeleton and exoprosthesis

The demo case aims at facilitating the deployment of 3D printed external orthosis and internal implants/prostheses. The demo case is currently focusing on 'certification-related' aspects.

The following 'cross-demo cases' challenges are being actively addressed: certification/standards, training and funding.

CONTACT DETAILS

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