THYBRIO TO

DEFORALL

Hybrid Additive Manufacturing (AM) solution for a wide range of machine platforms and applications for small and large companies

ALL FOR ONE

Several processes in a single machine enabling parts to be made in an unbroken process



OBJECTIVES

- Increase the impact and uptake of hybrid AM technology for a wider range of machine tool platforms, processes, materials and applications
- Develop a single manufacturing system capable of producing large, high volume and complex components without the need for materials handling or post-processing
- Develop an all-in-one hybrid additive and subtractive multi-tool platform using directed energy deposition (DED) AM
- Integrate a machining process to enable fully finished components to be produced
- Enable adding and finishing material for automated repair and new part production





PROJECT IMPACT





- Increase of productivity
- Reduced set-up times due to CAD/CAM developments and improved machining interface
- Upskilling of workforce due to training on new hybrid AM systems
- Increase health and safety benefits due to the reduced materials handling
- Potential to significantly reduce the material, waste and energy cost

- Develop the necessary skills for implementation of the OPENHYBRID system at an industrial level
- In-process non-destructive testing (NDT)
- In-situ stress relieving
- Inventory and work in progress reduction
- Reduction in energy usage and associated emissions

Increase in productivity for high volume AM production

Reduction in inventory due to single step process and flexibility

Reduction in time and cost with respect to current equipment and processes

Reduction of work floor space

PROJECT PARTNERS

























SIEMENS

