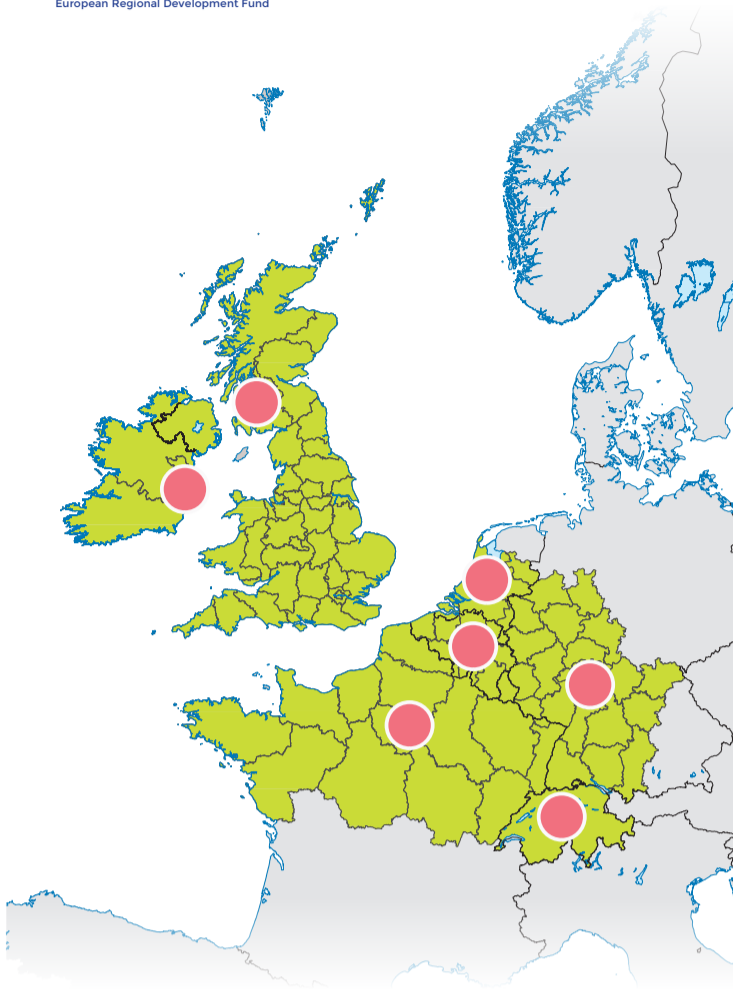


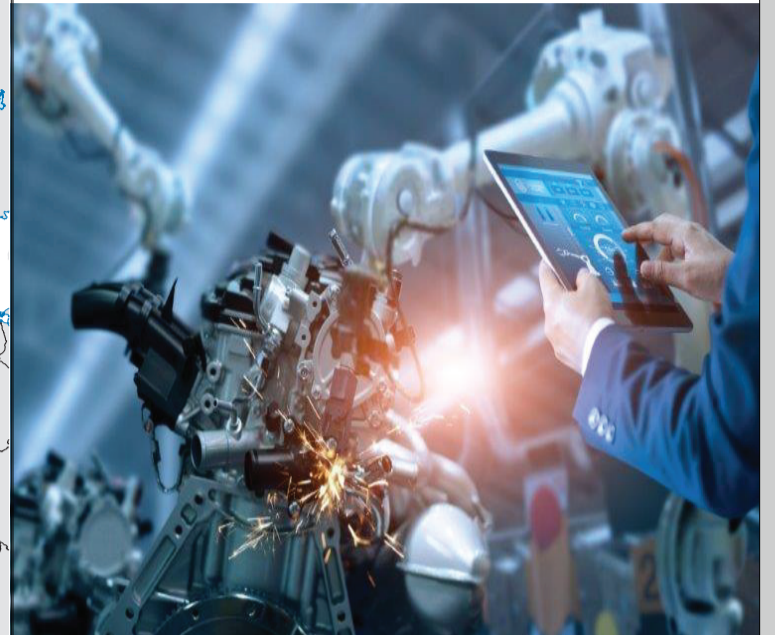
Project Partners

-   www.sirris.be
-   www.strath.ac.uk/research/advancedformingresearchcentre/
-   www.cetim.fr
-   www.fraunhofer.de
-   www.imr.ie
-   www.medicalmountains.de
-   www.stodt.nl
-   www.swiss-mechatronics.ch
-   www.ucd.ie
-   www.zhaw.ch



Website: www.machining4.eu
 LinkedIn: [Machining4.0.](#)
 Twitter: [Machining4_eu](#)

Total budget received from Interreg North-West Europe (2014-2020):
€2,55 million of ERDF



**Increase the Innovation level
 of NWE Machining**

Machining 4.0 project

Machining 4.0 is a European funded project to improve capabilities of machining SMEs. The goal of the project is to increase the innovation level of machining SMEs and transform them into more competitive enterprises.

- 10 European partners across the Northwest Europe Region
- A 'machining 4.0' web portal gives SMEs free access to relevant knowledge about innovative machining technologies. An overview is given of relevant technologies, possible applications, practical examples and testimonials
- A cross-border field lab network integrates seven regional application labs and gives companies open access to innovative technologies and inspiring demonstrators.
- Workshops will be set up for SMEs so that they can work with these technologies in their company
- A voucher scheme will be set up to provide financial support to companies wishing to transform their production

Industry 4.0 for machining

The Interreg project Machining 4.0 translates the broad Industry 4.0 vision into concrete applications for machining, tailored to SMEs.

Twelve applications based on typical challenges from the machining sector are being co-developed with machining SMEs under the following themes:

- Emerging innovative machining technologies (i.e. cryogenic, laser, precision machining)
- Digitising the machining shop-floor (i.e. connecting machines, extracting data, planning and scheduling)
- Supporting the machining operator (i.e. digital work instructions, collaborative robots)

Machining Benefits

These solutions, specifically targeted for machining SMEs, can deliver the following benefits;

- Mass customisation
- New technology/capabilities
- Shorter lead times
- More with the same personnel - Automated work
- Decrease distance between factories and the product development
- Internal optimisation of operations

Example Outcomes of Machining Innovation Projects

- Optimise the storage of raw materials - 30% reduction (machining)
- Evaluating methods of non-destructive defect detection (testing)
- Up to 60% less wear using cryogenic machining (Aerospace)
- Develop new fixing technology for hybrid machining (Subcontracting)
- Researching vibration free machining using simulation (Casting)