

PROBLEM/ISSUE ADDRESSED

Enabling efficient **repair and/or re-work of complex metal components** with little-to-no re-engineering time. Thanks to the **simulation option, results will be more predictable**, avoiding scrap or failed repairing that could increase costs and times or furtherly damage the parts. Furthermore, the customer will benefit of an inline quality control of manufactured parts, leading to **improved part quality and enhanced client satisfaction**. Besides economic advantages, the provided solution will be **easier to use than** currently available approaches.

SOLUTION

OSCAR automates metal parts repairing by an advanced inspection and tool path generating platform.

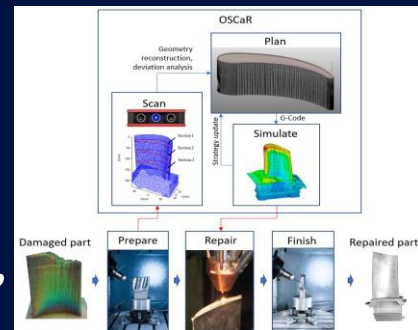
The benefits for manufacturers and users will be

- Huge reduction of engineering time for designing such repair strategies
- Possibility to repair a broader range of complex parts
- Increased convenience of repairing versus manufacturing parts from scratch
- As a result, cost reduction on the whole production chain

WHY IT IS IMPORTANT FOR SOCIETY

- ✓ Environmentally sustainable production (several large parts repaired instead of substituted, with respect to current common practice)
- ✓ Decreased energy consumption
- ✓ Inline quality control of processed parts

“ Thanks to EIT we were able to implement the full repairing pipeline as a commercial option that is fully integrated with the machine tool control environment. ”



MAIN RESULTS & INSIGHTS



Enabling increased circularity and step towards circular economy



Automated repairing process increases efficiency and reduces costs, turning repairing of parts more attractive for industry



2 industrial sectors included (automotive, tooling), 1 start up involved (ADAXIS), 1 advanced process considered (Direct Energy Deposition)



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MAIN PRODUCT: OSCAR KIT
AIM: supporting the adoption of green manufacturing