





JANUARY 2020

440702€

Sensors selected and integrated for WAAM and **LMD** April/2020

Tool available for simulation of WAAM and LMD processes December/2020

Validation of sensors for WAAM and LMD December/2020

Monitoring and control systems integrated in PRIMA and ADDILAN machines

WAAM and LMD demonstrator parts manufactured

CHALLENGE



Lack of monitoring and control systems in direct energy deposition technologies for Additive Manufacturing



SOLUTION



- Develop an intelligent monitoring system
- Develop control system for obtaining stable process conditions by adapting on-line process parameters
- Develop process models for simulating the LMD and WAAM obtained





Increase the process reliability and reproducibility

MAIN PROJECT RESULTS

SIMULATION TOOL FOR LMD AND WAAM



RELEVANT PUBLICATIONS ABOUT DED TECHNOLOGIES



thanks to EIT we were able to monitor both LMD and WAAM process and simulating them ""



TERESA ARTAZA

Manager of Innovation Projects at ESI Group **DEDALUS** project

AIM: boost and spread the use of DED technologies based on (WAAM and LMD, by creating specific monitoring and control systems for assuring high quality manufacturing of large metallic parts





TECNALIA



















