

# RADICLE

Real-Time Dynamic Control System for Laser Welding



This **RADICLE** project aims to create a real-time dynamic control system for laser welding using a combination of (application specific) sensors in combination with intelligent and predictive control technologies for in-process monitoring and control to minimize or eliminate defects for a range of materials and geometries for aerospace, automotive and other applications.



The control system will aim to include pre-welding and post-welding measurement as well as in-process monitoring, control and fault prevention / fixing.



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For more information:  
[www.radiclaser.com](http://www.radiclaser.com)



The successful implementation of the **RADICLE** technology by our consortium and then by the wider welding sector will enable an increased productivity of up to 30% from better monitoring & control, that will result in:

- 30% reduced energy usage
- 30% reduced emissions
- Reduction of the need for part scrappage or rework:
- Saving up to 20% - 30% of labour input
- Reduction or removal of the need for final NDE testing of the parts
- Giving a 35% floor space reduction
- Improved working environment



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Project consortium:

