## Pilot Lines



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## Metal Wire Additive Manufacturing Pilot Line (MWAM)



The MWAM Pilot Line at AIMEN is an industrial robotic cell addressed to work with laser beam and wire as feedstock, promoting almost 100% of material utilisation.

The cell is equipped with a pre-heated table, a wire feeder and a coaxial laser head being able to manufacture large volume and complex 3D parts reducing component distortion and defects and allowing a completely direction-independent material deposition.





A rigid glovebox fitted with an argon purification & recirculation system allow to work under a shielding inert place environment enabling to handle with very reactive materials as lightweight alloys based on Al, Mg & Ti.



The main objective of the MWAM PL is to obtain complex and lighter reinforced parts with increased performance through the use of different quantities and type of nanoparticles.

Thanks to other transversal tools as monitoring techniques and simulation capabilities we can improve the process parameters and understand the effect of the nanoparticles in the thermal history and in the properties of the deposited materials this broadens the field of application for the use of metal matrix composites in important sectors automotive such as and aeronautics.



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