DIAMANTS

CRM Group will participate to the DIAMANTS project funded by <u>SKYWIN</u> and the <u>Service Public de Wallonie (SPW Recherche)</u>. This new project aims to develop digital tools to empower first-time-right and serial production by metal additive manufacturing.

DIAMANTS aims to break down technological barriers in additive manufacturing, by demonstrating that, thanks to the support of modeling, we can reduce manufacturing risks, increase productivity, demonstrate a mass production capacity and reduce post-processing time, while bringing added value to the product through the use of new high-performance materials and design optimization. DIAMANTS will demonstrate that first-time-right production is possible, and that digital twins can actually help replace costly trial-and-error phases that are no longer acceptable today.

DIAMANTS will have a strong impact in terms of positioning Wallonia as a major global player in the world of metal additive manufacturing. The project will also increase the scope of the partnerships of the research centers involved with key players in aeronautics in Wallonia and abroad.

The consortium will be guided and validated on industrial "use cases". Nine major industrials provided one or more test cases. The consortium proposed to process 5 use cases.

Complementary Partnership

To achieve these goals, a consortium has been set up. It is made up of manufacturers who are already active and recognized in the field of additive manufacturing and who are confronted with current challenges and limitations. Their activities cover aspects of technology, manufacturing, design and simulation. They will be supported by research centers specializing in the development and characterization of materials, additive manufacturing technology, and the development of advanced digital methods. The partners are **GDTech**, **Any-Shape**, **SAMTECH** (Siemens), CRM Group, SIRRIS and CENAERO.

