

AddUp and MT Aerospace extend their partnership to accelerate the industrialization of DED Technology

Major supplier to the space and aeronautics industry, the German company MT Aerospace renews its confidence in the AddUp group and announces the acquisition of a second Modulo 400 machine. These two DED (Directed Energy Deposition) machines will enable MT Aerospace to multiply projects while reducing industrialization times, to move more rapidly towards the use of this technology for series production.

Based in Augsburg, Germany, MT Aerospace is the European leader in the field of fluid storage for the aerospace industry. This subsidiary of the OHB Group designs and manufactures fuel tanks for satellites and space launchers, including the Ariane 5 program. It is also the main supplier of drinking water and wastewater storage systems for Airbus group aircraft. Specialized in metal and composite processing, MT Aerospace also has expertise in metal 3D printing, in particular in DED (Directed Energy Deposition) technology thanks to its Modulo 400 machine supplied by AddUp in 2020.

AddUp, a French-based joint venture created by Michelin and Fives, is a global metal additive manufacturing OEM offering a range of PowderBedFusion (PBF) and DirectedEnergyDeposition (DED) machines. AddUp has been working closely with MT Aerospace experts for the past two years to qualify applications using the DED process. The Modulo 400 machine, which sprays metal powders through a high-powered laser beam, has proven its ability to create parts with fine surface finishes and high mechanical characteristics. MT Aerospace has already tested it on a wide variety of materials, even reactive materials such as Titanium thanks to the high level of safety of the machine.

In just two years, the German company is preparing to build up a complete industrial platform around DED technology, with design skills and production, post-processing, and part inspection capabilities. All these activities will of course be compatible with the requirements of the EN 9100 standard applicable to the aerospace sector later on.

About MT Aerospace:

MT Aerospace AG, a subsidiary of the space and technology group OHB SE, is a technology company with around 600 employees at its sites in Augsburg, Bremen, Klatovy, Czech Republic, and Kourou, French Guiana. MT Aerospace is a technology leader in lightweight structures using metal and composite materials. The company develops and produces key components and systems for the European ARIANE launch vehicle, satellites and the Airbus aircraft fleet.

With an order volume of ten percent, MT Aerospace is the largest supplier for the ARIANE program outside France. With its many years of expertise in hydrogen technology, MT Aerospace is paving the way for sustainable and resource-efficient mobility applications in the aerospace and other sectors, such as maritime and transportation. More than 50 years of experience in lightweight construction and component optimization are used at MT Aerospace to create new components from the first prototype to small series using additive manufacturing (AM). Technologies such as laser beam melting (PBF) or laser buildup welding (DED) are used and offered as a service across all industries.

To learn more visit:
www.mt-aerospace.de



The Modulo 400, an AddUp DED machine

To accelerate the development and industrialization of projects

Today, MT Aerospace wishes to take a new step in its mastery of the DED process and announces the integration of a second Modulo 400 machine. The aerospace equipment manufacturer will be able to take advantage of this doubled production capacity to work simultaneously in several directions. First, the acceleration of qualification phases for satellites fuel tanks in collaboration with the European Space Agency, as well as the development of new applications for satellites and micro-launchers. Secondly, this second machine will be an opportunity to expand the services and thus address other sectors, such as the automotive or energy industries.

MT Aerospace has already succeeded in convincing numerous principals of interest in the DED process and is now counting on this new AddUp machine to accompany the increase in production volumes expected in the coming years. AddUp is proudly supporting this growth by offering its customers from Germany and beyond to fully benefit from the expertise of MT Aerospace to embrace the DED process.

AddUp and MT Aerospace will be presenting parts made through their partnership at the upcoming Formnext - Where Ideas Take Shape trade show, to be held in Frankfurt (Germany) from November 15 to 18. Visit the AddUp booth (Hall 12.0, booth E01) to discover the potential of the technology for the aerospace industry.

Finally, MT Aerospace and Addup intend to further extend their collaboration in 2023.



Satellite tank half shell production



Satellite tank made out of Titanium

About AddUp:

AddUp, a joint venture created by Michelin and Fives, is a global metal additive manufacturing OEM offering multi-technology production systems, including the FormUp® range of robust and open-architecture Powder Bed Fusion (PBF) machines, as well as the BeAM Modulo and Magic lines of industrial Directed Energy Deposition (DED) machines.

The combination of these processes allows AddUp customers the flexibility to choose the technology best suited for their specific application while also offering a unique ability to meet technical challenges, such as manufacturing parts combining these complementary technologies. AddUp's FormUp 350 PBF machine is modular and scalable to provide the highest productivity while ensuring user safety. The DED machines are designed for industrial production and equipped with in-house designed and developed nozzles to provide maximum precision and very high productivity. To provide customers with a true Industry 4.0 solution, AddUp also provides a complete monitoring solution providing quality assurances after each and every build.

AddUp is headquartered in Cébazat, France, with its North American subsidiary based out of Cincinnati, Ohio. In addition to the machine design and manufacturing, the AddUp group also offers part production, POC production, metal AM consulting services, AM training, and design for AM, making AddUp your one-stop for metal AM.

To learn more visit:

www.addupsolutions.com

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