



Materialise Strengthens Aerospace Offering with EN 9100 Certification for AM Metal Parts Production

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A milestone development that unlocks significant supply chain opportunities

Leuven, Belgium — February 25, 2025 — Additive manufacturing (AM) pioneer Materialise has gained EN 9100 certification for its metal AM processes for aerospace. A sector-specific variant of ISO 9001, EN 9100 certifies that an organization has implemented a quality management system that ensures product quality, process control, regulatory compliance, and continuous improvement.

The company already holds EN 9100 for its polymer additive manufacturing processes dedicated to the sector, producing upwards of 500,000 flying parts to date for aircraft OEMs, suppliers, and MROs. The development, therefore, represents a major step forward in the adoption of metal 3D-printed parts for aviation and space.

With EN 9100 for metal now in place, Materialise's manufacturing capabilities open up a whole host of new opportunities for part design and supply chain efficiencies for all stakeholders in the aerospace ecosystem.

A smart place to start: metal 3D printing for low-criticality parts

Materialise is no stranger to meeting stringent standards. The company is one of only a few providers of additive manufacturing processes certified to Airbus AIPI standards — recently achieving the highest possible grade on the Airbus Quality Maturity assessment. The AM-for-aviation specialist also holds a Production Organization Approval (POA) from EASA, enabling them to manufacture flight-ready polymer parts to Form 1 accreditation.

With EN 9100 certification for metal now complementing its existing credentials, Materialise is ready to help the entire aerospace value chain identify and source flight-ready metal or polymer 3D-printed parts — with low-criticality parts a particularly strong opportunity for the sector.

Erik de Zeeuw, Market Manager for Aerospace at Materialise, commented: *"Low-criticality parts that need to be light, strong, and durable, such as seat bezels, housings, interior trims, or ducts, are particularly strong candidates. They often need to be repaired or replaced, but in small quantities. These are requirements that align perfectly with key benefits of metal 3D printing, including the ability to have digital 'on-demand' stock for faster, more reliable sourcing, and cost-efficient production of small series parts."*

Parts are made more economical, adaptable, and readily available

In an industry where production volumes are often low, 3D printing's tooling-free technology makes small-series manufacturing considerably more affordable than conventional methods, where cost per part is much more dependent on volume.

With no 'minimum feasible production run' for metal 3D-printed parts, there are also no costs associated with wasted stock or warehousing of excess spare parts.

Erik de Zeeuw said: *"Paying only for parts used, and with a lower TCO, is clearly beneficial. As is avoiding any potential supply chain disruptions that could delay part availability, which in turn can end up grounding flights for long periods of time. What's more, it becomes less cost-prohibitive to review and adapt parts for continuous improvement."*

Helping new metal AM applications "take flight"

The scale of its manufacturing facilities, its status as a POA, and now the quality assurance delivered by its EN 9100-certified processes means that in addition to printing flight-ready parts, Materialise is ready to help Design Approved Organisations explore and produce new parts in line with industry standards — its processes aiding qualification requirements.

Erik de Zeeuw added: "The quality and process control system we have in place simplifies the digital thread necessary for qualifying 3D-printed metal parts. And that's something we are incredibly excited about.

"We are ready to talk to and work with our extensive network of partners in space and aviation to identify, produce, and develop the perfect applications for metal AM. Together, we will definitely see a whole raft of new opportunities quite literally take flight."

You can [learn more about Materialise's certified manufacturing offer for aerospace here](#).

About Materialise

Materialise incorporates more than three decades of 3D printing experience into a range of software solutions and 3D printing services that empower sustainable 3D printing applications. Our open, secure, and flexible end-to-end solutions enable industrial

manufacturing and mass personalization in various industries — including healthcare, automotive, aerospace, eyewear, art and design, wearables, and consumer goods. Headquartered in Belgium and with branches worldwide, Materialise combines the largest group of software developers in the industry with one of the world's largest and most complete 3D printing facilities