

AMOS produces and tests mechanical and optical aerospace parts

18 June 2021, 02:00 Hilde Krikor Francine Schoumaker

For over 35 years, AMOS has been developing and producing high-precision bespoke optical and mechanical equipment at Liège Science Park in Sart Tilman. Its main achievements are professional telescopes, space optical systems, test equipment for space instruments, and high-precision mechanical equipment. The company is a world leader in telescopes with a 2- to 4-metre diameter and is a European leader in space optical systems. The AMOS customer base includes well-known European, American and Indian aerospace industry companies and taps into new markets as well.

State-of-the-art technical solutions

AMOS has more than 100 highly skilled employees. The company has the expertise and capacity to design and produce state-of-the-art solutions to address current technological challenges. AMOS remains one of the few complete system integrators in Wallonia that can manage a project from start to finish in-house or in conjunction with local subcontractors: design, initial calculations, plans, manufacturing, assembly, tests and on-site installation. The technology varies: mechanical, optical, thermal, electronic, material technology, high-vacuum, welding technology and assembly.



Spaceworthiness tests

As part of their aerospace projects, AMOS contacted Sirris regarding the production of aerospace parts, specifically in terms of the thermal treatment of aluminium components and their 3D printing. AMOS also required various procedures to be characterised, with the aim of qualifying these parts for aerospace use.

The tests required included the characterisation of adhesive bonds (tensile and slide tests and using the climatic test chamber) and the characterisation of various surface treatments on a variety of substrates (including thickness measurement and adhesion tests).

These tests have enabled AMOS to validate specific processes for various ongoing aerospace projects.

"We value Sirris's responsiveness during the project. Whether quotes, tests or the reports, we could always depend on Sirris to give us a quick answer. The results are relevant, extensively documented and if any issues arise, Sirris experts were soon ready to determine how to resolve the problem the best they could based on our expectations. The fact that our organisations are geographically close to each other was an added advantage."

- Laurent Wéra, Electromechanical Engineer at AMOS

Authors



Hilde Krikor

Francine Schoumaker