



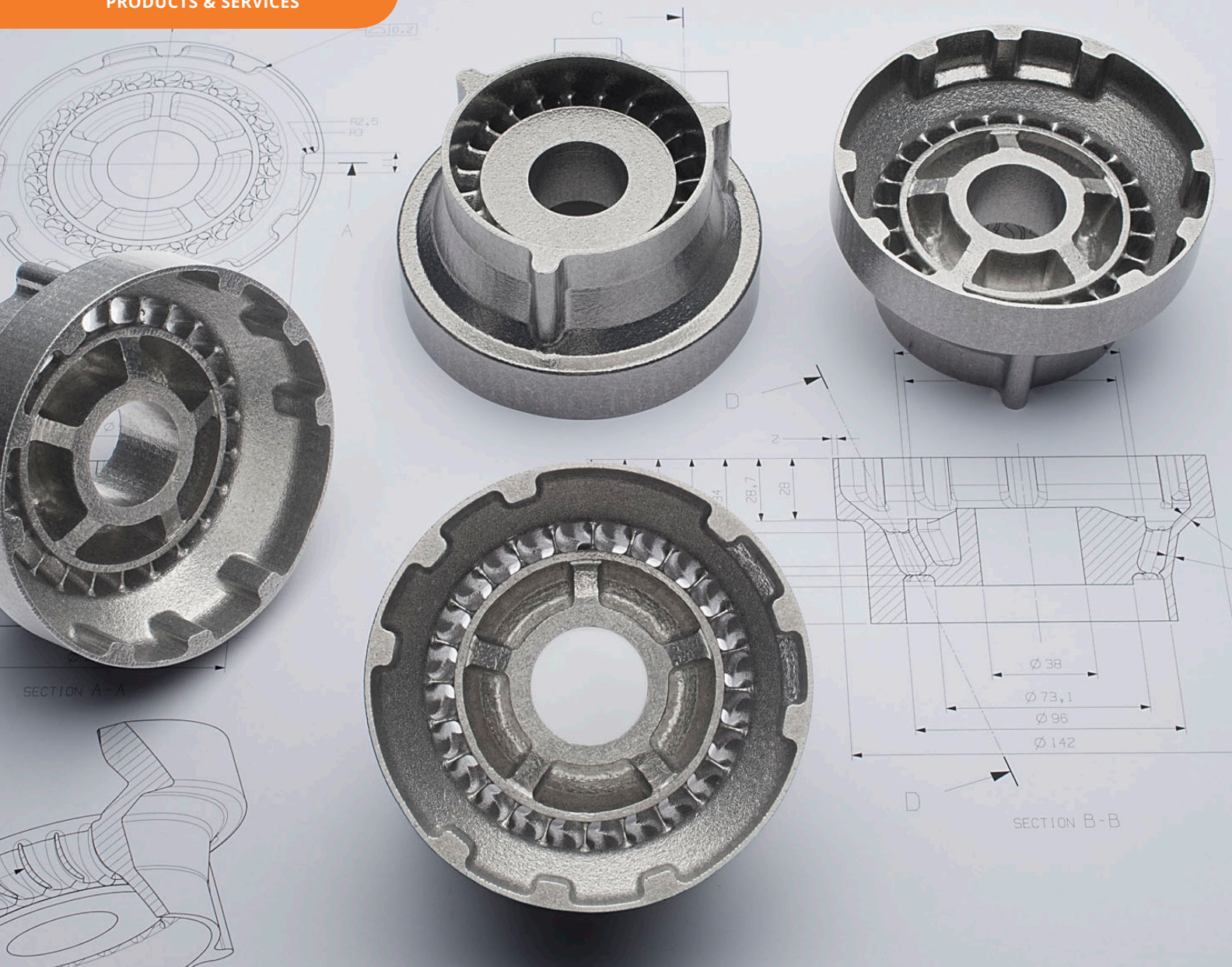
Dedicated to innovation in aerospace

AEROSPACE VEHICLES DIVISION

STRUCTURES TECHNOLOGY

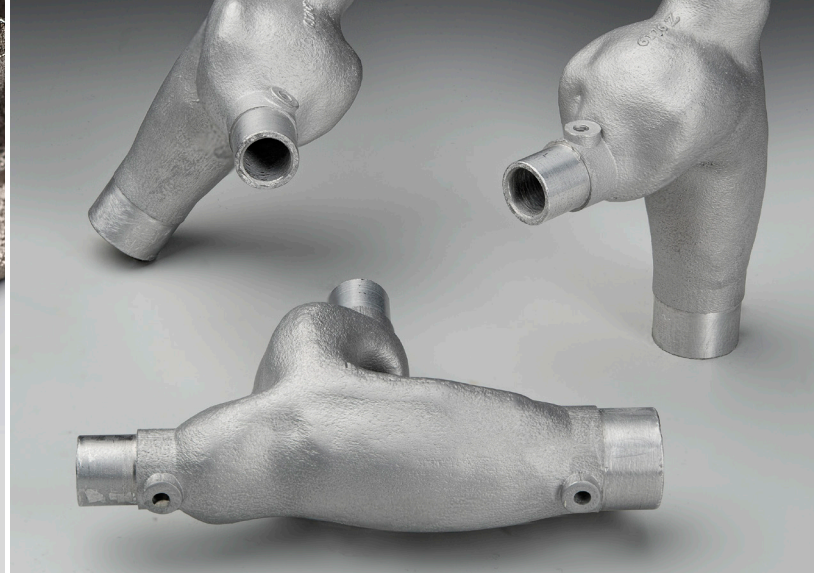
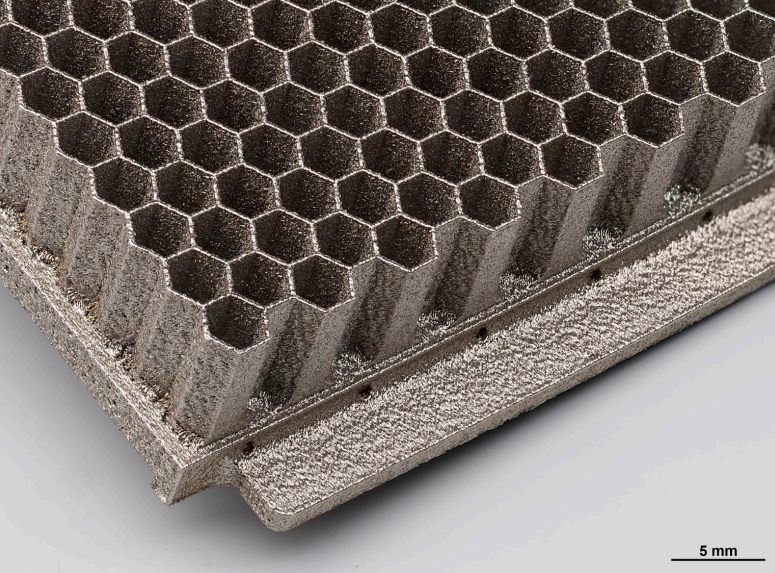
Join the AM technology programme

PRODUCTS & SERVICES



Get the maximum out of Additive Manufacturing!

From design to prototype. NLR has unique capabilities to assist you in developing your high-tech AM product, meeting its requirements and specifications. NLR has the knowledge, experience and facilities to deal with issues like design optimisation, process optimisation and qualification, material analysis and certification. To support you in getting the maximum out of Metal Additive Manufacturing, NLR is setting up a new AM programme in which you can participate.



WHAT YOU NEED

Do you ask yourself the following questions:

- How can I optimise my Additive Manufacturing product and process? - Can I apply new materials?
- How can I meet the (certification) requirements?
- How can I produce parts with appropriate accuracy and strength?
- What does AM cost? Is there a business case for my idea?
- Should I invest in equipment and knowledge? Is there a more cost effective way to achieve my goals without high risks?

WHAT WE DELIVER

Phase two of our AM programme. The programme is aiming at:

- Certifiable product development - Improving your AM-design optimisation capabilities
- Optimising and manufacturing of your technology demonstrator products
- Application of Laser-Powder Bed Fusion (L-PBF) and Direct Energy Deposition (DED) for production or repair
- High quality processing of multiple materials
- Development of a capability for processing new materials, graded metals and Metal Matrix Composites (MMC's)

OUR CAPABILITIES

NLR is currently coordinating an AM programme which runs until the end of 2018. In this programme a consortium of industry, research institutes and universities have already made substantial progress towards process optimisation, quality assurance, process qualification, part certification, design values, post processing and design rules and tools.

NLR is now defining a new multi-year programme that connects to the running programme. This programme is based on a joint investment of all participants. Companies annually contribute 30 k€. The budget is supplemented with funding from NLR and TKI-HTSM. The targeted annual budget is 575 k€ which adds up to a total project size of 2.3 M€. All results will become available for all programme members. IP rights are covered according to EU guide lines.

The programme will focus on continued research and development of high-tech, high specifications products. Intensive consultation currently takes place with stakeholders to determine the content of the next programme. We ask you to let us know which topics should be addressed in the follow-up programme, so you can help to shape it. Participating in the programme will give you the possibility to:

- shape the programme content to your needs
- give you access to advanced Additive Manufacturing capabilities
- let you have strong interaction with fellow participants
- get intensive support and sharing of knowledge
- develop new or optimised high tech products
- apply new materials for demanding applications
- develop new manufacturing strategies.

NLR brings in over 45 years of advanced product development for aerospace applications, ranging from preliminary design to certified product, covering a wide variety of disciplines. NLR also has available dedicated facilities for advanced product manufacturing and testing.

PRODUCTS & FEATURES

Your advantages:

- Steep learning curve
- Access to NLR knowledge and facilities
- Benefit from research commonalities
- Exchange knowledge with other participants