## INSIGHT

## Growermetal meets aerospace requirements

Aviation, space and defense applications are particularly challenging when it comes to providing reliable and durable components. To meet the needs of this sector, Growermetal has combined a certified process with an innovation-oriented strategy to create a range of washers that can face extreme conditions.

rowermetal SpA has taken several steps and made crucial changes over the years in order to reach the point of introducing its latest evolution of aerospace solutions. For instance, in order to build on the commitment to accessibility, Growermetal's branches started playing a strategic role in addressing new clients from challenging sectors, such as aerospace. The company also looked at aspects that would help in the implementation of the aerospace service, such as new coatings, treatments and technologies – all aimed at enabling Growermetal to manufacturer washers suitable to highly demanding requirements and standards, such as those involved in aerospace.

The Italian company focused on investing in its R&D activities, with it obtaining the EN 9100:2015 certification for quality management system according to the aerospace specifications in 2021. Opening the way to customers from the aviation, space and defense industries.

Still today, Growermetal continues to focus on upgrading its service, by combining internal services and external resources with participation in important projects, always guided by the purpose of creating innovative and reliable fastening solutions. The company's commitment to research and innovation is underlined by the Growermetal Innovation Center (GIC), which will come into operation in 2024 and is a new multifunctional building to promote and create opportunities for sharing ideas and studies.

The ability to meet the needs of the aerospace sector is highlighted in the company's product portfolio, with a standout feature the meticulously crafted washer range that offers a wide variety of designs and functions, together with the possibility to create tailor-made geometries for the unique requirements of aerospace applications. Among the products, clients can count on different types of external teethed washers, internal teethed washers, coiled spring washers, flat washers for screws, conical elastic washers, corrugated elastic washers and convexed elastic washers.



Beyond manufacturing excellence, Growermetal also distinguishes itself through comprehensive in-house services that complement its product line. Ranging from design to quality testing, every step is carried out inside the headquarters to ensure continuous monitoring and an optimisation of resources throughout the production process.

The first part of manufacturing involves the design department and the tool shop, where Growermetal's professionals design and create tools and parts. During production the company is able to carry out both raw material and semi-finished processing, followed by the possibility of adding specific surface treatments, heat treatments, as well as surface finishing and coatings – including mechanical zinc plating and zinc flake coating.

To ensure structural integrity, conformity, and flawless washers and blanked parts, the combination of mechanical sorting, optical sorting, testing, as well as internal tech laboratories for quality controls, provide a match of speed and accuracy for high-quality results.

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In a scenario where aerospace companies look for reliability and efficiency, having a robust supply chain management capability allows Growermetal to ensure timely delivery of components. From this point of view, one of the key strengths of the company lies in the automatic warehouse, which enhances the logistic service.

With 11,000 storage locations, 17 storage levels and 5 LGV shuttles moving goods in an average of 800 missions per day, the warehouse system handles 4,000 items and includes packaging machines that complete the service. Thanks to this structure, Growermetal meets the demand for flexibility and competitiveness in the aerospace sector, providing cost-effective processes, 'just in time' production, order fulfillment and customised solutions – without compromising on quality and compliance.

The commitment to excellence is also underscored by Growermetal's adherence to industry leading certifications, such as the EN 9100 certification for the aerospace industry, IATF 16949 for automotive, ISO 9001 for its quality system and ISO 45001 for occupational health and safety. In particular, the desire to create more efficient and sustainable processes has led to the company obtaining ISO 14001 certification for environmental management system and the ISO 50001 certification for energy management.

This is also part of the effort to create a system based on energy saving, lower waste production, clean sources, CO<sub>2</sub> reduction and other actions, which is focused on five different pillars:

- 1. The selection of suppliers that align with the values of sustainability, transparency and efficiency.
- 2. The choice of innovative and low impact raw materials.
- 3. The development of durable products with high performance.
- 4. The delivery of energy saving processes based on the use of clean energies, the correct disposal of waste, and chemicals, and the recovery of energy.
- 5. Resource optimisation through advanced and high efficiency machines.

Shifting the focus to recent achievements, in 2023 Growermetal became a member of the Lombardia Aerospace Cluster – a network of local and international realities involving more than 100 companies, universities, research centres and other players. The objective of this platform is to create value, innovation and competitive growth for the aerospace industry, while providing the Lombardian aerospace system with a united and visible collective identity and working as the interface with institutions and third parties.

In addition to theseprojects, the attention paid to the aerospace sector

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included the participation at important aerospace trade fairs. At the end of November 2023, Growermetal actively took part in Aerospace and Defense Meetings in Turin, Italy, marking a significant milestone in its engagement with the

industry. The Italian manufacturer had the opportunity to present the latest fastening solutions and showcase the main innovations of its service, connecting with industry leaders from all over the world.

Looking ahead, Growermetal also plans to attend future trade fairs where the company will continue to present its products and connect with other industry leaders, in order to keep being an active participant in the aerospace sector and strengthen its international presence. The first stop will be in the USA at HAI HELI EXPO in Anaheim, California, from  $27^{\rm th} - 29^{\rm th}$  February 2024.

With a forward-looking approach, global presence, innovation strategy, and wide range of washers and components, Growermetal is committed to bringing reliability and flexibility to aerospace companies – driven by the desire to deliver a competitive service and through keeping an eye on the latest trends of the industry.

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