

Growermetal dedicates itself to R&D



Inside Growermetal's headquarters in the north of Italy challenges are pretty common. Since it was first established in 1950, the fastener manufacturer has always been looking for the highest quality, which has led to it constantly seeking innovative technologies and the selection of the finest material and designs for its safety washers.

Although recent years have represented quite a concern, even for a well-established enterprise such as Growermetal, the company's know-how and completely in-house production has sustained it during this most challenging period. The company also found a new balance and rearranged its organisation, in line with the general difficult economic phase.

"After the positive trend registered in 2021, with a growth of 6.6% according to Italian Institute of Statistics (ISTAT), Italian GDP returned to pre-pandemic levels in the first few months of 2022," explains Paolo Cattaneo, CEO at Growermetal SpA. "A recovery that proved the Italian economy to be resilient, even if it now registers a slowdown caused by the Ukraine crisis and the rise in raw material and energy prices."

Paolo continues: "These two aspects, the Ukrainian war and energy prices, represent the most critical factors for the short and medium-term perspective of the Italian economy. In spite of this perspective, in the first quarter of 2022 the export of Italian products registered a positive result, with a growth of 20.7%."

Even with the many changes within the market, between 2020 and 2022, Growermetal still puts great attention on its R&D department and in production systems – exploring new possibilities for its business through innovative technologies.

Research & development

Whilst Growermetal looks to continue its R&D, according to ISTAT insights – published in September 2022 – there was an international reduction of investments in R&D in 2020, with a drop of 4.7% compared to 2019. The largest part of this decline depended on companies (-6.8%) with Italian small and medium-sized enterprises reducing their research funding respectively by 26.5% and 17.5%.

Growermetal's commitment to R&D was underlined even during the first period of the pandemic emergency, with the company maintaining its focus toward technological innovation by becoming one of the founders and partners of a new research centre based on the concept of open innovation – the Joint Research Center MATT (Metal And Transformation Technologies).

This project of the University Politecnico of Milan was created in partnership with many individuals, universities and companies from the area between Milan, Bergamo and Brescia – with the aim of developing innovative research while sharing technical know-how, tools and infrastructures.

"JRC MATT is just one of the many projects of the last three years," highlights Paolo. "Research is a key factor in many different aspects of Growermetal, as proven by the resources spent on funding studies, tests and machinery of our R&D laboratory. »

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» The company is constantly committed in providing cutting edge technologies and testing tools, in order to guarantee a reliable and efficient service in every department, but also to create products according to international standards.”

Even with the consequences of the Covid-19 pandemic, Growmetal reacted positively, supported by its team of experienced professionals and specialists, by also achieving the quality system certification according to the EN 9100:2018 standard for the aerospace industry in April 2021, which is in addition to its other certifications – ISO 9001, ISO 14001, IATF 16949 and EN 9100 certified manufacturing process, which is completely managed and developed in-house.

In-house processes and benefits

The vertical productive model continues to be one of the pillars of Growmetal even in the post-emergency period, as the connection between the departments allows the business to offer many benefits. Among these advantages, customers can count on a single contact for the whole management of their needs. In fact, the company services range from the tool shop, equipped with CAM-CAD-CAE applications and technologies, to different surface treatments, including heat treatments, mechanical zinc plating and zinc flake coating.

“To integrate the production and create more competitive products, we put our quality control laboratories at customer services, in order to provide washers according to international technical, quality and safety standards,” points out Paolo. “Through tests and exams, merged together with continuous monitoring during every phase of the process, the team is able to check the products – ensuring reliable, precise and durable washer performance during the application.”

In synergy with the productive departments, the R&D laboratories also work on the development of customised solutions according to customers’ requirements. Plus, through its fully automatic warehouse, Growmetal optimises the products management and storage for a fast and easy delivery – as flexibility is taken into great account within the company.

Made in Italy

All these benefits have contributed to the creation of long-lasting relationships, which are at the base of Growmetal’s vision of ‘Made in Italy’. A label that is commonly used as a synonym of the finest quality and one that the company aims to spread and enhance through experience, research and innovation.

“For the Italian economy, 2021 revealed itself to be a year of great dynamism for exports, which rose by 13.3% after a 13.4% drop in 2020, as shown by Eurostat data reported in the ‘Relevant Factors Influencing Public Debt Developments in Italy’, published in May 2022 by the Italian Ministry of Economy and Finance,” points out Paolo.

Growmetal has kept up with these trends, strengthening its presence in the European and international markets with partnerships that constitute an essential part of a company’s success. Part of this good response lies in the presence of the company’s Brazilian and American sales branches, which have reinforced the presence of Growmetal in these areas and helped the company in maintaining its reputation as a leading fastener company with a range of safety washers, railway washers and blanked parts – successfully used worldwide in a great number of fields of application.

Range, innovation and Grower SpheraTech®

Growmetal’s remarkable achievements don’t just refer to R&D and optimising processes and services, it also applies to its product family, with a constantly expanding safety washers range. “With more than 4,500 standard products and 2,500 safety washers according to customers’ drawings, we are able to address railway, automotive, power generation, construction, transportation, electromechanic, oil and gas, industrial, agricultural machines and aerospace requirements,” mentions Paolo.

Alongside the launch of Grower TenKeep® in 2019, the family washer range has also seen the introduction of many new products, such as sealing push-in caps, special shaped blanked and bended parts, high thickness and precision flat washers and metallic parts with glued or moulded EPDM inserts.

Among the latest products created, Growmetal’s R&D department has also developed Grower SpheraTech®, an innovative preassembled set that was launched last September at the InnoTrans trade fair, and was presented also during the IZB trade fair in Wolfsburg, Germany.

The Grower SpheraTech® design consists of an inseparable preassembled set composed of a spherical top washer and a conical seat washer, which Growmetal reports guarantees many benefits in terms of application and performance. “First of all, it constitutes a safer bolted connection on uneven or non-parallel bearing surfaces, with a maximum angle of 3 degrees,” highlights Paolo. “This characteristic, together with the two different versions and the many sizes available, makes the locking technology of Grower SpheraTech® suitable for several mechanical applications, including railway, automotive and industrial machinery applications.”

“Secondly, the particular design of the set, and the coatings available, make it a reliable bolted connection for an excellent locking. Finally, it provides a single inseparable set instead of two different pieces, so that the top washer and the seat washer are permanently connected to one another. This is a great advantage in eliminating the risk of incorrect mounting and guarantees a safe application – while making the assembly particularly practical, quick, and easy, even in areas that are difficult to reach.”

Paolo concludes: “While the company is preparing for the next trade fairs in 2023, the promotion of our new products will be the occasion to spread and share our values, together with our short-term and long-term objectives. A programme that relies on quality, sustainability, and research, to expand the possibilities of the safety washer sector through new solutions.” +

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ELEVATING SAFETY WHEREVER YOU GO.



Experience allows us to face the most challenging aerospace applications.

From the single detail to the big picture, research has always inspired our vision and fuelled our ambitions, rewarded by the achievement of the EN 9100:2018 certification. A recognition of the highest quality and safety standards, which are the key to the production of excellent, reliable and flawless washers.

This is how we spread innovation and push every limit.

