

Maximising precision and productivity

Growermetal Srl specialises in the production of security, spring and flat washers, as well as pressed parts according to customers' specification. Will Lowry visited Calco (LC), Italy, to learn more about the company and how it has established itself as a reliable manufacturer that can provide the entire production process in-house.

Established in the 1950s by Mr Cattaneo, Growermetal is a family owned business with Mr Cattaneo's three sons – Roberto Cattaneo, managing director supervision sales and administration, Ernesto Cattaneo, managing director supervision purchase, logistic and environment, and Paolo Cattaneo, managing director supervision technical management, production and quality – all involved in the day-to-day running of the business.

"The name Growermetal is formed from the commercial name of our spring lock washer – Grower – which was the product our father started the company selling," explains Paolo Cattaneo. "He even included the spring lock washer shape in the design of our logo. Since then we have added a wide variety of products as a result of customer demand, which has seen us steadily grow year-on-year."

Growermetal's products can be used in a variety of applications, which has led to it expanding into markets across Europe and the world. "Nowadays our domestic market is Europe, but we have been expanding more and more into the rest of the world," mentions Paolo.

Further proof of this was at the beginning of 2014, when Growermetal opened its own North American office, G & G Safety Fasteners LLC, located in the state of New Jersey. In order to further strengthen its presence in the US, Canadian and Mexican markets.

Growermetal divides its production into two main families of products – pressed parts and products made of wire. In 2013, the company produced 3 billion pressed pieces – approximately 7,400 tonnes – and 300 million wire pieces – approximately 1,600 tonnes. The product range includes over 1,500 standard washers according to DIN, ANSI, NFE and other international standards. Available products include toothed washers with internal and external

teeth, conical washers, contact washers, Sperrkant washers, spring lock washers, spring washers for railway applications, corrugated washers, terminal washers, flat washers, flat ripped washers, as well as the new Grower Twin-Lock® – a wedge lock washer. Products are available in steel, carbon steel, stainless steel, bronze, aluminium, copper, brass, Inconel and other alloys upon customers' requests.

A key strength of Growermetal's production is its ability to manufacture special items – with the company producing more than 1,200 products according to customers' drawings or specifications. "We are experts in the field of specials, thanks to our experience with bespoke washers," says Paolo. "Everyday we receive drawings from customers that want to see if we are able to produce a washer to the necessary specifications and standards. We have to study the part, check the feasibility and go back as quickly as possible to the customer with an answer. We need to be certain that we will be able to offer a reliable service."

A key factor in Growermetal's ability to deliver a reliable, quick and flexible service is that it can offer the entire production process in-house. This includes tooling design and manufacturing, blanking and coining, rolling of metal wire, cleaning and surface finishing, heat treatment, mechanical zinc plating, sorting, packaging and storage, and quality control.

"Having the entire production process in-house means that we can also control and guarantee the quality of the products at every stage," states Paolo.

The production process begins in the tool shop with the design of tooling. The tool shop is equipped with the most advanced machinery and latest technology such as CNC drilling-milling machines, EDM machines, grinding machine and CNC lathes. This enables Growermetal's experienced technical staff to develop new tooling and decide whether the company can reliably produce the product for the customer.

"Thanks to our tooling department expertise we are able to maximise the precision and productivity of the tooling, with all the tools made on-site and the property of Growermetal," explains Paolo. "That gives us maximum flexibility when we need to work with customers on special products."

An important stage of the internal process is that Growermetal can offer mechanical zinc plating treatment in-house – enabling it to satisfy the demand for its own products, as well as for third parties. The mechanical zinc plating is an anti-corrosive coating, which minimises hydrogen embrittlement risks and also has a lower energy consumption. The mechanical zinc plating division is qualified by MacDermid® and Growermetal is an accredited licensed plater for ZinKlad 250 M treatment.



"Having the mechanical zinc plating process in-house has been a big advantage for us because it means that our production process is a lot more efficient," says Paolo. "Mechanical zinc plating is one of the most popular platings requested by customers and being able to carry out this treatment in-house means that we can improve lead times for our products and guarantee we provide an effective and efficient service."

Growermetal is also able to offer other surface coatings, carried out by a third parties offsite, including zinc flake coatings (GEOMET®, Delta Protekt®, etc), galvanic zinc plating, zinc-nickel plating, nickel plating, copper plating, phosphating and other surface treatments upon customers' requests.

Throughout the production process, Growermetal is committed to quality and ensuring that only the very best products are produced. The company is certified according to ISO 9001 for quality management and ISO 14001 for environmental management. The company is also certified to ISO TS 16949 for automotive quality management.

"If you are working within the automotive market you have to be ISO TS 16949 certified," states Paolo. "We don't deal directly with automotive OEMs, we sell our washers to the bolt/screw producers and they assemble our washers onto their products and supply pre-assembled products to the automotive company. This is advantageous to automotive OEMs as it makes it easier and more efficient for them to install the product in the final application."

To ensure that it is providing the flexibility, quality and service that is required by the automotive industry, Growermetal had to adapt its process and factory to include a new high-bay automatic warehouse.

"We initially decided to invest in a new automatic warehouse in 2005," explains Paolo. "Due to our location there isn't much space around us, so we needed to increase the space going up rather than out. The process started in 2006 when we asked for the planning permission and permits to have such a high building. However, due to Italian bureaucracy it took 6/7 years to get all the necessary permits and authorisation. Therefore it wasn't until 2012 that we received the green light from the authorities and it took a further year to design and build the automatic warehouse."

The new automatic warehouse went into service in September 2013 and has 11,000 half-pallet storage places and includes four trasloelevators and LGV shuttles. The introduction of the new



Growermetal's in-house zinc plating process

warehouse has enabled Growermetal to have a more secure process and better control over what it packs and delivers to the customer.

"It has been a very long process but it has definitely been worthwhile," adds Paolo. "It was a huge investment for us as a company, but we are very happy with the result. We now have a lot more room for our products and we have been able to introduce over 200 new part numbers. Our customers have also seen a big benefit as we have been able to improve lead times. We can also avoid mistakes during the picking of the shipments and work more effectively."

Paolo continues: "The automatic warehouse acts as a very good business card for our company. Whenever we have customers visiting, they are always impressed with the warehouse. It underlines our capabilities and commitment as a company to grow."

The addition of the automatic warehouse, combined with its ability to provide the production process in-house, is undoubtedly a significant step for Growermetal. From speaking to Paolo Cattaneo it is clear that the company is focused on growing in the future. More importantly, throughout the core of the company there is an absolute dedication to manufacture high-quality products and provide a service that can be totally relied upon by its customers.

So what is next for Growermetal? "There are so many variables that can affect the market, so you always have to be careful. However, we are looking forward to next year with optimism. We have invested a lot in the company over recent years and with the addition of the new automatic warehouse we will be looking to expand into new markets and sectors. In the near future we will continue to expand our production capacity and introduce new production technologies, in order to expand the range of products we can offer to our customers."

Paolo adds: "At the beginning of 2015 we will enlarge our covered area by a further 2,000m² and inaugurate the new 800m² sales and administrative offices. In February 2015 there will also be the Fastener Fair show in Stuttgart, which is an important event for Growermetal. It is a meeting point for the entire industry and gives us the opportunity to meet with existing and future customers. We will be exhibiting at the show and invite all visitors to come to our stand (booth L90 – hall 6) to find out more about our product range and how we can work together with mutual success and benefit."

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