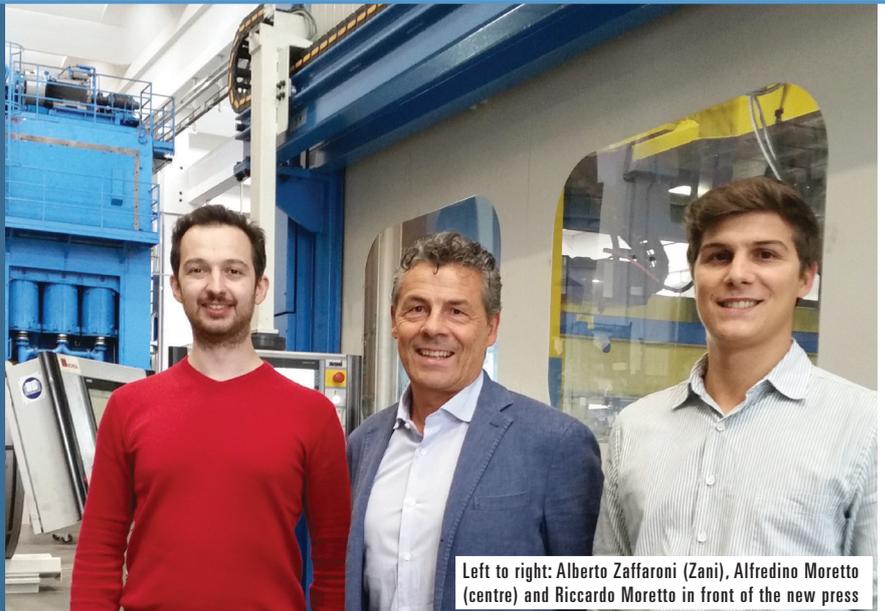


# SHEET METAL GIANT



Left to right: Alberto Zaffaroni (Zani), Alfredino Moretto (centre) and Riccardo Moretto in front of the new press

*ISMR* visited Moretto SpA (Vicenza, Italy) to see its latest new servo press – the largest that Zani has ever built...

## ISMR SAYS:

*"The new press has enabled Moretto to approach new markets and new customers for a range of new stamping projects"*

Over the years, the Italian Moretto family has tenaciously built up a leading European company in blanking, industrial moulding and cold-processing of sheet metal as well as assembly operations. Its three specialised units – R&D, tool design/manufacture and forming/blanking – have evolved around its customers' requirements, across a range of different industry sectors, and adapted to constant changes in the market.

Moretto makes parts for manufacturers in the furniture; building; air conditioning and electronics industries and, in recent years, has considerably extended its business into the automotive sector. It employs around 150 people in Italy and makes its own tools and dies. It supplies a diverse customer base – from Europe to the U.S. and, to further extend its activities, has set up a factory and business unit in Poland (2015) and in Serbia (2016).

The company has continuously invested in new technology from large heavy machines to multi-purpose presses and, more recently, new welding equipment to meet the needs of its customers. At its Rosà headquarters in Italy, it has approximately 52 presses (from 50- to

3200 tonnes) and has just made a significant new investment in a Zani SM Servo Master 3200 S4-70-75 servo press, the largest that Zani has ever built. *ISMR* flew to Italy to meet the company's management and view its sheet-metal operations, including its new servo press.

## Automotive stamping

"Moretto SpA is a family-owned company – it was established in 1983 by my father and started by making household items. Since 2008, we have also been working in the automotive sector, which currently accounts for over 68% of our turnover – and this is growing. We managed to work our way through the financial downturn in 2008 by working across different sectors – we have grown our turnover by 67% over the last five years," Alfredino Moretto, the company's CEO, told *ISMR*.

**"The company has continuously invested in new technology from large heavy machines to multi-purpose presses"**

"We look after Italian customers as well as customers from all over Europe (Germany, France etc.) and the U.S. From this year, we are also directly supplying a Tier 1 automotive OEM. We generally stamp parts in aluminium and steel in thicknesses ranging from 0.3mm to 16mm."

Flywheels for clutches are significant products made by Moretto for the automotive sector. These parts are very thick (7-8mm) with very narrow tolerances and, up to last year, Moretto made them on two presses. The ability to stamp these parts on just one press (with a large 7m x 2.4m table) was a major benefit for Moretto and fuelled its decision to purchase its first servo press from Zani SpA, an Italian press manufacturer.

"The ability to stamp this part on just one press has significant cost and time benefits for us," explained Alfredino Moretto. "You need a particular press, with particular characteristics (such as high tonnage, servo motors etc.) to stamp this part. We decided to purchase the press at the end of 2015. The benchmarking process started in 2014, and we approached different suppliers for quotes, but we decided on Zani because the company met our requirements, with the customised, tailor-made approach that we needed. This was very much



The Zani SM Servo Master 3200S4-70-75 servo press, the largest press that Zani has ever built



The servo press control

## Zani SM Servo Master 3200 S4-70-75

The SM 3200 S4-70-75 is the biggest press that we have ever built," Alberto Zaffaroni, Customer Support, Zani SpA told *ISMR*. "Challenges in today's sheet metal market mean that processing systems are increasing in size and complexity. The new servo-transfer press has a 32,000 Kn nominal force, with bolster dimensions of 7000 x 2500mm, and a total weight of over 1,000,000 kg. It features several Siemens servomotors, all with direct drive and with a total installed power of nearly two megawatts. With a maximum slide stroke length of over 700mm, it is able to reach speeds of over 30spm."

Despite such high installed power, the press can reduce its energy consumption with its energy management system, along with capacitors and a motor flywheel. Energy is stored up during the free movement phase of the slide and then released, when it is needed, during the forming stage. The foundations of the press, as *ISMR* saw at Morello SpA, are over 5m below floor level.

"The slide motion profiles are infinitely programmable, which makes this huge press extremely flexible," added Zaffaroni. "The press will be used for both production in transfer mode and for progressive die operations, stamping high-tensile steel sheet."

a joint project with Zani. The press itself arrived in Spring 2017.

Zani SpA manufactured a particular knuckle joint press that, combined with servo motors, was designed to guarantee much higher rigidity – another reason that the press was chosen by Morello SpA. The press is also suitable for special and structural jobs. Because of its size, it can accommodate special tooling so it can be flexible for a range of projects. The press can also stamp high-tensile material, a major advantage for Morello as high-strength, low-weight material is used more and more in the automotive sector. Zani is supporting Morello with training, as it is the first servo press that the company has bought.

"We also stamp other parts for other projects on the press, mainly for the automotive sector. We have been using the press for a few months now and, based on the tests we have done with different parts, different processes and different tooling, we are very happy with the results. The maximum material thickness we can stamp on the press is 16mm and the maximum width of the coil is 1800mm," added Francesca Martinello, General Manager, Morello SpA.

"This is the first servo press we have bought – we hope the first of many. The most immediate benefit, compared to mechanical

presses, is its near silent operation. Servo-motors control the slide movement before impact on the die, so the press is quieter and stamping performance is much better."

### Developing new business

"Thanks to this press, we have been able to approach new markets and prospective new customers for projects that can be stamped on the new press. As a result, we already have two new clients, who wish us to stamp large automotive parts on the new press, so this has opened new opportunities for us," Riccardo Morello, of Morello's purchasing department, told *ISMR*.

The new press is also expected to bring new business, to replace more traditional stamping staples, at Morello as the automotive industry continues to evolve.

"The automotive market is growing and growing, in terms of business for us, in Europe. The electric car is expected to become more prevalent in this industry over the next few years. A large percentage of the automotive parts that we currently stamp are heat shields so, with the rise of electric cars, we expect this business to substantially reduce. However, we hope that this new press will help us to bring in new business so that we can stamp products/parts for the chassis. These are parts that we do not currently stamp but, on the new press, this business could potentially replace some of our

business from heat shield parts in the future," explained Alfredo Morello.

Morello prides itself on its flexibility and responsiveness to customer requests. It always aims to respond quickly to requests for quotation, information or any changes to existing orders or part specifications. Accommodating customer needs, for challenging or innovative parts development, and working closely with them on new projects is part of this.

Alfredo Morello has some exciting new plans and investments in mind for the future, to keep the company on its growth trajectory.

"At the moment, we deliver parts to customers who do secondary operations and assembly themselves to make a complete product. In the future, we intend to introduce secondary and finishing operations (such as laser cutting systems, welding systems and CNC capability) so that we can finish the part here and supply it to the customer. We are doing this in a step-by-step process, and are starting by offering welding operations (we have already ordered new welding systems). We will introduce the other technologies onto our shop floor over the next two years," he told *ISMR*.

"We also intend to eventually make the part drawings for the client and take care of the entire part creation and manufacturing process ourselves. So, if the customer tells us the part they need, we can create the drawings for them and then take care of the entire manufacturing process so that we become a one-stop shop for customers. We are already working towards this goal and starting this implementation."

With such an innovative approach, and new ideas to further develop its business, Morello SpA can count on added flexibility and capability from its new servo press. ■

**Products**



			
Hub (clutch) Steel alloy (MnCr), 4mm	Flywheel (clutch) Steel, 7mm	Drive plate Steel, 5mm	Heat shield (multi-layer) Stainless steel, 0.25mm smooth
			
Halteplatte Steel, 3mm	Primary Cover Steel, 3mm	Backrest adjustment Steel, 3mm	Heat shield (multi-layer) Hot-dip galvanized steel, thickness 0.4mm

**A selection of parts stamped by Morello**

### CONTACT

For further information, see  
[www.morellogroup.com](http://www.morellogroup.com)  
 or [www.zani.net](http://www.zani.net)