



*Dimitri Campanini*

# Plastic modelling

For several decades now involved in the business of thermoforming plastic materials, this Italian company manufactures camper parts for the RV sector. Its remarkable manufacturing flexibility is made possible also thanks to the presence of an inhouse department for the preparation of the moulds.

*Words Andrea Cattaneo*

The company began operating in 1988, when Lapiplast staffed three employees who worked in support of the three founding members. Today, 32 years later, the founding members are still three and are more busy than ever in the production department. Here to tell us the story of this company is Dimitri Campanini, sales manager of Lapiplast. This Italian manufacturing business with headquarters in Emilia Romagna operates in the field of plastic components and is also strongly involved in the RV compartment, acting as a vendor to various European camper and caravan manufacturers. The company can rely on several years of experience in the vacuum forming process, with the use of various plastic materials such as abs, polystyrene, PEHD,

methacrylate, and polycarbonate. Lapiplast began growing considerably in the late 1990s and in 2001, it transferred its headquarters, massively expanding its manufacturing plant, which presently covers a surface of 10,000 indoor square meters out of a total surface area of 15,000 square meters. But there is also another area of considerable expansion: in fact, a new production hall will be built close to the company's current headquarters. Part of the construction works have already been completed, but the finished building should be ready in a couple of years and will have an indoor surface area of 45,000 square meters out of a total 85,000 square meters. The goal is to create a single production hub for the various manufacturing processes and for

the compartments in which Lapiplast operates. The company, in fact, is also present in other industrial sectors besides that of RVs. Its plastic components are used to form the parts of agricultural machines (from small lawn mowers to large farming tractors) and operating machinery (such as excavators), as well as pleasure watercrafts and industrial cleaning machines. But Lapiplast's thermoformed components are also used to form medical devices, equipment for beauty centers and for the refrigeration of transport vehicles. The company's expansion plan stems from the idea to broaden its production and add new technologies to the ones already in use. The company staffs about 100 employees and its turnover is in the range of 11 million Euros per year. Lapiplast today supplies its products to top European camper manufacturers, and the RV sector accounts for 30% of its production: an outstanding result considering that the company set foot in the RV industry only eight years ago.

## Responding instantly to customers

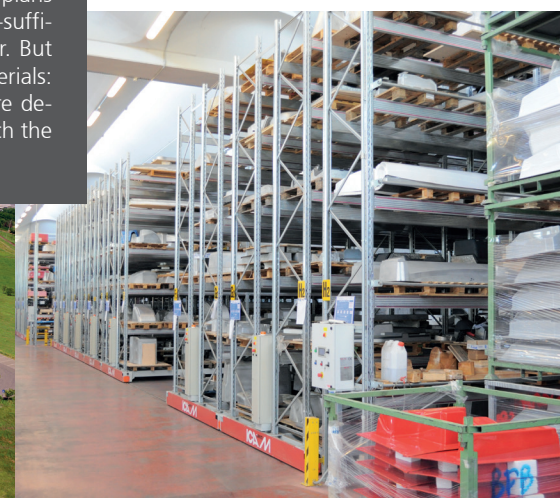
*"Our growth in the camper industry was quite rapid", says Dimitri Campanini, sales manager of Lapiplast. "Our great attention to the quality of the materials and our customer service had a highly positive impact in that sense. We always try to help camper manufacturers, guiding them towards the choice of the most suitable material given their needs in a spirit of cooperation, in order to achieve the best result in terms of sturdiness, aesthetic appeal, and*





## Respect for the environment

All of Lapiplast's manufacturing plants have roofs tiled with solar power panels. The new manufacturing plant, at the core of the company's plans for future expansion, is already entirely self-sufficient, thanks to a 500kW power generator. But we also are quite keen on recycling materials: all Lapiplast plastic components, in fact, are designed to be fully recyclable when they reach the end of their life cycle.



production cost. When necessary, we propose new materials and special finishes, with an eye also to the product's design. We have an in-house engineering and design studio, and we often need to work with the customer to perfect some parts: our customer-oriented mindset helps a great deal in this respect. But it is also essential to be flexible and to be able to provide instant feedback to the customer's requests, from production urgencies to the special finishes of the items manufactured. We've created several teams inhouse that are quick to take immediate action, you could say that we're "big yet also small", we've grown a lot but still respond quickly to customer queries like a small business normally does, thanks to our agile organizational structure and to our production capacity. Our flexibility allows us to work both in service of the large multinational group as well as the small local business".



Lapiplast is capable of manufacturing all kinds of components for campers and caravans, from the rear bumper to the underbody frames, from the decorative rear elements to the front ones, but also internal parts such as bathroom components, supplying them assembled and ready to be installed on the vehicle. Great care is placed on all details: many small parts, like the fastening screws for instance, are studied in detail, with the aim of finding the best solution. "For the finishes", Dimitri Campanini tells

us, "customer requests are carefully assessed together with the supplier of the raw materials. For example, we study the component's colour: a special combination of colours, a plastic material with a slightly matt metallic finish... The materials and finishes have to meet the customer's specific demands, and together with them, thanks to our expertise in a variety of industries, we are able to introduce new features from other sectors in the camper industry, such as, for instance, different solutions for in-

stulating the vehicle in both cold and hot environments. Some years ago, with the introduction of new engines in the field of agricultural machinery, customers began asking us to supply special guards for protection against high temperatures, to which our response was to manufacture specific ad hoc components, and this proved helpful also on campers. Another example are the soft-touch thermoformed components, which have an impressive sensory value and relatively low costs".

## Manufacturing processes

Lapiplast uses vacuum forming to manufacture various kinds of components which it then supplies to a full range of industries: automotive, RV, nautical, medical, and many more. The company can create large-sized thermoformed pieces (2000x3000 mm) with extreme cutting precision, thanks to the use of CNC robots with 5 axes. Lapiplast's fleet of machinery in the cutting department consists of 10 CNC cutting robots with a maximum size of 5500x2900 mm. For the thermoforming process, the company uses 16 thermoforming machines with automated feed. Product quality is essential, which is why Lapiplast has added a FARO laser scan-

ning arm to its fleet of machinery, which makes it possible to create a pattern on the printed component to be superimposed on the pattern provided by the customer, so as to ensure a perfect match. Lapiplast, in addition to the part's 3D certification, can develop machine tool certifications and reverse engineering if no more patterns are available or none were ever created. The company issues a product conformity report in the first phases of production. Lapiplast can also count on an internal modelling department for the development of wooden and aluminium moulds, which makes for a faster prototype manufacturing process and an increase in the company's production flexibility.

