Sicomin celebrates 30 years with further expansion

French company Sicomin, a leading supplier of epoxy systems in Europe, is completing Phase 3 of an expansion plan that is increasing its reach outside its original strengths in the marine sector. Mark Holmes discusses these moves with President Philippe Marcovich.

Sicomin is celebrating 30 years in the composites business this year. However, the original company that was founded in 1946 had nothing to do with composites, as current President Philippe Marcovich tells Reinforced Plastics.

He explains: "The original Sicomin was created by a bank to conduct overseas bartering and trading activities. When these activities were no longer required, my father, who was a young employee at the time, bought the empty shell of the company and moved it into the fatty acids business, where it operated for 35 years."

With a particular interest in sailing, boat construction and a background in chemistry, when Philippe Marcovich joined the family business, he sensed an opportunity. Composites were on the rise in the yachting and marine business and he established a composites division within the wider company, which began to grow rapidly.

Marine

Philippe Marcovich continues: "We started by servicing racing boatyards - some had good polyester experience while some were craftsmen with wood but few were familiar with epoxies. However, as the racing market was growing increasingly more competitive in France, we needed to encourage boat builders to up their game and move towards more performance related processes and materials such as epoxies, vacuum bags and multiaxials. Around that time we also came to represent Airex core materials in France, meaning we were able to offer a complementary product set. This soon allowed us to build our expertise in optimising reinforcements."

At the same time, Sicomin's USP was also being able to offer boatbuilders and other customers laboratory facilities where they could test laminates with core materials, and resins.

"This was an exciting time. The marine racing market was taking off in France and the country became the centre of excellence for manufacturing multi-hulls. It was experimental and innovative and there was a huge learning curve for designers and builders to create large composite parts ranging from 40-85ft long. So it was

particularly interesting working with these companies to design and manufacture these complex components. We attraced some very daring projects from sailors looking for an advantage in the racing world and we banked a lot of experience."

From those origins 30 years ago, Sicomin was already building a reputation for innovation in the marine sector, not just in racing but within the cruising yacht sector also. The company was then in a position to diversify.

Windsurfing

"Another strong market that was emerging was the windsurfing market," explains Philippe Marcovich. "There were many small companies making 50 or 100 custom boards a year, initially using polyester resin with expensive polyurethane foam imported from California. While the combination of PU foam and polyester resin was suitable for surfboards, these techniques resulted in a 10kg weight penalty for the larger volume windsurfs due to the high density of the PU foam. As a result, we promoted the trend to use white expanded and extruded







Sicomin now supplies materials to a great many more industries, including aerospace.

polystyrene boards selected from the construction industry. Easily available, cost effective, and less than half the density of PU foam, EPS foams combined with epoxy resins and glass/carbon reinforcements provided higher mechanical properties as well as significant weight savings. We also introduced the use of vacuum bagged micro sandwich laminates encapsulating EPS foam blanks, which is still a technique that is widely used today."

Growing alongside the expanding marine and windsurfing markets, Sicomin continued to invest in its laboratory facilities and people to expand further into new territories, using its substantial experience from the marine market to create cost effective solutions within the aerospace market, as well as others.

Philippe Marcovich continues: "The industry is changing all the time. Compared to 30 years ago there are now a lot more engineers graduating from University with a huge knowledge of composites. There have also been big improvements in material development, from reinforcements to core materials, as well as resins, that have significantly improved performance. Sicomin has continued to invest and innovate, and has moved with these times into new market sectors.

"We are now able to offer technical products and services in aerospace, transportation, wind energy and civil engineering, for example. There is now no industry we are not capable of being able to contribute to. We enjoy participating in our customer's projects; there is always an interesting problem to solve, and our philosophy is that a problem is never too small for our team to source a solution for. We live through the creativity of our customers."

Sicomin now has over 50 employees, an established global supply network covering over 20 countries, and is in Phase 3 of the development of the company's Marseilles facility, which was established in 2007 and which provides good air and sea links. Phase 2 was concluded in 2012 and on completion of Phase 3 this year, the site will increase to 7000m², housing laboratories, new technologies, production facilities and logistics. Over 6 million euros has been invested this year to date.

As Philippe Marcovich points out, further expansion is within the plans. The company already has another base in Brittany, which is necessary for them to service the entire French market and Northern Europe. There also remains the possibility of further expansion at the Marseilles site, and building facilities outside France to serve its growing business.

Technologies

Sicomin has also introduced some new products in its 30th Anniversary year.

TOPCLEAR is a mixed epoxy and polyurethane formulation that offers an enhanced, translucent and glossy finish on a wide range of components. Sicomin says that it is a highly versatile, UV resistant and ultra-fast hardening product that can be processed in as little as 10 minutes.

TOPCLEAR can be applied by brush or spray

to multiple surfaces including composites, wood, glass and carbon fabrics, and metals. It is claimed to be ideal for clear carbon parts.

GREENPOXY 56 is the company's latest innovation in environmentally enhanced epoxy formulations with over half of the product's molecular structure derived from plant matter. Independent laboratory tests using the Carbon 14 measurement were recently conducted and declared the product's green carbon content amounts to 56%. It can be used for lamination purposes, injection moulding, filament winding, hot or cold press processes and casting.

In addition, Sicomin has produced a range of epoxy systems developed specifically for rail, aerospace and civil engineering applications. These products are suitable for laminating, infusion, prepregging, epoxy foaming and coating production methods. Sicomin's fire retardant systems were recently accredited with the ASTM E-84 Class A for civil engineering as well as FAR25-853 for aerospace and EN 45 545 for rail. The range has achieved many leading OEM's Fire, Smoke and Toxicity (FST) standards. Sicomin has also further developed a range of multiple density structural epoxy foaming systems. Well suited to industrial, marine and aerospace applications, these foaming products are specifically designed for the manufacture of strong, high quality and versatile cores and for the superior bonding of laminate skins.

Further Information

Sicomin; www.sicomin.com