

PMA AG cable protection systems are used in railways around the world. Sales director Martin Gueller and Product Group Manager Cable Protection Systems EMEA Sandro Schwarz talk about their plans for innovation and growth here is a certain aura of quality and reliability about products with a Swiss label. This is certainly the case for the high tech cable protection systems designed and manufactured by Swiss company PMA AG. Founded in 1975 in the small village of Wetzikon, PMA is a global company reaching into most industry sectors that require cable protection, and has established a market leading position in the railway sector.

Based at Uster in the greater Zurich area, PMA has co-located its headquarters, global manufacturing operations, and extensive test, research and development facilities on the same site. Today, it employs some 170 staff worldwide, 100 of whom work in Switzerland and the remaining 70 are spread across PMA's six subsidiaries in Germany, the UK, France, Spain, Austria and Italy.

PMA has built its reputation and success on high levels of customer service and the ability to innovate and manufacture quality products that lead the market for functionality and reliability. Ownership of the company has changed several times during its history, and two changes in recent years have played a significant part in strengthening the brand and global footprint. In 2006 PMA was acquired by the private equity firm EQUITA. "From the beginning they invested in us," explained country leader-sales director Martin Gueller. "One of the new technologies that came from that phase of expansion was the multi-layer technology." After three and a half years of investment there was significant market interest in PMA and the company was acquired by Thomas & Betts Corporation, a leading designer and manufacturer of electrical components headquartered in Memphis, Tennessee.

"At that point we imagined we would have many years of continuity ahead of us as part of a large organisation with a \$5 billion turnover," Martin continued. But that was not meant to be. "In 2012 Thomas & Betts was taken over by ABB Group, an even larger organisation with over 150,000 employees and revenue in the region of \$42 billion."

Today, as a subsidiary of Thomas & Betts, PMA is part of one of the world's largest power and automation technology companies. Not only is ABB headquartered in Zurich, but it also has extensive global reach and a focus on sustainability, creating enormous opportunities for development and growth for both PMA and Thomas & Betts.







Innovation & manufacture

All products that come out of PMA's plant in Switzerland are manufactured in plastic. "Our materials technology expertise is one of our unique strengths," Martin said. "Our technicians sometimes combine materials that simply shouldn't work together, according to the book. But they manage to bind them through innovative processes. We've developed many new products that way, such as corrugated tube that can withstand significant impacts."

Another deliberate design feature that makes PMA products attractive across all markets is that not only does it supply entire cable systems, but each of its 4000 products are interchangeable, enabling customers to mix and match to achieve the optimum combination. "We also work closely with our customers and develop tailor made solutions that meet their specific needs," explained Product Group Manager Cable Protection Systems EMEA, Sandro Schwarz. "On average, we manufacture 120–150 customer specific parts a year."

All the base ingredients are shipped in from global suppliers and combined at the Uster plant, which is currently equipped with 20 injection moulding machines and niner extrusion lines. The plant is highly flexible, able to produce large and small runs of standard parts or customer-specific products at short notice. Staff normally work a two shift pattern but are flexible to change. "We are currently working three shifts because there is a high demand for our product," Martin said, "And this is not only for the rail industry but also for the marine market and many other applications."

The rail sector

PMA has established a market leading position in cable protection systems for the rail industry worldwide and has been experiencing year on year growth, particularly since achieving IRIS (International Railway Industry Standard) approval in 2010. In many branches of the rail sector there has been a consistent trend for downsizing. "That has not happened in cable protection. The issue is power cables running very close to data cables, so there has been an increase in demand for EMC cable protection solutions," Sandro said.

"Another challenge for us," he continued, "is that global standards are continuously becoming more demanding in the markets we supply, and those include rail, machines, marine and energy. So we are always improving our products, while striving to respond to price pressure and the need to compete on cost."

The most widely used product in the PMA portfolio is the PMAFIX/PMAFLEX range of corrugated conduits. "But we are seeing an increase in demand for PMAFIX Pro /PMAFLEX Pro, which is our highest specification line," Sandro continued.

Vision for the future

Looking forward through 2014 and beyond, PMA is continuing to focus on innovation. "We are expanding our multilayer conduit offering to provide complete solutions for all rail applications, so that will include any cabling either on, inside or below the train," Sandro said. "We are also working on fire barrier solutions, products which allow cables to be fed through a fire barrier without reducing its integrity. And we will be presenting those at InnoTrans 2014."

From the strategic perspective, PMA is continuing to focus on market growth through involvement in the many rail projects currently in progress and those at the planning stage, by expanding its share of the marine sector, and by moving into new transport sectors such as electric cars. The company also perceives great potential in Russia and in North and South America, areas where both ABB and Thomas & Betts have a strong presence. "One of the challenges we face in the US market in particular is that they are very metal focused," Sandro explained. But the company has been making significant efforts to change perceptions and share their knowledge of the benefits of plastics technology.

The arguments are persuasive. Plastic doesn't corrode, it's quick and easy to install, and has no sharp edges that can damage the cables it is trying to protect. It's light and flexible, and can be bent around corners. "Often metal is perceived to have a much higher impact resistance, but that is only half the truth," Sandro continued. "Metal can deform under impact and doesn't recover, damaging the cables inside. So when we are able to demonstrate and prove the advantages of plastic products over the existing solutions, we are very successful."

With so many metal products in use in the USA, PMA see enormous potential. "We are already enjoying substantial growth in the US market," Martin concluded. "We anticipate that trend will continue strongly."

