

Specialist applications underpin Steiger success

Steiger CEO Pierre-Yves Bonvin tells *Knitting Trade Journal* about the company's latest technological developments and the specialist markets that the flat knitting machine builder is now supplying.

Knitting Trade Journal: Can you outline how the company performed in 2019 and whether this was in line with your expectations?

Pierre-Yves Bonvin: 2019 was rather a good year for Steiger. It was a surprise for us with a forecasted turnover 10%

above our budget. We started the year with a comfortable backlog but the demand has slowed down during the second semester.

KTJ: Can you explain which regions were the most active and broadly speaking, which

machine types were most popular in these regions?

PYB: Our Antares 3.130 machine with 32 motorized yarn-guides has been introduced in several Eastern Europe countries but also on the Italian market with great success. We are also happy to see that long-term knitwear customers

Steiger CEO Pierre-Yves Bonvin.



have been renewing their machine portfolios. We can confirm that they have invested in high-end machines to maintain their competitiveness in Europe. With this machine range they have the capacity to deliver complex intarsia products but also offer good prices for classic knitwear.

At ITMA Barcelona 2019, we presented, for the first time in Europe, the models produced in cooperation with our partner company Cixing. The positive feedback received during the exhibition convinced us to distribute them in the European market.

The entry level STG and the complete garment KS machines, both manufactured in China with our R&D support, will be sold through Steiger and supported by our after-sales service.

They can be programmed with Steiger software Model. They will help us to extend our offer to cover all the needs, from fully fashion to complete garment, including shoes, with excellent levels of productivity whilst offering the best ratio quality/cost effectiveness.

KTJ: Are there any new technological developments from Steiger from 2019 that you can tell our readers about?

PYB: Since 2015 we have invested in developing solutions for the technical knitting segment. In particular we focus on light structural parts: knitted preform solidified with a resin on a mold. The first machine fully dedicated to the knitting of 3D preform was shown at ITMA Barcelona.

The Vega 3.130 is able to knit carbon fibre, glass fibre and PPS in 3D with the insertion of weft yarns and chain yarns. They are added to reinforce the final part. It combines both the advantages of knitting and weaving technologies.

Knitting offers the unique capacity to prepare a 3D preform ready to be installed in a mold for the solidification process. The application is very promising in the sport, aeronautic and the luggage

The Vega machine.



industries. As an example we are currently knitting parts for a plane that will fly above 30,000m.

KTJ: Several of Steiger's recent developments appear to be focused around the production of high-specification technical textiles. How important is this market for Steiger? Is this a part of the market that you see significant growth in?

PYB: Our aim is to maintain the production of machines in our Swiss site of Vionnaz even if our production's costs are higher. We need to deliver machines in segments where our customers can still be profitable using Swiss made knitting machines.

This is the reason why we focus in niche markets that value our machines, our digital solution and our service. Typically the medical sector in which we are the leader is a great success for us with the Libra 3.130. We deliver customized machines adapted to the industrial needs of each of our customers. Our digital solution allows them to deliver - within 48 hours - custom-made compression garments

used to cure edema on limbs or to treat third degree burns.

With the technical textile we would like to use the same assets to develop a new business area that could bring a similar growth.

KTJ: In Europe, it's widely acknowledged that in recent years many knitwear producers have restructured to focus on smaller production lots, quicker turnaround times and improved sales service. To serve this market, how important is flexibility for a company such as Steiger i.e. how well is the company able to supply both niche and specialist machines?

PYB: Our off the shelf machines are only available from our factory in China. All the machines assembled in Switzerland are made by order. We highly customize each machine according to the final knitted product. We often test the yarn and the program in our Stitch Lab even for knitwear. At the order, we know the product, we discuss the machine

specification, and we also clarify the way the machine will be integrated in the production flow. This defines the machine options, its periphery equipment, and also the digital integration of the machine in the customer's IT system.

For specific technical textiles we can even develop new modules to improve the efficiency of the production. To be competitive in delivering out of Switzerland you need to offer more value. Typically, integrating the machine into our customers' production system allows them to reduce the delivery time of smaller lots.

KTJ: How have your customers responded to the development of the Steiger Stitch Lab training centre? What are the key benefits offered by the facility?

PYB: With the high-specification technical textiles, flat knitting technology has raised interests from industries having no knowledge of knitting. We see customers that are interested to see how flat knitting could solve their production challenges.

The Steiger Stitch Lab is a success as we offer customers a way to test flat knitting technology on their products. They come with an idea and discuss with our experts how to knit their concepts in 3D with technical yarns. Working with them, we determine a plan on how to

Steiger offers solutions for specific industrial applications.



achieve a prototype with a budget.

With the demonstrator and its production parameters, they can decide whether to invest in flat knitting or to use another technology. If they invest in this new technology, the Stitch Lab team continues its job with training and technology transfer. We have several success stories with companies outside of the flat knitting sector that have started their activity thanks to Stitch Lab team.

KTJ: Is there anything else that differentiates Steiger from its competitors?

PYB: The main assets of Steiger are: innovation, agility and how we listen to the customers' voice. Thanks to the Stitch Lab we are in direct contact with the needs of our customers and thanks to our flexible production structure we are able to build machines that fit to the demand of the end-user.

KTJ: How is the company, and its partner company Cixing, approaching key trends in the market such as the onset of Industry 4.0 and a growing demand for higher levels of sustainability?

PYB: Steiger has been concerned by the sustainability of its activities for a long time. For example the power consumption of our machines has been

reduced by 40% over the last decade. In 2017 we performed a Corporate Social Responsibility (CRS) audit of our company. The result was rather positive and the recommendation made by this audit is currently in place. The sustainability of our activities is particularly important when discussing with young entrepreneurs. They care about their CSR impact. By nature the production using flat knitting machines is sustainable as waste is reduced as much as possible.

In our group, the drive to develop solutions for Industry 4.0 is from Cixing. It faces a situation in China where salaries are increasing and the availability of machine operators is shrinking.

Cixing's strategy is to develop complete garment machines fully integrated into the digital production systems of their customers. At the recent ShanghaiTex 2019, the company presented its first 5 needle-bed machine with compound needle able to compete with the best reference on the market. Cixing Robotics offers the possibility of fully automatizing the stock management using robots to store and then deliver fabrics or shoes.

Cixing is able to deliver a turn-key solution to produce shoes. Starting from the knitting machines then to the cutting, the assembly-gluing operation and stock management, the customers can obtain the complete process from one supplier.

KTJ: What will be the main challenges facing high quality machine builders such as Steiger over the next two to three years?

PYB: Pressure on the prices for standard applications will become higher and higher. Our partner Cixing is well positioned to address this market. The challenge for Steiger will be to develop machines and services for customers for applications which are still profitable when produced in Europe. It can be in the fashion segment, in the medical segment or in the technical knitting segment. The technological differentiation and the personalization of the offer will be a success factor for Steiger. Using our Stitch-Lab as customer interface and a flexible production line we will be able to deliver machines that fit perfectly to the needs of our customers. **KTJ**