

Domestic supply

In common with other developed nations, Japan is seeing a resurgence in domestically produced knitwear, allowing manufacturers to respond quickly to specific customer requirements. **Joel Peterson** profiles one family company capitalising on this demand

It seems to be a trend, small, but the same signals coming from several countries. Companies focused on flat knitted products are moving production from low-cost countries back home.

Some firms in Sweden, England and Japan are choosing to facilitate their business in-house in order to have better control over manufacturing and respond with fast deliveries to their customers – the domestic retailers.

There is certainly no exodus from production overseas, but it shows that there is a need to meet delivery with short lead times and high quality from fashion companies and retailers in European countries. New technologies such as

complete garment knitting, digital printing and single-ply cutting enables manufacturing to order with reduction of work-in-progress and lead times.

Sato InterKnit is a flat knitting manufacturing company located with a beautiful view over Lake Suwa in the town of Suwa, Nagano Prefecture, Japan. Managing director Mr Yutaka Sato says the company was established after World War II by his grandfather and father and was back then focused, as were so many others in this region, on silk yarn production.

Gradually, when the silk industry had difficulties resulting from foreign competition and production moved abroad, the company shifted to produce

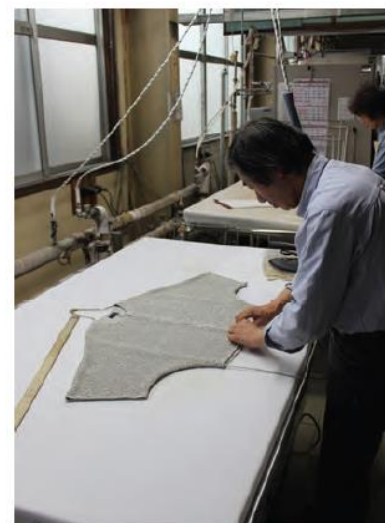
flat-knitted garments for the domestic market. It employs 40 people and produces approximately 84,000 garments per year with a turnover of 40 million Yen (€288,582) and with 20% of its sales sub-contracted.

Tokyo-based wholesaler Fenix International Co Ltd, with a large number of brands in its portfolio, has long been Sato's largest customer. In order to compete with manufacturers in China, the company has focused on short lead times and developing new products.

With a delivery time of 3-4 weeks and an order quantity of 230 garments, Sato InterKnit supplies Fenix International with products designed and developed in



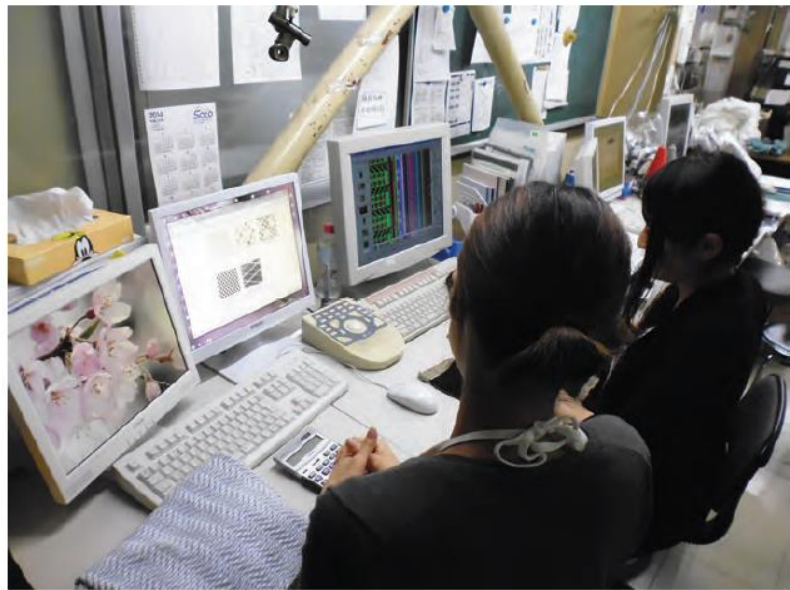
WholeGarment knitwear eliminates the need for cutting and sewing



Quality control at Sato Interknit



InterKnit shop



Design is a key element of fast turnaround knitwear

close collaboration between the knitting manufacturer and Tokyo-based wholesaler.

“Being able to respond quickly to actual market demand is essential if you want to compete in the fashion business of today,” says Mr Sato. “With this type of business model and with skilled and experienced personnel, it is possible to produce in Japan.”

The lack of experienced sewing operators in Japan is a problem, however, that has forced the company to turn to Vietnam to recruit personnel for sewing and linking operations.

It has about 30 Shima Seiki knitting machines, five of which are WholeGarment machines, allowing manufacturing of products without the need for cutting and sewing. The gauge range of the machines is from 5-14 with eight machines in gauge 14 and seven in 12 gauge.

Design and production data of a new style is programmed into one of the five Shima Seiki SDS-One CAD-systems. Many employees are skilled and experienced in using the Shima Seiki system, which enables manufacturing of 520 new style samples per year, a necessary and fast service to the company’s customers.

One problem in knitwear production is the time consuming sampling process. It is repeated many times, with the associated costs. In the near future, the company wants to invest in the SDS-ONE APEX3 design system from Shima Seiki

to improve efficiency of the sampling

process, says Mr Sato.

This system supports the entire process in knitwear production and has the capability for virtual sampling that offers significant savings in the sample making process. “Now we just have to convince fashion buyers at the retailing companies that this is an efficient way of working in the future,” he says.

“The garments are produced in trendy fashion yarns often using high quality fibres such as cashmere”

The garments are produced in trendy fashion, yarns often using high quality fibres such as cashmere. Pattern construction and grading are made in the computer system which converts drawings into electronic data and pattern print-outs are made by the Mutho system-plotter.

This Japanese-made system is easy and efficient to use and a new pattern is printed in seconds which meets requirements from the company in terms of speed in the sampling and manufac-

turing process.

A speciality for Japan is the testing standard that says: “no metallic residues may be present in the clothes after manufacturing.” Therefore, all garments are checked for needle residues in a special machine from the company Hashima Co Ltd before delivery. This equipment can detect metallic particles so small they are not visible with the naked eye.

Like so many other small- and medium size knitting manufacturing companies, Sato InterKnit is a family business. A third generation Sato, by daughter Ran, is already on the way into the family business through studies at Shinshu University.

Mr Sato’s plans for the future are bright, with investment in a new flat knitting machine from Shima Seiki, model SRY123LP, equipped with two upper beds and loop presser technique to facilitate the production of dimensionally stable structures, similar to woven fabrics.

In this machine the loop presser device can hold the straight inserted yarn in place when several courses of tuck or knit loops are produced and facilitate the use of carbon, Kevlar or other high modulus stiff yarns.

Through research collaboration with a university in Japan, an attempt to expand the product range towards more technical textiles will be made. A short lead time, combined with high quality and skilled personnel and a move towards new product categories such as technical textiles makes

future prospects for Sato InterKnit good.