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FLEXIBILITY THAT PAYS: THE MULTI GAUGE- CLASS

www.stoll.com · Email contact@stoll.com

A separate machine for every gauge? Coarse or fine? You have a short-term larger project? There's only one answer: the Multi Gauge-Class from Stoll. It gives you control of multiple gauges with one and the same machine. The advantages? Your machine pool is smaller, yet more flexible. You're prepared for every trend and every season, and your machines are optimally utilised. And you can respond immediately, even with the shortest lead times. Machine selection is just as flexible: working widths from 50 to 96 inches and two to six systems are available to cover a gauge range from E3 to E18. The Multi Gauge-Class: flexibility that pays for itself from the start.

STOLL

THE RIGHT WAY TO KNIT



RTS-RIEGELTEAM.DE

Stoll, Reutlingen

Even more flexibility

Flexibility is the success factor for profitable production. Optimal utilization of machine capacity is the conditions for this. Low hourly rates and low investment costs increase economy. Many years ago, Stoll, Reutlingen (D), was one of the world's first manufacturer to devote itself to this topic and became a pioneer with machines marketed under the name Stoll-multi gauges. With the Multi Gauge class, Stoll offers a line of machines today that meets all requirements with working widths from 50 to 96 inches, machines with two to six knitting systems and a gauge range from E3 to E18.

For knitters, flexibility and productivity are decisive for growing market shares. The times are long past in which a separate machine could be provided for each gauge. At Stoll there's only one answer to the question "Coarse or fine?": Both! For the Multi Gauge class

Fully fashion sweater knitted on CMS 530 multi gauge, E3,5.2. Front piece in 2x2 rib in coarse, 10, 8 or 6 threads, back piece and sleeves in fine, 4, 3 or 2 threads

(see box) from Stoll can knit several gauges with one and the same machine (see table). The advantage, according to Stoll: the machine pool can be reduced, however becomes considerably more flexible. The capacity of all machines is optimally utilized, and even the shortest development times, new trends or seasonal changes are no longer a problem.

This machine class gets its name from the Stoll-multi gauges knitting technique. With it coarse or fine stitches can be realized in no time exactly as desired. It is possible to knit in the so-called 1x1 technique or with all needles us-

ing different yarn thicknesses. The technical conditions required for this are the needles for fine and coarse stitches especially developed by Stoll, refined stitch formation geometry and the Stoll holding-down jacks gentle to the yarn for high running stability.

Different gauge appearances

The Stoll Multi Gauge class also demonstrates flexibility in the fashion sector, i.e. for fabrics with different gauges in one piece. Here the clear visual grading of fine areas - knit with all needles -



Photos: Stoll

Multi-Gauge machines and their gauge ranges^{*}:

Machine gauge	Possible gauges E
(from coarse gauge ranges, knit with the 1x1 technique: knitting on every 2nd needle up to fine ranges, knit on all needles)	
E2,5.2	3 3,5 4 5
E3,5.2	3,5 4 5 7
E5.2	5 7 8 10
E6.2	7 8 10 12
E7.2	7 8 10 12 14
E9.2	10 12 14 16 18

^{*}However, all the information provided is strictly dependent upon the respective fabric requirements and can vary as well, depending on the yarn qualities used.

Machines of the Multi Gauge class:

CMS 520 TC multi gauge: 2 knitting systems, working width: 50 inches (127 cm), gauges E3,5.2 / 5.2 / 6.2 / 7.2

CMS 530 TC multi gauge: 3 knitting systems, working width: 50 inches (127 cm), gauges E2,5.2 / 3,5.2 / 5.2 / 6.2 / 7.2 / 8.2 / 9.2

CMS 822 multi gauge: 2x2 knitting systems, working width: 84 inches (213 cm), gauges E2,5.2 / 3,5.2 / 5.2 / 6.2 / 7.2 / 8.2 / 9.2

CMS 922 multi gauge: 2x2 knitting systems, working width: 96 inches (244 cm), gauge range E3,5.2 / 5.2 / 6.2 / 7.2 / 8.2

CMS 933 multi gauge: 2x3 knitting systems, working width: 96 inches (244 cm), gauge range E3,5.2 / 5.2 / 6.2 / 7.2 / 8.2



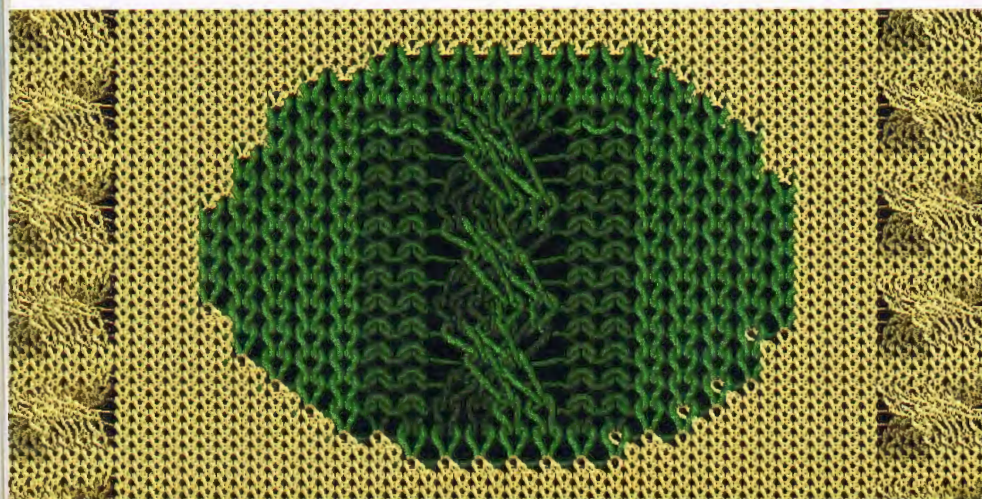
and coarser areas – knit with every second needle – can be realized. In the process, it is possible to work with a different number of threads, i.e. with a different total thickness. This means the pattern areas can not only be arranged in various colours or patterns, but also in different gauge appearances, with the different yarns arranged horizontally and vertically as desired.

Stoll's many years of experience is also reflected in the program-

ming. The knitting programs can be written with the M1 pattern preparation software using all available functions. Corresponding automatic functions support the programmer in the process. For example, knitting programs can be transferred from one gauge to another at the press of a button. This means, for example, that a pattern programmed in the gauge E5 can be simply and quickly converted for knitting in the 1x1 technique with the gauge E5.2.

Fully fashion sweater with French shoulders, jacquard motif and gored stripes, knitted on CMS 822 multi gauge, E7.2

Fabric view on M1 software



This can in turn easily be converted to a program for the gauge E6.2. The programmer doesn't need to be concerned with transitions between coarse and fine areas in the pattern, as they are automatically inserted. In the module database of the M1 all structure modules are also available in the "Multi Gauge version". The results can be checked immediately in the fabric view.

With the Multi Gauge class, fabrics can be produced in all basic knitting modes, in jacquard, structure, cable and aran patterns. And it's especially easy to knit intarsia patterns with Stoll machines. Just push on the intarsia yarn carriers and knit unusual patterns in no time – no expensive special machines, no time-consuming conversions.

Individual sections of the Stoll-Multi gauges fabrics can be knit in any desired single and double jersey knitting techniques. With the Stoll intarsia technique, applications like pockets, overlapping collars or 3-layer fabrics are also realized using the Stoll-applications knitting technique. *pr/cor*

MAYER & CIE.

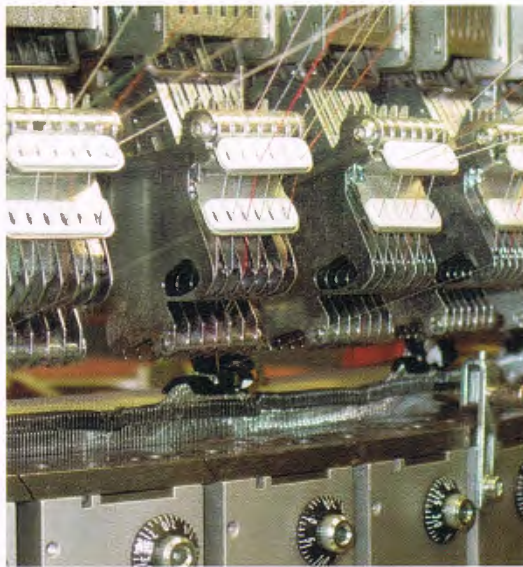
Twelve-colour striping with elastomer

Today's fashion scene is ablaze with colour, and stripes are currently right in vogue. To achieve even greater flexibility in this field, circular knitting machines are now available which are capable of knitting stripes in up to twelve colours. The technology involved here is generally highly complex, with the inevitable consequence of greater susceptibility to faults. Also when used in conjunction with elastomer yarns, multi-coloured stripes can be fraught with problems.

Mayer & Cie. in Albstadt (D), one of the world's leading circular knitting machine manufacturers, has taken up this challenge with a new development based on the Relanit 1.6 R circular knitting machine. The relative movement technology used in this machine offers the decisive benefit of fewer deflection points: The yarn is subjected to lower tension and benefits from far gentler treatment than on conventional machines. This machine also affords the operator a clear view and easy accessibility to the needle bed – a decisive advantage when working with stripes.

The predecessor machine Relanit 1.6 R with five colour striping at each feeder or ten colour stripes over two feeders achieved major market success – largely as a result of its patented striping attachments. When upgrading to six colours with each feeder or twelve colour striping over two feeders, the technological benefits of this development are brought particularly to bear. Customarily, one striping finger is occupied in performing the stripe-out function. Mayer & Cie. makes use of all six striping fingers for the colours. The stripe-out function takes up one functioning section within the striping attachment. When striping over two feeders, special thread clamps take care of reliable transfer of the thread from one feeder to the next.

Another special feature is the use of just six magnets for colour selection and one magnet for control of



Photos: Mayer & Cie.

the stripe-out function. These operate all the striping attachments at the machine. In the case of a machine with a 34" diameter and 54 feeders, a total of 324 striping fingers are reliably and safely controlled by these seven magnets.

The special design also permits the trouble-free use of elastomer yarns with six or twelve colours. In the case of plain single jersey, the elastomer thread is fed from the front over the yarn feeder edge. When knitting patterns with needle selection, guidance of the elastane thread over the yarn feeder plate is vibration-free, so permitting multiple colour stripes to also be reliably processed in conjunction with elastomer threads.

Mayer & Cie. has also further developed its machine software to simplify the process of programming both the width and number of stripes. The Relanit 1.6 R offers the whole range of applications and is available in 26", 30" and 34" with gauges E12 to E28.

cor

Gentle feed of the elastane thread

The Relanit 1.6 R is capable of knitting twelve-colour stripes



In brief

Joint activities for Silpure:

Thomson Research Associates, Toronto (CAN), and Huntsman Textile Effects, Basel (CH), announced that the two companies have agreed to work together in developing and marketing Thomson's Silpure anti-bacterial technology.

Silpure, launched in 2005, utilizes the natural characteristics of silver to limit the growth of odour-causing bacteria.

Thomson Research Associates sells its Silpure brand directly and through distributors worldwide to over 200 companies in more than 40 countries. Huntsman is a global manufacturer and marketer of differentiated chemicals, among others for textiles and footwear. cor

In brief

"Position in all market segments sustained": For 2006, nonwoven producer Sandler AG, Schwarzenbach/Saale (D), announced a turnover of EUR 112m (2005: EUR 113m) and said, that it was able "to successfully sustain its position in all market segments." In its traditional market segment "furniture and mattresses" the company took advantage of the opening of the borders to the Eastern European neighbouring countries during the last years, said Sandler.

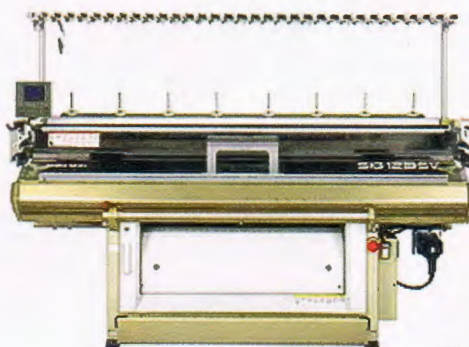
According to the company the continuously growing market of disposable wipes (wet and dry) has become a main focus of its entire production range. Therefore, the company is going to invest approx. EUR 20m in a second high performance production line for substrates, which are mainly converted into wet wipes.

Special nonwovens for the automotive industry also gain in importance, explained the company. Sound absorbing nonwovens made of polyester are increasingly established as material for interior applications in vehicles. Innovative products and procedures like elastic nonwovens or fine fibre nonwovens are permanently developed for existing as well as for new market segments, stated Sandler. In 2006 the company employed 460 people in its production site in Schwarzenbach. *sl*

SHIMA SEIKI

New high-tech knitting machines

SIG123 SV with WideGauge technique



SPF-W is capable of knitting pairs of five-toe socks



Photos: Shima Seiki

Flat knitting machines manufacturer Shima Seiki, Wakayama (J), presented the new SSG and SIG machines with WideGauge variable gauge technology. Special needles allow a wide range of production possibilities, from tighter, finer-gauge fabrics using all-needle knitting, to more airy, lower-gauge fabrics using half-gauge technique. In addition, SIG has superior intarsia capability with capacity for up to 30 intarsia carriers, says the company. The new SPF-W is capable of knitting five-toe socks for both left and right feet on one machine, whereas the previous SPF required two machines. *cor*

FREUDENBERG EVOLON

Evolon nonwoven fabric for digital printing

Evolon can be used for outdoor and indoor decoration

Performance textile manufacturer Freudenberg Evolon, Colmar (F), launches its nonwoven fabric

Evolon for digital printing. According to the company the media delivers new benefits above certain other available substrates, by offering the ability of dual-sided printing and the compatibility with an array of different digital printing technologies and inks. In addition to inkjet printing using water-based, solvent, eco-solvent and UV-cured inks, Evolon ensures "high performance" in transfer/direct sublimation applications, says Freudenberg Evolon. *cor*



Photo: Freudenberg Evolon