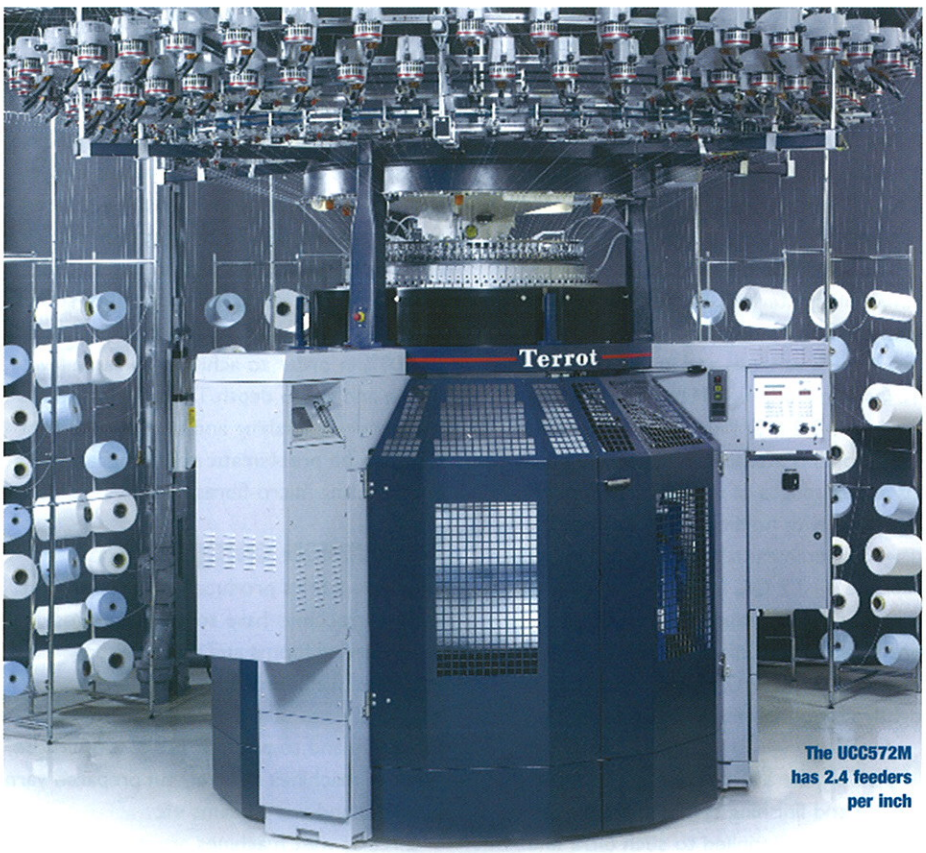


The UCC572M has 2.4 feeders per inch

Bedding in

The driving force behind Terrot's mattress ticking technology is the ability to provide high quality covers in the most efficient way possible.

Traditionally, mattress ticking has been an area dominated by woven fabrics that are tensioned over the mattress to serve as a cover. Knitted mattress cover fabrics are, however, now increasing in popularity at an incredible rate, particularly in the European and American markets, with customers drawn to the improved elasticity and improved lying comfort these covers are able to offer.

The additional scope offered by knitted fabrics, which are able to combine traditional mattress cover materials with say, spacer fabrics, brings other added benefits to users such as being able to compensate for the so-called 'pressure points' at critical parts of the body. By allowing sensitive body areas to be supported without pressure, spacer fabrics can also help prevent what is known as the decubitus effect (pressure sores or bed ulcers) – a benefit which is also due to the capacity of spacer fabrics for fast elastic recovery. These advantages are making knitted mattress covers an invaluable asset for a number of applications such as the medical sector where they are increasingly used in hospital beds.

Additionally, the fabric finishing stage offers an opportunity to apply additional wellness products such as Aloe Vera. Antibacterial effects for the prevention of mildew and mould growth can also be implemented with the use of special fibre/yarn blends and finishing processes. The knitted cover fabric is also made up in such a way that it can be easily stripped from the mattress core for cleaning.

As a major manufacturer of circular knitting machines, Terrot now offers a number of machines suitable for the production of mattress cover fabrics that provide a range of economic benefits and wide-ranging applications.

In terms of flexibility, the patterning possibilities offered by the UCC548M and UCC572M series with electronic needle selection are said to be almost unlimited and are especially suited for the part of the market requiring different surface designs. These machines are capable of producing multi-coloured patterning and logos over the entire length of the mattress and can be re-set to produce a new design within just a few minutes. In terms of fabric weight, these models are designed to give the full range of flexibility between 150 g/m² and 700 g/m².

"All of Terrot's circular knitting machines for mattress cover fabrics are proved and tested in practical everyday operation," says Terrot. "All are available in machine diameters of 38 ins or 42 ins while the cut extended fabric tube has an open unfinished width of 260cm and 290cm respectively, depending on the article setting."

When making up the mattress covers, the complete width of the fabric web is stretched over the length of the mattress which, in contrast to woven covers, helps to avoid the formation of centre creases, particularly when the mattress slats are set at different angular positions.

The UCC548M and UCC572M models also produce mattress covers in one continuous piece. Along with this flexibility, the UCC548M (1.6 feeders per inch diameter) and UCC572M (2.4 feeders per inch diameter) are also said to offer improved levels of economy over other models. With a medium fabric setting of 300g/m² and a mattress width of 90cm, the machine can produce up to 15 covers per hour.

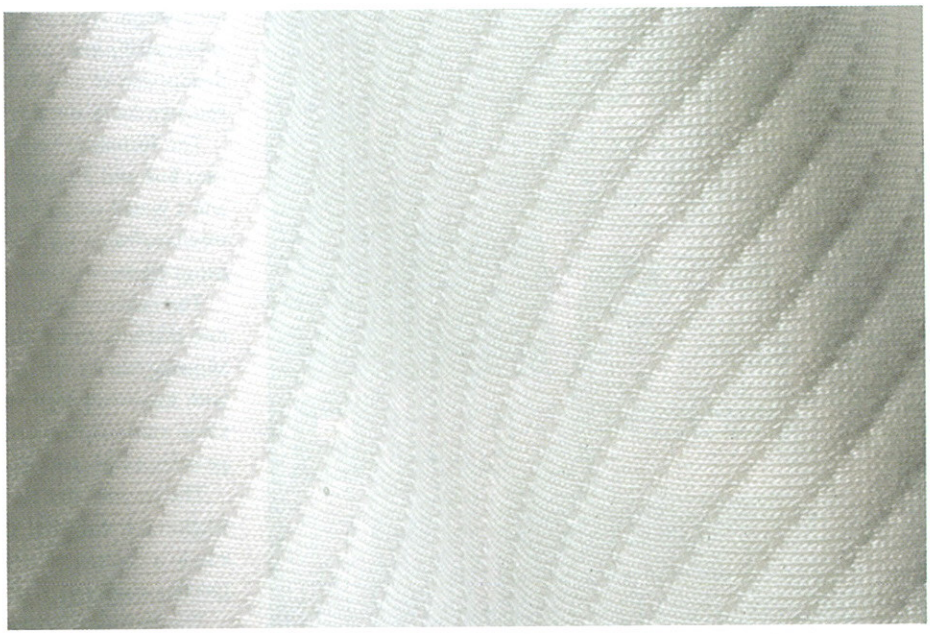
As Terrot points out, with most knitted fabrics for the mattress ticking sector currently produced by 38 ins machines with

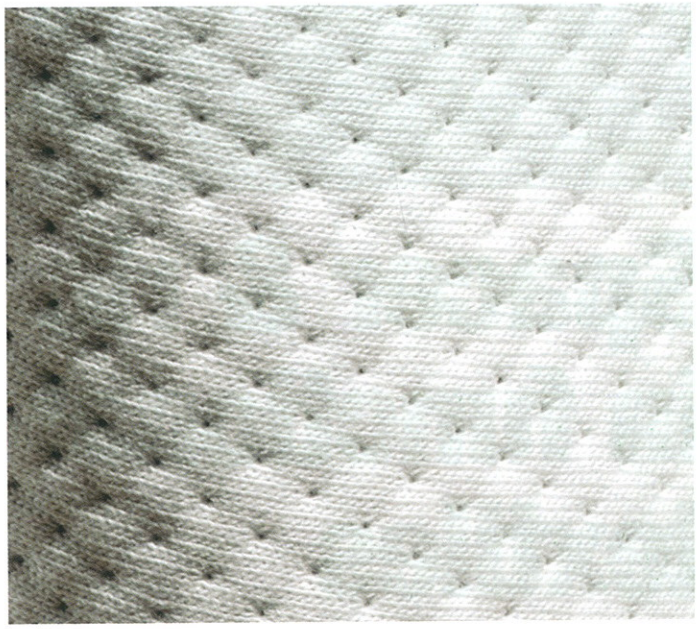
The knitting head on the UCC572M

60 feeders, the 90 feeders on the UCC572M can increase productivity by up to 50% to around 30 kg/h. The 3-way technique also means that the UCC572M can be used for an unlimited range of applications including mesh, spacer and blister.

Patterning possibilities

The technical design of these machines means that space has been deliberately left between the knitting systems. This allows them to be adapted with a range of supplementary attachments for the production of a number of interesting patterning variants such as quilted effects with weft threads, patterned or plain spacer fabrics and 3D spacer functional knit goods, matt/gloss effects through the combination of fashion yarns, and the use of super elastic fabrics with plated elastane yarns.





Samples of mattress ticking fabric produced on Terrot's UCC572M series.

According to Terrot, the company's mattress ticking technology is also capable of providing increasingly efficient processing at the finishing production stage in terms of the provision of large fabric bales in the knitting factory. The UCC548M and UCC572M are capable of manufacturing fabric bales with a diameter of up to 105cm (which corresponds to approximately 130kg of unfinished fabric) saving time in the finishing process. Maximum efficiency is then guaranteed by long piece lengths while fabric bales can be simply and quickly removed.