

Knitting in weft or in warp, Santoni seamless-wear knits the way... everywhere

At this year's ITMA Asia, in Shanghai, Santoni will present the latest developments in weft circular seamless and warp seamless knitting as well as the finest way of knitting ultra fine gauges in large diameter circular knitted fabrics

Since 1919, the Santoni company has been the first Italian maker of circular knitting machines for socks and hosiery. In the 1980's Santoni was bought by the Lonati Family who themselves have been building Seamless circular knitting machines since the late 1940's. By the 1980's they had grown this business to become globally renowned for their knitting machines in the field of Seamless Hosiery and socks.

So both by tradition and passion we can say that Santoni was born to seamless, grew up with seamless and developed seamless technology. Indeed it was these very qualities that the Lonati Family wanted to develop when they took over the Santoni Company in the late 1980's. Their express purpose was to make this machine builder into a specialised extension of Seamless knitting machinery for all other wear as well as legwear.

To pioneer this technology, to research and develop it and to expand it in every possible innovative direction was the core goal of Santoni.

We have kept to our target by leading

the way both technically and commercially in this field of what is now universally called Seamless-Wear.

In the last two and half decades Santoni has installed thousands of seamless circular machines in the world, covering until now approximately 97% of the world's market of seamless knitting machine installations.

In 2003-04 we began extending our Seamless R&D Dept. into the other area of knitting such as warp and raschel, so that by June 2008 our first publicly-shown compact Warp Knitting Machine was presented to the World as a machine conceived specifically to produce Seamless-Wear garments.

In fact, at ITMA Asia 2010 in Shanghai, Santoni will present three special Seamless models that perfectly illustrate this distinctive feature of Santoni; namely that we are able to build Seamless knitting machines in the two great systems of knitting – warp and weft.

Here we have summarised the distinctive advantages of these three latest models and their approach to Seamless.

Seamless warp machine - SWD 6/2J

Keeping in mind that our users are garment manufacturers and by using our experience in knowing their needs well, the Santoni Seamless Warp machine has many distinguished features that offer unique performance benefits:

a) These are first and foremost exclusive or patented innovations:

- Highly dynamic and precise Linear Motors that control, in pull and push motion, every single knitting bar.
- A very compact system of Jacquard selection with Ceramic Piezo transducers; each one being separately inter-changeable
- Vital control of the oscillations of the knitting bars. This essential innovation is a system of Push-Pull that gives to the whole of the knitting bar group, a movement that is both immediate and



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delicate so avoiding the peaks and troughs of acceleration and deceleration with complete power over the masses, even in the inverse phase of the swing. A complete control and dampening of the machine vibrations also contributes to an increase in working speed.

- New CAD textile system made in conjunction with our sister company Dinema, is both simple and very user friendly, and is based on the pictured image or design of the product to be knitted that can be created on any computer (Desk top or lap top). This CAD is able to realistically show in a very convincing way using the PRERVIEW function what the product to be knitted will look like.

b) Amongst many other specific features precisely developed through Santoni's special approach as a seamless machine builder we also have:

- The mechanical adjustments are reduced to the minimum, as all the machine settings are made on the machine assembly line and need not be touched. Finer or other particular settings are made on a touch display panel. No keys, or gauges or other mechanical tools are required, as all operations for the control of the machine are already on the display panel menu.
- The machine has been conceived to be compact and accessible in every possible way including both the supports for the yarn beams, and the electronic control that is incorporated inside the machine itself without the need for any additional cabinets, thus saving space and increasing the reliability of the performance.
- This is a textile machine unit with the most up to date electronics and of course can be controlled 'remotely' just as if one is standing in front of the machine itself.

Seamless single jersey weft - SM8 TR1

A special Santoni approach to seamless casual sportswear

The central feature of this machine is its special knitting needles which have a unique Santoni-patented collar. This allows stitch transfer when knitting mesh or eyelet stitches giving an extremely secure fabric which has a very even surface appearance and a very important breathing capability so indispensable in sportswear.

It has the huge advantage of being able to knit these mesh or eyelet areas in any position on the garment, including diagonally aligned holes and even extremely small mesh or eyelets.

It is also possible to knit plated or double face fabrics using two different yarns, for example polypropylene yarns on the inner layer and long staple cotton on the outer layer.

Double face sports apparel is extremely important as you obtain the twin advantages of Moisture / Perspiration Management and Comfort.

This machine with its 8 feeds has a very high productivity. Its gauge ranges from 16 to 24gg and this also allows the use of natural yarns, especially wool, that is so required in sportswear.



The TR1 This machine can perform all sorts of garment types and is especially suited to loose type sportswear in casual styles.

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To summarise, this machine was conceived to redefine sportswear apparel with its unique possibility of knitting eyelet areas wherever one requires in the garment; its possibility of producing double fabrics or

ADVERTISING FEATURE

plating; and its capability to use natural yarns as well as synthetic ones.

These features, combined with a high productivity, provide unique performance benefits for all those who are interested in producing sportswear to meet the latest trends and demands.

Seamless double jersey weft SM9-MF

Our special Santoni know-how for a universal circular Seamless-Wear machine.

This is the most complete seamless circular weft machine that we have recently presented to the world market. It has

The SM9 produces a range of garments that go from the most luxurious and chic underwear to the smartest and most versatile trends of outerwear



Santoni's Atlas offers large diameter knitting for ultra fine gauge fabrics.

required us to use our vast experience and knowledge to create such a competent all-round model.

It is a double jersey machine offering the possibility of knitting almost any stitch or knit structures such as; true ribs; links-links; jacquards; striping; pointelle and eyelet, all with optional incorporated body rib bands, to produce a range of garments that go from the most luxurious and chic underwear to the smartest and most versatile trends of outerwear (daily/street wear, from casual to evening).

It has been conceived to knit a vast range of both man-made fibres as well as all types of natural fibres.

It covers diameters from 14 ins to 24 ins and gauges from 14 to 20gg and has a total 12 feeds.

This shows you the extraordinary range of garments types, of gauges and the equally extraordinary productivity for each item this machine is capable of.

The technical details like the transfer stitches, their formation control, the upward movements of dial needles, the take down system, the electronic selection by actuators and the complete user-friendly software, not forgetting the ease of managing the programs from a normal computer, makes this machine our latest 'State of the Art' seamless model.

The users of this machine have at their disposal its many beneficial features to meet ever-changing fashion trends, and so

providing a good return on their machine investment.

Accessible – Versatile – Productive.

The ideal machine for both small mills that need a wide range of specialised items, and for larger mills that need both volume and versatility.

Santoni Large Diameter for ultra fine gauge fabrics

Following Santoni's firm belief in the R&D synergy between various circular knitting technologies, as with its classical large diameter circular knitting sector, Santoni is also showing a specially patented model in the ultra fine gauge.

The Atlas single jersey will be on display in 62gg in a 30 ins diameter with open width.

This model has been conceived without sinkers but instead with specially-patented Under Jacks that serves the same technical function as the sinkers, but do not get in the way of the needles.

This produces a splendidly uniform stitch formation and a beautiful fabric feel, while using a less fragile needle at these high gauges, and being a highly productive machine.

Santoni has adopted this patented system in all its Single Jersey ultra fine gauges of its large diameter circular knitting machines. Due to this incredible innovation, Santoni has already installed several such ultra fine Atlas models in both Europe and Asia to the great satisfaction of the machinery users.

