IMA WEBINAR2023 to focus on SPORTSWEAR held on 26th October 2023

The following information about IMA WEBINAR2023 to focus on SPORTSWEAR on 26th October 2023. All information and VIDEO, you can watch it on IMA APP and YOUTUE also.

The speech from Ms. Mirella Sardini, president of IMA

Hello everyone, and once again welcome to the second #IMAwebinars 2023.

This time we are going to talk about sportswear and, more in general, technical materials. This is a sector which has set us many challenges we have always accepted and which has allowed us to gain good experience over the years.

We all know that perfect cuts, attention to detail and impeccable fit are only some of the features of the pieces that are in the sportswear/technical sector. These fabrics, due to their characteristics of being resistant, elastic, lightweight and non-transpiring, require special treatments and processes that in their turn have to guarantee millimetric precision for maximum comfort and performances.

As always, IMA makes its technical and technological know-how available to work appropriately with this sector and offer highly sophisticated solutions to reach the precision required by the market for these garments.

The solution that IMA has designed and produced to obtain high performances includes, as well as the line of machinery, an offer of CAD but also, thanks to the MAXIMA series made up of the CAD system, the plotter, and the pattern cutter and we can say we have also added a projection system, the IMA Cutting Projection System, which allows the interactive positioning of the pieces to be cut directly on the fabric.

Obviously, we are beginning from the start of the process with the CAD, pattern-making and prototype room, to then go on to the line of machinery which includes the 812 robot, the Dual 890D spreader, the Polaris 908 labelling machine and the 921.30 and 922.50 automatic cutting machines.

I would say that we can start now, so I leave the floor to those who will get into the heart of the webinar with more in-depth explanations, obviously accompanied by relevant videos and images.

Enjoy the webinar and see you soon!!!

Focus on IMA Maxima CAD

Speaker: Marcello Cecconi, Head of SW division

Let's start with the solution of the IMA MAXIMA series MAXIMA CAD is the complete suite by IMA, particularly suitable for the sportswear and technical sector where comfort, fit and therefore precision of the garments are essential. In addition, with this instrument, the interval of time between when the product is conceived and when it is put on to the market is reduced incredibly, representing an advantage of



primary importance.

The DESIGN part has modules and features which speed up the creative and design process of the garment. It contains multiple commands to speed up single and composite functions and above all this pattern-making part meets in full the typical characteristics of the production of sportswear of quality, efficiency and particularly high rhythms. (Elena - screenshot del design – cartella maxima cad)

MARKER : it has a significant impact on the costs of the final product.

It allows the greatest saving of fabric by optimizing the layout of the pieces interactively (manual, computer-aided)



or completely automatically, with the generation of both the plotting and cutting files. (Elena – screenshot marker – cartella maxima cad)

The new Maxima SP cutting system also belongs to the MAXIMA series and, thanks to its compact and sturdy structure, the vacuum table and the cutting and writing options, it is the ideal solution for cutting and marking paper patterns. It is also particularly suitable for the production of prototypes and small made-to-measure productions. The serial model presents a tangential cutting head perfect for cutting paper and cardboard or to be fitted with two heads with an oscillating blade (9000 RPM and 14,000 RPM) which is very suitable for sports/technical fabrics as well, guaranteeing great quality and speed of execution. The frequency of oscillation makes it suitable for cutting perimeters, notches, holes, articulated shapes and circles of reduced diameters.

The last product, developed by the IMA software department, is called the IMA CUTTING PROJECTION SYSTEM

This is made up of hardware and software that allows the interactive positioning of the pieces to cut directly on the fabric. It makes use of a high definition projector which is mounted on a support above the scanning area, situated upstream of the cutting surface. The programme that governs the projector can read the normal cutting files (ISO), manage the free positioning on the fabric and return the new cutting file modified.

The system has a field of application in all sectors, especially in that of sportswear, where it is necessary to match the various pieces on the design of the fabric (stripes, checks, words and logos, drawings etc.), which necessarily have to match.

It is a device with high resolution and high luminosity, to allow good visibility even in well-lit environments. It has autonomous instruments for geometric correction (distortion of the perspective, cylindrical and skew) and chromatic correction (luminosity, contrast, dye, etc.) and of the image. It is mounted on a support at an adjustable height; this means it can cover the surface area of the table necessary and allow a determined width/height projection ratio.

Focus on Machiner

Speaker: Donato Bruno, Head of Customer Service / Product Test Division

Before starting to talk about the machinery, I wanted to emphasize how the sector of sportswear is one to which IMA has always paid great attention, in this way maturing good experience. We talk about technical fabrics used above all for different sports, such as cycling, running, trekking or skiing, but also in other sectors such as that of uniforms of all kinds, military, nautical, medical or aerospace, which have important requirements of quality, as well as the whole range of accessories such as backpacks, bags and much more. They are fabrics which, in any case, independently of their use, due to their intrinsic characteristics, require as already specified, a particular treatment and process.



Circle # 00 on Reader Service Card



In this world, precision is fundamental. The cutting and sewing operations must be impeccable to guarantee the greatest comfort, as well as a good aesthetic, because the need to treat increasingly complex fabrics means that the production process has to guarantee the highest quality. In this sense, IMA plays a key role in shaping the production process, paying attention to all details and every technical detail and giving rise to genuinely highly advanced systems and instruments that can work even on this type of fabric, which is particularly difficult, with millimetric precision.

So going on to the machinery proposed by IMA for this sector, we can introduce

LOADER - 812 CHRONOS

This system of cloth roll loading is a robot for handling cloth rolls of any type and material, ideal for the sector of sportswear but for others as well. It is a genuine warehouse, very large, because it can effectively contain from 10 to 20 rolls of fabric, depending on the customer's requirements. It is ideal for a rapid and precise start of the process which consists of immediately loading the roll on to the spreader. The great advantage is that the customer can programme the working day by already setting the order of the cloth rolls on the loading belts. It is not just a robot for handling cloth rolls, but also their management. It is suitable for the type of customer that during the day handles different rolls, not particularly large ones.

SPREADER - DUAL

In the sportswear sector, IMA offers the Dual spreader which has the speed and productivity of a spreader and the precision and accuracy of an unroller. It has been developed especially for small productions, for samples, for made-tomeasure clothing and for a single ply, thanks above all to its versatility. Having analysed the sector in question, the fabrics that are used, completely technical, present a high grammage and elasticity. This is why IMA has chosen Dual, which adapts to any situation, solving the issues linked to this type of technical fabrics and thus exploiting its flexibility. Considering this sector, it is important that the Dual spreader has the antistatic bar in order to eliminate the electrostatic problem typical of technical fabrics which also present a number of creases during the spreading. (estrapolazione dal video technofashion della dual - linea syncro cutting room)

LABELLING MACHINE - 908 POLARIS

The 908 POLARIS labelling machine, completely digital, is also perfect for this sector where the application of thermo-adhesive labels on the upper ply of the layer must in no way mark the fabric. The label identifies the parts of the model and of the lot in question; in any case it is possible to add and customize the information on the basis of the customer's requirements within the limit of the dimension of the label.

AUTOMATIC CUTTING MACHINE - 921.30 /922.50

Automatic cutting is the last phase in the process. We are talking about the automatic cutting machine model IMA 921.30 Tempest Plus, which allows cutting compressed lays of up to 3 cm., guaranteeing very high cutting precision, necessary in the case of these fabrics which are often sophisticated and very particular to cut, also and especially due to the fact that they are not transpiring. The fundamental accessory ensures the efficiency and the quality of this machine: the boosted turbine that helps compress the thickness of layer even more, allowing an even more accurate and quality cut, limiting to a minimum the error or the imperfection of the shape cut, keeping the fabric perfectly still. In addition, another important function is that of avoiding the material being processed undergoing deformations due to the change of vacuum flows.



Another important accessory when these non-transpiring fabrics are cut is lubrication. IMA developed a kit especially thanks to the collaboration with an American customer that produces backpacks for the US Army. Thanks to this kit, the customer was able to substantially increase the number of plies and therefore productivity, as the lubrication avoids the plies sticking to one another (video kit lubrificazione -3 video presenti con tglio da 3 cm)

The IMA 922.50 model is also particularly suitable for this type of fabrics and allows cutting lays that are slightly higher, compressed up to 5 cm.

Both machines are fitted with AMI (Advance Machine Interface), the latest software HMI developed by the IMA software department for the management of the most recent generation of IMA cutting machines.