

Simac 2006—ready to do business world-wide

Simac is still the most wide-ranging and international exhibition. However, the state of the market in the West makes it a time for consolidation rather than innovation. Having developed sophisticated equipment for a demanding European industry, suppliers now find themselves ahead of the needs of the newer Asian markets. In response, several have formed partnerships with Chinese companies so that some of their more basic models can be produced and marketed in China, thus bringing Western technology into the Asian market at a more acceptable price.

This year's timing of the exhibition was not ideal. It took place between Easter and an Italian public holiday and concurrently with an exhibition in Shanghai. The number of exhibitors and the size of the stands was somewhat reduced, but there were still 312 exhibitors from 20 countries and there were some items of interest to be seen.



Crispin's new Wacom drawing tool

CAD

Once software is in use, it inevitably has to be updated so all the main suppliers introduced their latest versions. Torielli and Crispin Dynamics were of particular interest.

Torielli demonstrated its latest version of the CSM3D Shoemaster system which now has dedicated sole design tools. This version includes a unique extra feature for processing patterns. The company has worked with Ars Sutoria to add various options to replicate manual methods of springing and deadening the forme and for selecting preferred mean lines. Traditionally trained users can adapt the control of the process to their preference and problems due to difficult materials, etc., can be dealt with and recorded on the CAD system so as to avoid manual amendment of patterns in the factory.

Crispin Dynamics introduced a new interface for the CADsuite design module which allows the user to draw on the large Wacom screen in 3D with a WiFi 'pen'. This multifunctional pen can

plot or stream points and act as a cursor to select from drop down menus, so, apart from being very satisfying to use for the creation of design lines, it also speeds up the process. Pre-prepared templates for frequently used sets of data such as texture, colour or offsets can also be quickly selected, and there is an automatic, simultaneous mirroring of design lines.

Procam has been further developing its Business Process Management software. This is a new and more user-friendly interface which features faster, simplified inputs for the process design function. User rights can be assigned to allow third parties access to selected data.

Delcam has been working on an upper package and now has direct transfer of the upper design lines to the 3D last in the sole design package to give information as to the exact position of upper components prior to sole design. The 2D graded patterns can be exported as a simple pdf file to be printed off layer-by-layer to produce a set of paper patterns.

Cutting

In an already over-supplied sector, there were few new branded models, but several presses had been upgraded for increased output.

Due to the high cost of leather, many companies now carry out 100% inspection of leather on receipt by specified methods and Bima's latest leather inspection table aids this. Instead of stretching the skin in one direction, it features a rounded 'hillock' which can be moved across the table under the clamped skin to give a 3D extension thus making flaws easier to spot.

Atom demonstrated the double head version of the large Flashcut 405155. To enable the double heads to work at high speed, the nesting computation speed has been greatly increased.

Teseo still took a huge display stand and has added a second head to all its continuous cutter models over three metres, to increase output. It also demonstrated the FC4 400 TH which, like the whole range, now uses Sanyo projectors.

Elitron has updated its nesting software for greater speed and included it in the Visio off-line nesting station and the Booster L2 cutter. Also shown



Bima's '3D' leather inspection table

was the K2 Linear cutter and the Dynamo T2 insole cutter, both now with twin heads.

Lectra nesting equipment has been fitted with Canon digital cameras for image capture, new projectors (also fitted to the cutting equipment) and a very large display screen.

Zipor showed a lower cost version of its waterjet cutter for upper materials. Available in several sizes, the equipment

uses cameras in place of projectors and includes nesting software for synthetics, with leather nesting software as an optional extra.

MaMecc demonstrated the P146 CU continuous cutter for heavy materials such as seat board and sole leather up to 6mm thick. The head is now fully mechanical and exerts pressure on the material so less vacuum power is required to hold it down.

Stitching

Not renowned for showing stitching machines, Simac still provided a few new models.

Dürkopp-Adler launched a new M range of stitching machines. These are a complete redesign with no screwdriver needed for the easy-change needle plate, a new Schmetz needle, bottom feed mechanism and a top feed wheel position. The bobbin winder does not need the thread to be attached to it before winding commences. Several parts are constructed from specialised plastic rather than metal and the central oil supply

has a warning light to indicate when topping up is required.

Juki showed a small area version of its TNU 243L auto stitcher for heavy thread on heavy materials. It now has a working area of 250x150mm making it more suitable for footwear. Also on show was a new buckle attacher that automatically stitches forward then in reverse to avoid workpiece rotation.

CMCI, now in partnership with Cuicani, showed a twin needle version of the moccasin machine that offers even more complex stitch patterns.



Dürkopp-Adler's new easy-change bobbin



Juki's auto-stitcher for heavy thread

Bottom preparation

Simac always has a strong showing of equipment in this area and there were several new items this time.

Benezzato exhibited the Easy sole router and decorator which, apart from cutting out the sole, can use three other tools per cycle taken from a choice of eight.

Comas launched the CS1, a twin-head sole cements which uses a small nozzle to outline the shape to be cemented, followed by a brush to fill in large areas. It was developed to cope with the routed out areas needed for contrast insertions on the wearing surface. Two differing paths can be programmed for the two working stations which each vacuum hold a pair of soles.

Eurmeccanica, conscious of the European need for small quantities of varied designs, introduced the PF06 ECA thermo-former sole embossing machine for synthetic materials. The machine has two work stations each taking a pair of cut soles, which are pre-heated before



Euromeccanica's sole embossing equipment showing embossed sole

being pressed on refrigerated embossing moulds to form the pattern. The typical output is 350 pairs per hour with a 15-second dwell time.

Several new insole processing machines for shaped insoles for very high heels were also shown. These have been developed specifically for insoles using a heavy seat board rather than the lighter 'sandwich' construction popular

in Europe for moderate heel heights. The processing takes place after insole moulding for optimum results.

The RoGi RG06/FS and Tallamonti Stella were both new bevelling machines.

Tecno2 also had the T/2005 waist bevelling machine to create a wider 'skive' and MaMecc had the Elit 129 double shank rivetter.

Lasting

In this sector the technology is ahead of the average customer's needs, but a few further developments were still unveiled.

Cerim introduced some variations on its established range of lasting equipment. The K130 tack/cement seat and side laster now has rubber 'pushers' rather like tank tracks to last the waist. The K158T tack seat and cement side laster has a new tacking system to insert tacks sequentially rather than simultaneously. The number of tacks and the spacing pattern can be set up to allow the optimum placement on cut outs or straps and to cope with very small or very large sizes.

Elettrotecnica BC has a new venture which saw it demonstrating a complete lasting and making line producing ladies' fashion courts. They have formed a partnership with Shanghai Dalong BC (exhibiting concurrently with Simac in Shanghai). The set up on show was conventional by Western standards except

that it used hand lasting for the waists and was designed to produce 400 pairs in a 25m² area.

Schon & Sandt didn't have any machines on show but now have a partnership with Cheng Feng, the largest lasting machine supplier in China. Through this agreement, the lower specification S&S models will be manufactured and sold in China by Cheng Feng, working from a new office in Guangzhou, while the others will continue to be made and sold in the West as normal.

Elettrotecnica BC's lasting and making line



Moulding

This area of the exhibition was disappointing with fewer exhibitors than normal, smaller stands and very little equipment on show.

Even Klockner Desma did not have its normal full machinery but did show its three-axis robotic PU pouring to give very accurate placement on complex designs and very tall units. This is particularly useful for specialised materials and was effectively demonstrated on Huntsman's wood effect material.

Although neither was on show at Simac, Ottogalli announced the Alba, a two-station sole moulder for PVC or TPU and Main Group publicised its Activa 2, a larger version of the two colour EVA injection machine with injection from above.

Kingsteel promoted a new two-colour EVA sole moulder. This is a linear format machine with a maximum of ten stations. Each station has one mould for two pairs of soles and it can inject two colours (or two densities) of blown EVA simultaneously.

Making

The most innovative item in the show was Brustia's prototype roughing machine using a laser in place of abrasion. It can rough the margin in one pass with adjustable depth in various zones and is particularly suitable for sandals as it operates only where required. Typically, one pass takes 13 seconds and it can also operate over the feather edge. It uses a CO₂ laser which although it produces 'smoke' that needs to be extracted does not produce any leather dust. This simplifies machine maintenance and reduces the risk of fire. The same equipment can be used for decorative effects on soles or uppers if required. The company has formed an alliance with Yili Shoes China to manufacture Brustia equipment under licence in China and handle sales in Asia

and South America.

ESM is continuing to develop welted machinery and the latest noise reduction and energy saving feature is that the rough rounder now only runs when actually processing a shoe.

Mecval introduced a more ergonomically-designed holder for marking the position of walled units in preparation for roughing. The PC82R has adjustable height and angle to allow an easier working position.

Iron Fox has changed its cement dryer technology and developed a special mono-component water-based adhesive. The SAS dryer can dry this adhesive in two minutes with no skin formation, low power usage and virtually no noise. The new development is being offered exclusively to existing customers until the end of the year.

Innovation of the show - Brustia's laser rougher



Miscellaneous

Robot System was demonstrating its last digitising work station using the last top clamping system which was designed for robotic footwear production. The individual identity chip that recognises the last, its position and its orientation, is fitted to the centre back just above the feather.

Wenzhou Shenlong, exhibiting for the first time at Simac, promoted its mould-making service to fit Klockner-Desma machines and the WL688MA forepart laster. Also on display was a wide range of general equipment. As agents for numerous companies, there was a

mixture of familiar names (e.g. Atom swing arm presses) as well as unbranded models.

In a potentially significant development, Tallamonti introduced an automatic inspection tunnel to be used immediately prior to boxing. The Revolution equipment uses cameras to record the appearance and check for size, shape, left and right. Significantly, it can transmit the images over the Internet for customers to view at will.

There was rather more in-factory lab testing equipment than normal with SATRA, Muver, Zipor and Wenzhou all offering their latest ranges. 

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