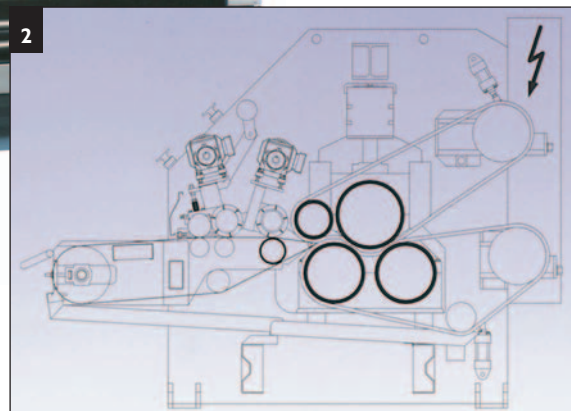
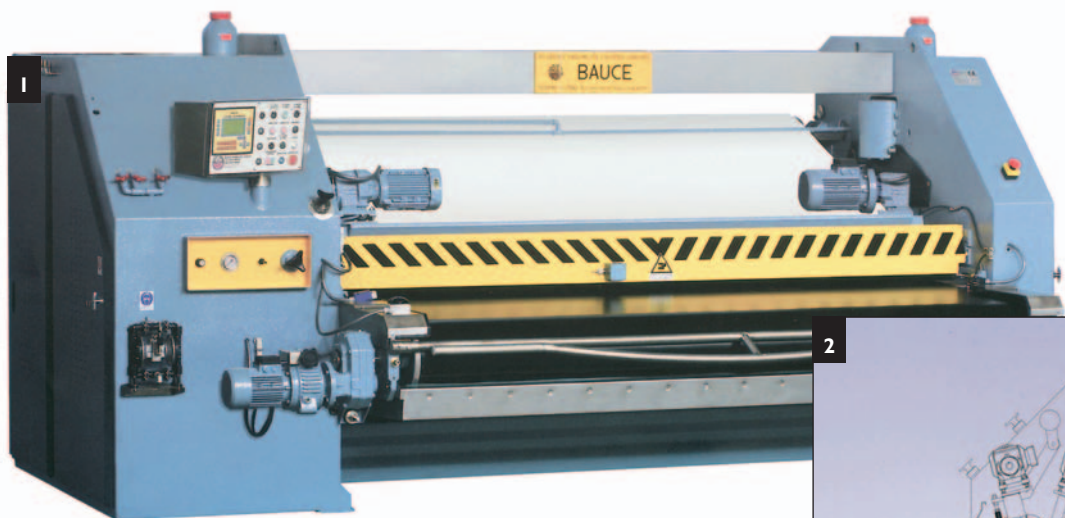




Tanning Tech Review 2005



The weather was unseasonably warm in Bologna this year, but a chill wind seemed to be blowing down the aisles of the machinery halls. Where were all the visitors? The absence of the major chemical companies clearly had a knock-on effect for the machinery manufacturers, and left many thinking seriously about their policy for the future. Some major players had already reduced the scale of their stands, a few well-known names were absent, and by the end of the fair some smaller companies were seriously wondering how they could justify exhibiting next year. As always, Tanning Tech is the best place to bring innovation to the market, but companies simply cannot be expected to bring "something new" to each and every fair, and many manufacturers presented developments of their existing ranges. Some new machines and new concepts, however, were to be found around the halls.

Throughfeed sammying specialists *Bauce* introduced its new Bluepress model for wet blue/wet white sammying (Figure 1 and 2). Replacing the established PRC3 model, the Bluepress has the same conveyor configurations and setting arrangements as the heavier Bluestar machine, but with three main sammying cylinders rather than five, it is aimed towards lighter weight or lime-split hides. The machine offers greater setting action than the PRC3, reduced pleating, and greater throughput speed.

A new model of the popular Superpress throughfeed embossing and ironing machine was introduced by *Bergi* with a 3400mm working width for very large whole hides. A new model of its Ariosa pneumatic de-dusting machine was also presented, equipped with four de-dusting heads.

Cartigliano tackled the problem of presenting large scale process machinery by designing part of its stand as a representation of its TAIC conditioning tunnel! Its integrated drying, staking and conditioning lines continue to be developed and perfected, and the company presented its four-head wet stretching machine, for use before and after vacuum drying.

Finishing specialists *Das Comar* introduced the Kodex Chromo Leather system, which enables the printing of photo-quality images onto leather at up to 1,600mm working width. The image is first produced at 720dpi resolution on transfer paper (Figure 3), which is then passed through a heated nip roller in contact with the leather surface at 3m/min. The transferred image can then be protected by a fixing lacquer applied with ➤

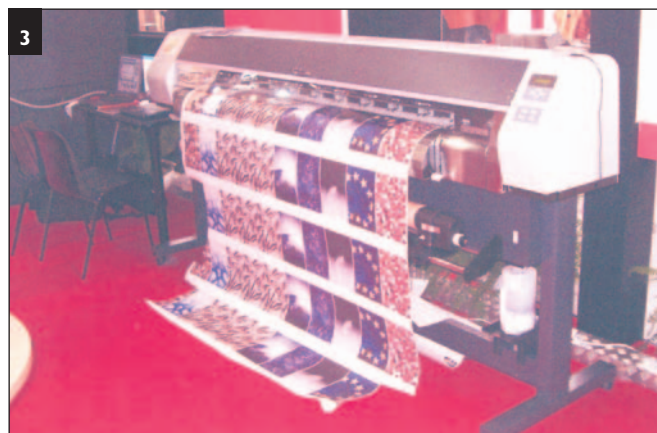
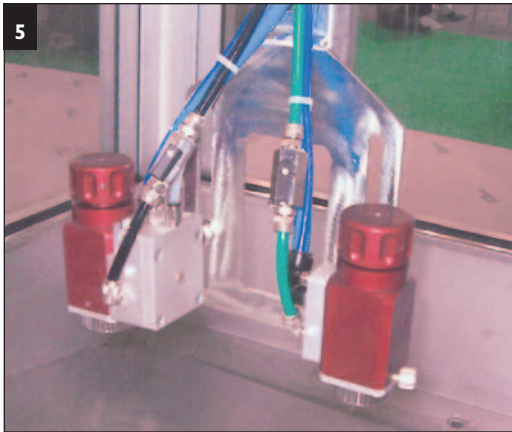


Figure 1 Bauce's newly introduced Bluepress TA2S machine.

Figure 2 Roller arrangement of Bluepress TA2S.

Figure 3 Kodex Chromo Leather transfer paper printer.

Figure 4 Feltre's new hide cutting machine.



a rollercoater. A vacuum application system is also available to apply the images onto finished leather products such as bags and shoes.

Chiampo-based *Feltre* normally exhibits component units of its automated hide-handling systems, but this year it brought an entirely new machine to Bologna. Its RawCutter (*Figure 4*) is an automated machine for cutting raw hides, built entirely in stainless steel, which can cut hides to three different patterns to give bellies, shoulders, croupions or butts. The two operators position the hide on the infeed table, then set the position of the cuts to be made with projected laser beams. The hide is then transferred to the cutting table, where traversing rotary knives cut the hide, which is supported on a bristle conveyor, at the set positions; the cut pieces can then be transferred to transverse conveyors or to a stacker at the end. Throughput of 200 hides/hour with two operators is claimed (further details of this machine will appear in *World Leather* in 2006).

Finishing specialists *GeMaTa* introduced its newly-developed Red automatic spray gun for use in spray cabins (*Figure 5*). This HVLP (High Volume, Low Pressure) design features adjustable spray fan width, integral flow regulation and line cleaning by compressed air. Its Jumbostar whole hide reverse rollercoater and associated Stardrier is now produced with a 3,800mm working width, which allows hides to be fed through the machine belly first, and offers a 20-25% productivity increase over conventional orientation. It is also claimed that rollercoating

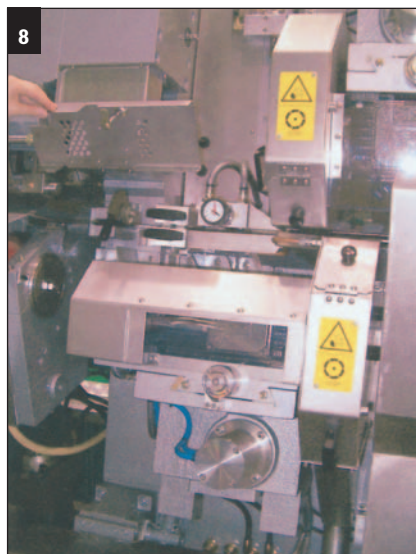


Figure 5 Gemata Red sprayguns in demonstration rig.

Figure 6 Hides upgraded by stucco reverse rollercoating.

Figure 7 GER Selevison system coupled to Linta Diamond splitter.

Figure 8 Revised grinding arrangements on latest Mosconi SuperZenit splitter.

hides belly first helps to cope with wrinkles in bellies and flanks. GeMaTa's customary rollercoating demonstrations on its stand this year concentrated on hide upgrading by stucco application with a reverse coater (*Figure 6*), which is finding increasing favour with upholstery and automotive tanners.

German automation specialists *Incotec* has followed the migration of tanning capacity to the Far East by opening offices in Thailand, and is currently working on a 14 drum installation for the Stellar shoe leather group in China.

Italprogetti presented an interesting new development of the polypropylene drums that it has championed for several years. By incorporating water circulation channels in the polypropylene skin of the drum, the temperature of the contents can be controlled by circulating hot or cold water, delivery being via



Figure 9: Mosconi Aster 3000 shaver with touchscreen control.



Figure 10: Laser cutting and engraving machine from Ot-Las.



Figure 11 Inside a Pajusco X-drum.

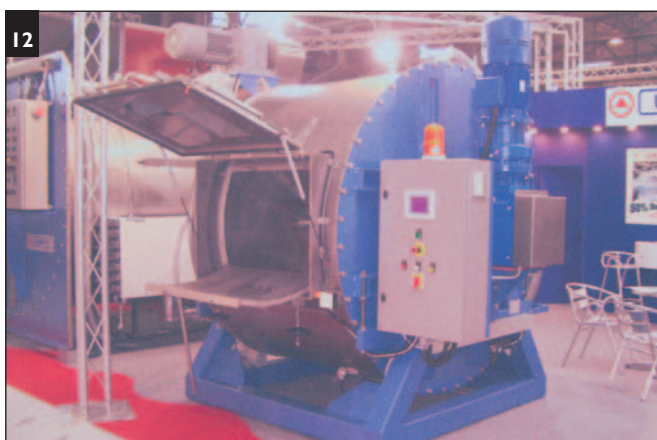


Figure 12 Romagnoli's simplified Inox 4004 machine.

rotary sealed joints on one axle. Float composition is unaffected, and it does not have to be circulated externally through a heat exchanger. The development is claimed to be particularly useful to tanners working in hot climates, as overheating can be easily controlled; it is also said to be useful for vegetable tanning and fatliquoring. A new sealed polypropylene milling drum was also introduced, capable of both wet and dry milling and able to produce effects such as bleaching and natural wrinkling.

Linta showed its "upside-down" Diamond splitter, with gauge roller at the bottom and ring roller at the top. The machine is intended to be fed by a feeder conveyor system, and can thus be directly linked to the outfeed of a sammy machine without an operator to handle the leather. The splitter was exhibited with a GER Elettronica Selevison system (Figure 7) which measures, displays and records the thickness of the split, and can be used to automatically adjust the splitting machine.

The well-established SuperZenit splitter from Mosconi has several new features for 2005, including colour touchscreen control, grinding head adjustment by brushless electric motors, and an automatic blade blunting device for use before blade changes (Figure 8). Mosconi's Aster 3000 shaver (Figure 9), besides sharing the splitter's touchscreen, also has an in-built PC unit which enables the screen to show video clips of operation and maintenance procedures for the guidance of operators.

Mostardini presented a new design of platen press for embossing, the 1,200-tonne model MP7TS. The press has a new frame design fabricated from 140mm steel plate, which is claimed to give greater rigidity and more working space above the platen for the operator. A touchscreen panel is used to control the press, and mechanical or photo-electric guarding systems are offered.

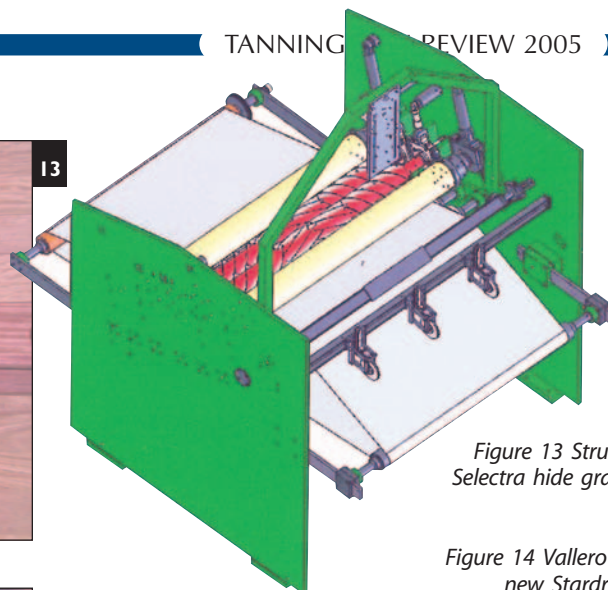


Figure 13 Structure of Turner Selectra hide grading machine.



Figure 14 Vallero International's new Stardrum for dyeing.

Spanish drum producers Olcina continues to promote the "cangeliones" low float, low speed designs which it pioneered, and which are now available in traditional wood, stainless steel and plastic. Working in the latter two materials has led them further into the area of milling drums, where the "cangeliones" principle of deep shelves with low rotational speed is now offered, with benefits claimed over traditional milling.

A high-precision laser cutting and decorating system for leather was presented by Ot-Las of Calenzano. Its Way 60-160 machine (Figure 10) uses a computer-controlled laser to either cut intricate patterns or to burn designs into the leather surface. A working area of up to 1,600 x 1,600mm is available, and the accuracy and delicacy of the results achieved is remarkable.

Persico has continued with incremental improvement and development of its highly successful throughfeed flesher design. The latest machines, in 3,100 or 3,400mm working width, incorporate electronic control of hide transport speed, independent control of fleshing pressure for upper and lower positions, and all machine casings and guards in stainless steel. The machine can now be supplied with a special device at the lower fleshing position for working humped "zebu" hides.

The increasing popularity of low float, slow speed processes for liming and tanning has led drum manufacturer Pajusco to develop its patented "X-drum" system, which is available for wooden, plastic and stainless steel drums and also for retanning, dyeing and milling.

The X-drums are equipped with five very deep, t-headed shelves (Figure 11), and operate at half the speed of conventional units—30% more loaded weight is claimed per ➤



unit for the same external dimensions. Pajusco claims that the five-shelf layout increases the stiffness of the drum construction, and speeds unloading of leather.

Bologna-based *Romagnoli* is one of the few Tanning Tech exhibitors which is on "home territory"—it presented a new model in its range of stainless steel processing vessels, the Unimatik Inox 4004 (*Figure 12*). This simplified machine has a capacity of 800-1,000kg shaved weight, direct drive to the axle and a single external door incorporating powder hopper and sample door; the simplified design makes it 20% cheaper than previous models of the same capacity.

French manufacturer *Turner* presented its new Selectra automated hide grading unit, available for whole bovine hides and for ovine skins (*Figure 13*). The machine spreads the hide or skin flat onto a special conveyor, where it is illuminated and scanned by a high resolution digital camera, which is able to recognise scars, wrinkles and insect damage. Thickness is also measured at three points across the machine, and the resultant data analysed by computer to grade the hide automatically without operator intervention (further details of this development will be featured in *World Leather* in 2006).



Figure 15 New AG vertical door has no inflatable seals.

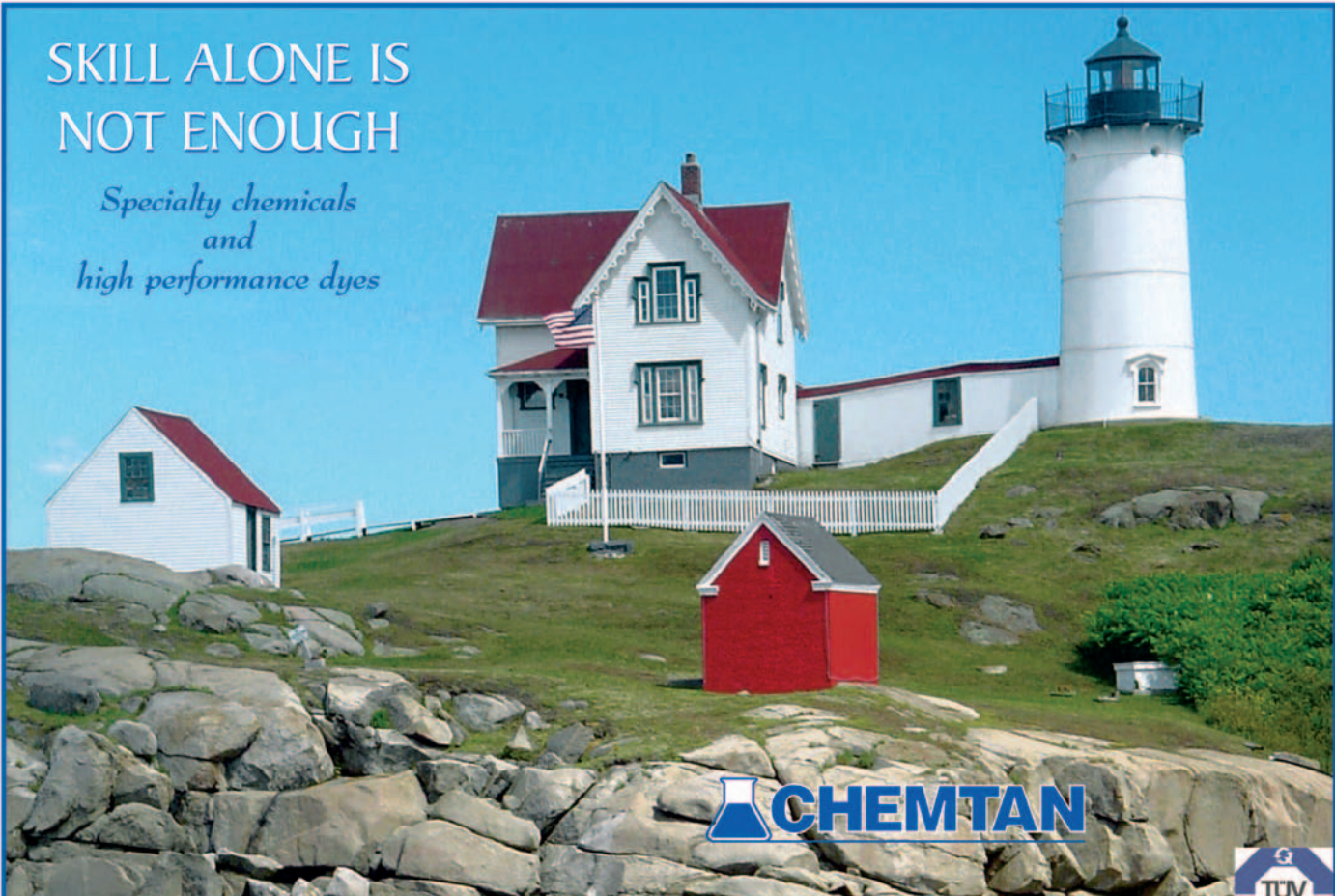
Drum manufacturer *Vallero International* continues to develop its production of stainless steel vessels, and introduced its new Stardrum range of dye drums in sizes from 2 to 3.5m diameter (*Figure 14*). A transparent side wall is available in sizes up to 2.5m and a full range of options such as filtration is offered. These vessels are complete with mounting frame and require no plinth or stand. A new design of vertical automatic drum door, the "AG", was also introduced, which does not require inflatable seals (*Figure 15*).

So, the fair ended with gloomy expressions on many exhibitors' faces. Whilst visitors will no doubt have been delighted at the unhurried opportunities they had to speak with key people on manufacturers' stands, the drop in visitor numbers is a serious concern. Several major manufacturers expressed satisfaction at the level of serious business achieved, but for those small companies for which Tanning Tech in Bologna is their major "shop window" to the world, results were indeed poor. It seems that something has to change. ☹

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