



Assessing Tanning-Tech after four years of recession

By now it could be claimed that the industry has learnt to live with the current state of the domestic Italian, European and world economy. It might not be what the dominant machine builders in the leather industry would like, but the reality is that there does not seem to be an end in sight to the uncertain times prevailing, especially in Europe; certainly that is the broad brush picture that could be gained from speaking to both exhibitors and visitors in Bologna at the 2012 Tanning Tech show in October.

Not unexpectedly, there were companies that have continued to enjoy commercial and technical success, others were living in hope, while other exhibitors appeared to be stagnating and treading water. Demand for new and replacement equipment in domestic markets remains low but some companies have been greatly encouraged by export activity and the prospect of further sales in the Far East and in some South American countries.

Technically, machine innovations were few and were often confined to modifications of already current machines. Regarding the attitude to the exhibition, however, there was more positivity compared with previous years in the sense that fewer company spokespersons considered it a waste of time and money or wished to see the machinery show take place less often. Certainly the 'one year on/one year off' Tanning Tech schedule as regards to showing and demonstrating machines has been largely accepted by the industry.

Of the 80 exhibition stands in the Tanning Tech Hall, 36 companies were machinery, accessories and consumables manufacturers and traders. Among the others were 13 chemical producer companies supplying the tanning industry. Although Tanning Tech has strived to become international, it has remained a predominantly Italian venue, even though some 12 different countries took part. Excluding press stands, 60 companies were Italian, seven came from Germany, two each from Spain and France with singletons representing South Africa, Switzerland, Holland, Finland, China, Mexico, Argentina and the UK.

A new approach to drums

Before reviewing some of the individual stands, in alphabetical order, a notable development in the field of drums must be highlighted. As soon as chrome tanning really began to take hold in the mid 1980s, wooden drums became the general equipment used in handling wet end operations; wood is still the dominant material used in rotating vessels but other drum construction materials have come into the field. For a number of years, several wooden drum manufacturers also produced stainless steel drum bodies. Although these were designed originally for use as small laboratory vessels and subsequently dyeing and also drying drums, limitations of size as well as temperature losses put a brake on much further development.

Polypropylene fabricated bodies made an appearance some 20

years ago but their adoption was somewhat limited, with cost and endurance factors playing a role. The use of higher specification polypropylene, PPH, and increasing experience gained by the builders, is now making substantial headway. PPH has a high resistance to temperature losses and the sophisticated internal configuration elements, originally developed for wooden drums, can also be installed. There is every sign that there will be a developing move away from wood construction to PPH.

Hüni moves into PPH

Hüni occupied a large information stand. Reaching back to 1968, this Swiss-based firm, a leader in drum and its ancillary equipment manufacture, is an excellent example of a company initiating progress in the drum sector.

Its entry into the field came via process control automation, which in earlier days was based on the then widespread punched card system, when the company developed its state of the art electronics for drum operation. Once established in this area, Hüni took the logical step of extending its activities to the building of drums, adapting and developing classic wooden versions into drums with high loading capacity, water and chemicals saving, optimum mixing effects, energy saving and working at reduced speed.

Other factors such as drum doors, internal construction systems and recirculation arrangements were continually updated by Hüni. Stainless steel bodies were not involved but polypropylene (PPH) constructions were targeted by this company resulting in PPH bodies using standard welding technology or tubular technology. Hüni now makes standard liming and tanning drums in this medium in up to 3600mm x 3600mm dimensions. The important characteristics of PPH



Tubular Technology and Standard Welded PPH System Hüni Drums



drums are easy cleaning, good thermal insulation, high chemical resistance, more internal volume, lower weight and no need for swelling of drum material to ensure elimination of leaks.



Hüni PPH drums installed.



Aletti De Zero shaving machine, redesigned and based upon the company's many years of experience. The aim is to achieve simple operation without needing special operator training. Controls are conventional without electronics. Critical components such as cylinder and rollers are manufactured in high specification steels for rigidity, endurance and minimum maintenance. Working width up to 1800mm.



Alpespak Suprema wet blue splitting machine with dual operator controls.

Bauce introduced its brand new sammsetter (below) with seven pressure cylinders and six sammying points. The machine, marketed as the **Bluextreme**, can be manufactured with up to 3400mm working width.



The **Bergi Innova** buffing machine for soft leathers with automatic adjustment of working thickness and holding blade. This machine is available in up to 1550mm working width.



The **Bergi Nabukka** buffing machine for processing nubuck finished leathers. The quality of the nubuck effect is enhanced by the system of misaligned operative rollers.



The **CM Tannery Machines** new throughfeed sammying machine is shown below.



Officine Di Cartigliano SPA. Rather than showing machines a very large stand was set up as a walk-through gallery of images of tannery machines developed and built by this company since 1960. Some of the key dates of its growing technology were:

First radio frequency unit	1969	Low temperature dryer	1990s
Semi auto "lunetteuse" staker	1980s	First 4 head auto staker	2002
Single head mechanical staker	1980s	Auto drying line-wet stretch and	
Through feed dyeing machine	1985	TAIC dryer	2007
Reverse roller coater	1986	Eight table vacuum dryer	2008

Although an image was not available, **Danese Tannery Machines and Parts** report the development of "NEXT", a textile conveyor engineered for use on vibration staking machines.

The **Equitan** information stand (below) promoted Condufelt, a new antistatic conducting felt for use on ironing and embossing machines. This new product joins the range of antistatic felts for staking and dedusting machinery. A new stamping device for raw skins with an operational system similar to the manual stamper exerts more power and is mounted on a work table for enhanced operator safety.



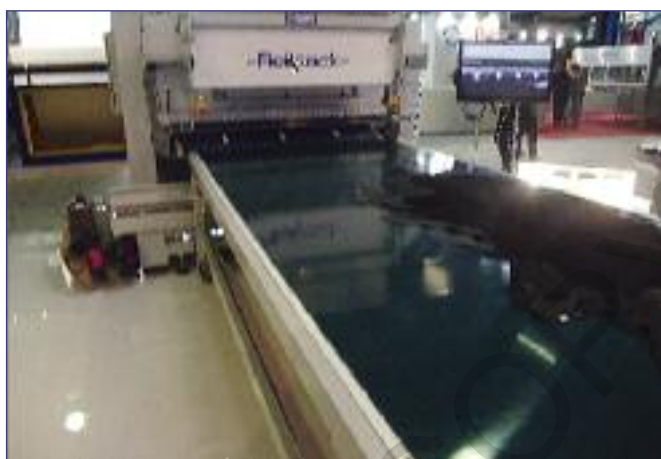
Escomar Italia SRL showed its Escomar PCR7, a new sammsetter configured with seven pressure cylinders and five sammying points. It is manufactured in a working width range from 1800mm to 3300mm.



Feltre SRL and **Emmezeta Tamac SRL.** Based on the Feltre stand, associate Emmezeta introduced a new drying machine styled MachTwins. The photograph above shows the output conveyor of the dryer equipped with a double working station ensuring high productivity, exploiting the large number of frames resulting in longer exposure in the drying chamber. The system is PLC-programmable to achieve optimum temperature and humidity conditions and is specially suitable for handling skins and sides.



Gemata SPA. Pride of place on this stand was a line with Starplus-S rollcoater followed by a Stardryer. A foam mix generator was also shown. The versatile reverse and synchro Starplus-S can handle stucco application, impregnation, oils, pigment coating and foamed chemicals. The latest model Linta splitting machine was displayed, fitted with a universal automatic feeding device.



GER Elettronica SRL focused on bundling machinery. A new conveyor-fed rolling-up machine, still a Rollpack system, was demonstrated. It can roll up side leathers onto a cardboard tube and produces printed labels with programmed data. Also shown was the Roll 1 bundling machine, which rolls up single leathers and can handle up to whole hides.

Heusch GmbH & Co KG. The introduction of stainless steel shaving and fleshing blades by this company is a major step forward. New technology makes manufacture of this product possible without losing sharpness. Corrosion resistance is obvious and service life is increased. There is full compatibility with cylinders machined to accept conventional knives, Heusch or their competitors.

Italprogetti Engineering SPA. This early developer of polypropylene drums has participated in research and development of an oxidative unhairing process requiring drums capable of meeting specific new factors. Design and implementation of the ECO Smart polypropylene drum, resistant to hydrogen peroxide oxidation, resulted in appropriate control and automatic dosing systems installed to monitor PH levels, temperature of float and automatic dosing of chemicals. It also signals to circulate chilled water through coils to cool drums as needed.



Olcina Group Trading Co. S.L.U. This illustration shows that yet another drum maker has entered the PPH construction field with a 2m x 2.5m drum. It also demonstrates that conventional componentry such as the gear ring and the stainless steel door with frame lends itself readily to be fitted.



Pajusco Tecnologie SPA. This photograph shows another kind of polypropylene construction. This type of drum is produced by Pajusco in a range of sizes from 1m diameter x 0.5m width up to 3.5m diameter x 3m in width.



Rizzi SPA positioned an eye-catching new wide shaving machine on the front of its stand.



Rotopress SRL. This independent company, now located in Montebello Vicentino, continues to manufacture the classic stainless steel band type throughfeed ironing press alongside a roller type press.



S.C. Costruzioni Meccaniche SRL. Three of the company's products were illustrated by posters on stand:

Hairpress: dehydrates load and compresses

Cleandisc: cleans filtration discs quickly and effectively

Salt Shaker: a drum which, when loaded with salted hides, shakes out surplus salt.



Close-up view of the Millimir opto-electronic system capable of measuring exotic leathers with millimetric precision. Shown integrated with the wheel type universal measuring machine.

SELIN PROJECTS SRL. Its Rollmir universal wheel type measuring machine is shown, incorporating the exotic leathers precision measuring device.



OFFICINE TURATO SRL. The vacuum dryer on show named "INNOVA" represents its newest development. Much of the technology of its predecessors, one with liquid pump and the other with the first dry pump, is further developed. Dry claw type vacuum pumps are using minimum energy, twin condensers providing high thermal exchange rates and recovery of pump exhaust air to maintain working temperature along with magnetic table position sensors are just a few of the new devices which are to be expected to open some 50% of the market for this type of processing.



Thema System SRL. The photograph shows its new Applicart Evo with new styling, greater flexibility in the application of ironing papers, higher precision to meet requirements of new papers and devices which reduce a tendency of creasing papers during the operation.



Vallero International SRL. A dye drum 3.25m dia x 2.50m was shown. Internal fittings are three large shelves of the "dragon" type which ensure maximum lift and drop of the load. Recirculation of liquor is by the twofold "cyclone" system using two large wooden spoons to direct flow into a "laboratory" box. The main access door is 1000mm x 1000mm in stainless steel.