



Notes from

TANNING-TECH

2010



A photo taken from the elevated section of the Cartigliano stand across the machinery stands.

Indications from both exhibitors and visitors at Tanning Tech this year confirm a recovery of the global leather industry from the miserable levels of 2009 but still clearly a long way from pre-recessions conditions.

All tannery machines, accessories and service stands occupied approximately three quarters of Bologna's Hall 35, with the remainder taken up by chemical producers' stands. More precisely the machinery and service sector numbered 79 stands and chemicals came in with 27. While Italian exhibitors dominated, a further breakdown provides an indication of the degree of international presence:

Machinery, accessories and service stands: France 2; Spain 2; Germany 3; Switzerland 1; Holland 1; UK 1; Argentina 1
Chemicals: China 1; RSA 1; India 1

Organisers Assomac report that there were official delegations from Argentina, Mali, Morocco, Mexico, Poland, Russia, Tunisia, Venezuela and Vietnam present at the combined Tanning Tech and SIMAC shows. On the same basis, still taking the two fairs together, Assomac estimate the total number of visitors at 15,000.

Importantly, all three days of the show were busy. Major

exhibitors dealt with large numbers of interested parties and pronounced themselves satisfied with the quality of enquiries, some of the smaller stands rather less so. Interest focused upon new developments and innovations and the following 28 images and commentary illustrate some of the highlights.

One final impression is based upon discussions with exhibitors. There is no doubting the importance of Tanning Tech and about 50% of stand holders responded very positively as to its place in the exhibition calendar, but some however put forward arguments in favour of a biennial rather than annual show. A further 30% were enthusiastic, seeming to indicate preference for annual fixtures while the remaining 20% said that they were disappointed, and thought the Tanning Tech cost and effort not worthwhile. In reality they were saying nothing new in this straw poll — after all, these are the comments the World Leather team at major exhibitions has been hearing for years!

TMM



A 1550mm width model of the **Bergi** Selecta range of new buffing machines. Amongst several new features the machine is provided with a system including an inverter for the transport roller drive with visual speed display as well as another inverter controlling oscillation, again with visual display.

An example of the **Bertech** stacker could also be seen on this stand. This type of new stacker is available in four versions:

The 'Dynamic', a traditional compact stacker

The 'SPL', a line of stackers for splitting machines

The 'Armless' with split movable conveyor

The 'Soft' for perfectly flat leather

Tannery machinery builder **Aletti** presented a new wet buffing machine for wet blue bovine hides and pig skins. This machine is specifically designed for the buffing of wet leathers by means of an abrasive paper band. Compared with dry buffing, quality is enhanced (fibres are shorter). No dust is produced and where wet leather is buffed before re-tanning penetration of dye products is enhanced.

Aletti reports that this new machine, type Velox SNW, in certain cases can replace wet shaving. Chrome tanned leather and vegetable tanned leather can also be handled by this wet buffing machine.



The 1550mm working width 'Optima' buffing machine introduced by **Steni**. This buffer is available in a range of working widths from 1250mm up to 3250mm.

A feature of this type of machine is a leather spreading device which can be fitted at the feed out side (not visible here). Inverter controlled speed variations include the rubber cylinder drive, oscillation device, leather holding arrangement and leather transport.



Further development of mechanical leather stacking has led to a new compact machine produced by **Rodalch Srl**.

The machine can accept most types of skins and it can be placed in line after measuring. Soft leathers are handled without problems. Grain to grain stacking is straightforward. Slippery surface leathers, normally problematical with conventional stacking, are satisfactorily stacked making the machine suitable following ironing or embossing. Processing is understood to be fast and with precise alignment.

The Turato vacuum dryer.

A dry vacuum version without liquid ring pump is produced as well as a fast drying machine utilising either a water ring or an oil type vacuum pump. Turato also specialises in the manufacture and supply of spare parts for all types of Italian made vacuum dryers.

Service and support by experienced technical staff is available on a world wide basis.

"User enablement" is a policy introduced by Turato which helps the user to solve his technical problems. Part of this is based upon supplying information about the necessary sourcing of spare or wear components.



On the **OLCina** stand - a large poster listing the updated product range.



Electronic measurement specialist **GER** has adopted the universal "Plug + Play" system to create its Selevison program to separate, classify, arrange and manage control of leather substance. The program in a wet blue application precisely reads and saves substance value. Hides are graded according to substance and size resulting in a record of accurate data of the number and the surface of each hide category. Selevison can be integrated with process machinery such as splitters where the interface allows monitoring and controlling the machine performance. It can be used independently as a sorter.



The main feature on the **Feltre** stand at Tanning Tech 2010 was the Caravel automatic unloading system for drums. Feltre says the Caravel system manages the movement of hides in the tannery, collecting hides from the tanning drum and moving them into the correct position for the next work phase, optimising productivity and making the best possible use of space in the tannery, while maintaining the quality of the hides throughout the process. Feltre first installed the system at Ecco's tannery at Xiamen in China in August 2008 to manage the unloading of hides from the dyeing and retanning drums and their movement to the setting machines. The technology provider says the project was successful enough to convince Ecco to put the Caravel into all its tanneries.

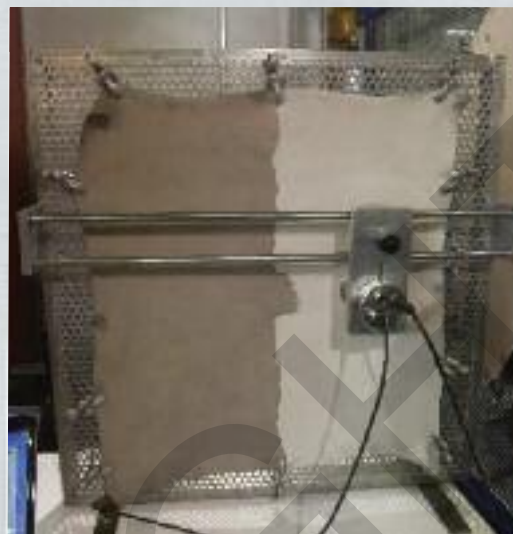
In 2009 it carried out an installation at Colomer Moda (part of the Henan Prosper Group), which this time included an unloading system for 14 steel liming drums. Colomer Moda processes sheepskins, so Feltre adapted the system to suit the specific characteristics of this product.



The **Bounce** Versus model thru-feed sampling and setting machine shown here is equipped with an optional bridge above the feed conveyor. Placed on this bridge an operator can survey the hide about to enter the machine and input selected classification features which can later be used to determine subsequent processing settings.



Emmezeta, aware of the difficulty in controlling drying parameters in machines such as toggle dryers has developed a device capable of detecting and displaying actual moisture content of the leather as it travels through the dryer. This can be an aid to the setting of machine controls such as temperature, air flow and extraction to optimise performance.



The wireless substance calliper employed transmits leather substance values to create data flow producing substance display of a given hide or skin. The measurements are saved and are used to create reports, diagrams and analyses of trends.

A development of **Axis Consulting INC** together with **bserviceB** located in the Veneto region of Italy which unites digitised measurement with software in real time. Analysis of the map produced can result in more precise splitting, more valuable splits and also reduced amounts of shavings.



Front view of a 'Suprema' **AlpeSpak** splitting machine. for wet blue and dry splitting.

This is a technically well developed splitter with new mechanisms such as fast hydraulic opening and closing head movement and a six point mechanical jack.

The work table includes a hydraulically actuated double oscillating counter roller system. Opening and closing functions are also hydraulic here.





This shows a so-called Elliptical Spraying Machine although the movement of the gun in the circuit is in a straight line. The machine was exhibited by **ELPA Service**. The guns are connected to a central rotating distributor but each gun has separate electrical, pneumatic and pigment supply. This type of spray application has the advantages of the reciprocating machine but without the mechanical drawbacks of a reciprocating system.

Plastic construction of tannery drums is gradually increasing in its market share. **Vallero International**, a long-time maker of the classic wooden drum has now also entered the field taking however a new approach in design. Rather than using large plastic mouldings the drum in principle is built in the same way as a wooden drum. It is assembled with separate staves of high density polyethylene with special rubber seals between each stave. The drum ends also consist of three polyethylene sections each, welded together. The result is that conventional fittings can be used and, above all, drums can be supplied in components and then assembled on site. The drum can be put into service without delay as no swelling is needed to ensure water tightness.



The image shows the plastic roller arrangement, the element used in the design of a new radial spreading machine developed by **Danese**. The machine is capable of "radially" stretching both wet and dry leather. It is understood that an appreciable surface gain, along with equalising substance, results from this operation. Danese reports that the device can be installed on either feed-in or feed-out ends of suitable leather processing machinery.



During the Tanning Tech event **Gemata** staged one of their "Open House events" at its main factory at Trissino (Vicenza). One of the exhibits was the "Linta" splitter equipped with a fresh-off-the-drawing-board automatic feeding device. The images show the device in its configurations.



1) Feeding device in the operating position. Operator platform automatically raised.



2) Feeding device commencing to lift out of the way. Operator platform beginning to descend.



3) Feeding device swung out of the way. Operator platform lowered and machine ready for direct feeding of leather.



4) Rear view of machine showing mechanism of swinging feeding device.



5 + 6) Views of operators feeding the splitter using the raised feeding device.



Consumables, spares and accessories

The requirements for these materials have continued to rise in recent years. **Equitan** - equipment for tanneries - since its inception some 10 years ago has developed a large range of components to satisfy the demand.

A core product for the company is the antistatic conducting belt for vibration staking machines which has been conceived so as to avoid attracting dust to the leather during the staking operation. A belt suitable for use on wet stretching machines made of a water resistant fabric has also been introduced into the consumables programme available.

Typical of the range amongst others are items like substance gauges, pneumatic stamping devices, polishing machine rollers, moisture meters, conveyors in a variety of materials and more.

More recently a stand-alone leather de-dusting machine has been designed and is being marketed.



"Roll Pack" is a fast rolling up machine for leathers developed by **GER**. It is a bundle forming and tying device actuated mechanically. It was developed originally to roll up leather following a measuring machine.

(Machine not displayed at Tanning Tech - details and image based upon published information)



An example of a range of polypropylene liming/tanning and dye drums newly designed and produced by **Hüni**

(Drum insert: Hüni)



Laboratory equipment specialist **Giuliani** have added fogging test apparatus to their range of test instrumentation. It is based upon a method originally designed by automotive standards with the aim of testing leather and fabrics for "fogging" in determined ambient conditions.



Fogging test apparatus open



Fogging test apparatus closed

More innovations presented at the Fair:

- A new wide working width Thrufeed Fleshing Machine introduced by **Rizzi**
- A roller type area measuring machine equipped with a "micro" measuring bridge suitable for precise surface area measurement of reptile and similar narrow skins demonstrated by **Selin**
- The "NewContilux" rotary ironing and plating press reported to perform for better quality of leather properties introduced by **Rotopress**
- Enhanced performance milling drum now equipped with with internal shower system and automatic temperature control developed by **Pajusco Technologie**
- New surface area measuring machines demonstrated by **Wega** including a model equipped with touchscreen display and function setting, and another new machine for precise measurement of reptile skins. Wega also have a patented measuring bar designed to work on the feed-in side of a rotary press. In another field a drum temperature monitor using radio wave data transmission to display and control has been developed by this company.