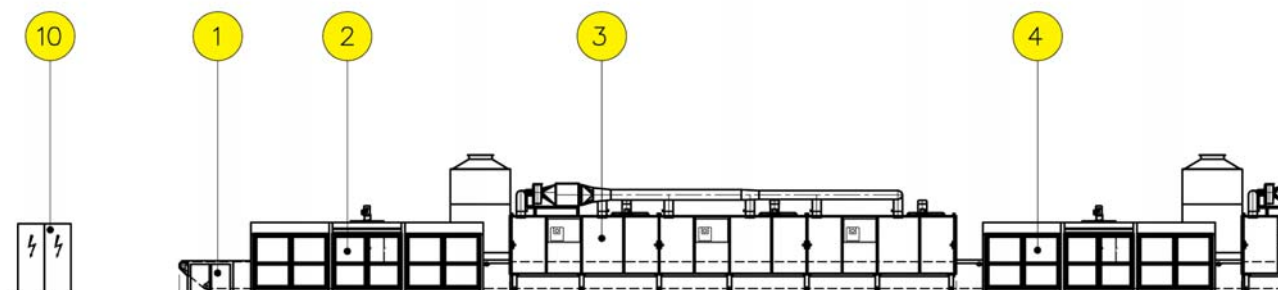




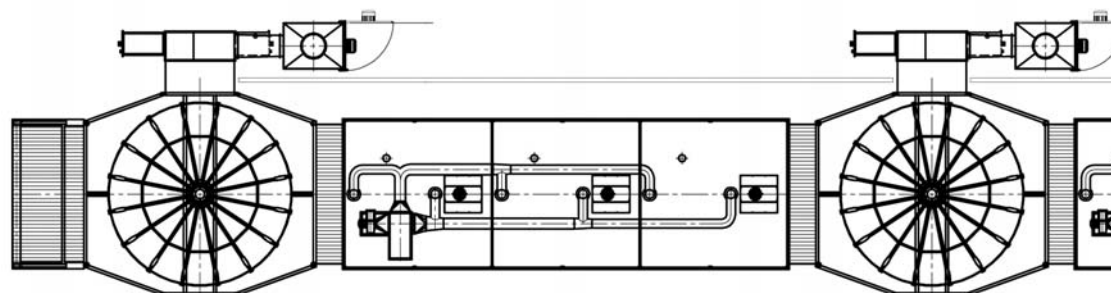
The Machine Minder

Layout of a 3800mm wide rotary sprayer recently installed at the Mastrotto Indonesia plant.



Key:

- 1 Leather feed and exit points with string scraper fitted
- 2 First rotary sprayer
- 3 First drying tunnel
- 4 Second rotary sprayer
- 5 Second drying tunnel
- 6 Third rotary sprayer
- 7 Third drying tunnel
- 8 Cooling cell (chiller)
- 9 String conveyor
- 10 Electric control console



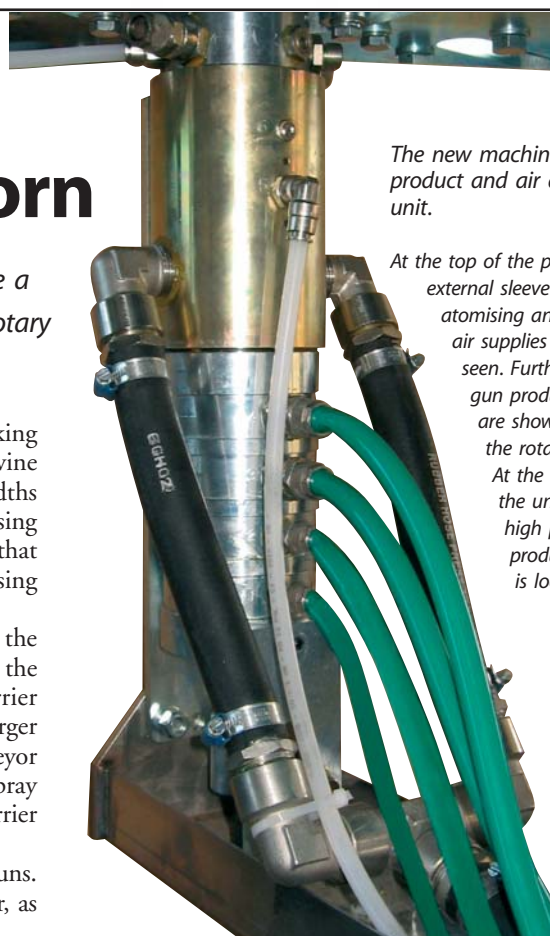
The 3800mm-wide rotary sprayer is born

Finishing machinery specialist engineer Gemata has made a significant step forward by developing a 3800mm wide rotary leather spraying machine.

The rotary sprayer originated with machines that had a working width of 1800mm, largely designed to be able to handle bovine sides with an acceptable throughput rate. Versions with widths between 3000mm and 3400mm came later to meet the increasing demand for finishing whole bovine hides. Tanners soon found that productivity with smaller-sized leathers could also be improved using these machines.

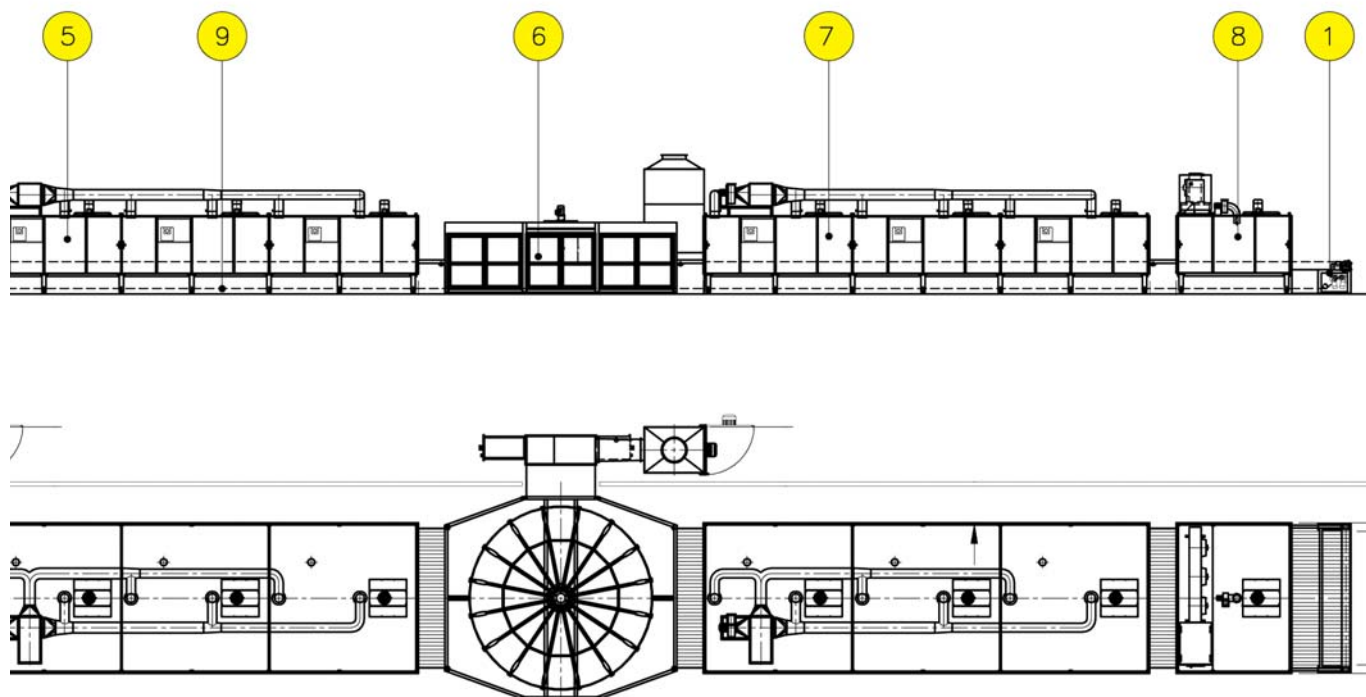
The significance of the jump to 3800mm, quite apart from the ability to process even bigger hides more effectively, lies in the qualitative aspect of the operation. Obviously, the gun-carrier diameter—that of the carousel—is greater in the case of the larger machine. As a result, the arc described by the guns across the conveyor becomes flatter and this, in turn, produces a more uniform spray pattern. Gun velocity can be higher without increasing the carrier revolution rate.

The 3800mm system is designed to allow the use of up to 16 guns. For all these reasons leather can be fed through the machine faster, as long as the rest of the line is specified to cope with this.



The new machine's central product and air distribution unit.

At the top of the photo, the external sleeve with the atomising and gun control air supplies connections is seen. Further down four gun product supply lines are shown connected to the rotary gland rings. At the bottom end of the unit a separate high pressure, airless product supply gland is located.



General manager of Gemata, Dr Gianni Maitan, is the driving force of ongoing technical development in the company.

An appropriately dimensioned central product and air distribution unit supports the enhanced requirements. The complexity of this unit is explained by means of the illustration shown above.

The scale of operation of the new wider rotary sprayer demands a high degree of performance by the ancillary equipment normally required. This applies particularly to the exhaust fume scrubbing system, the string cleaning device and the design of the drying tunnels. Energy saving and reduction of polluting emissions have also been addressed. Subsequent issues of *World Leather* will report in detail about Gemata's developments in those areas.

A basically similar two sprayer line is installed at Mastrotto's Calbe Sud plant (now known as *A Pelle*). It features emission control equipment mounted above the respective sprayers with better efficiency and space saving. Also a cooling cell is fitted at the end of that line.

TMM