



Mercier Turner augments its Newsplit machine

Since World Leather last published information about the Newsplit splitting machine from French tanning machinery provider Mercier Turner in 2015, the company has continued to make progress on a seven-year project to refine and improve lime-splitting capabilities.

When Mercier Turner introduced the Newsplit splitting machine in 2015, it claimed to be breaking new ground. The company stated then that the Newsplit was the first splitting machine in the world to work with brushless motors and to offer digital control through the Windows operating system.

Since then, the company has continued to add to the technology's capabilities, and through work it has carried out with Lyon-based research and testing organisation CTC, has developed an automated hide-feeding component called Autofeed, which allows operators simply to place limed hides onto the conveyor belt for feeding into the Newsplit machine.

Lime-splitting is arguably one of the most critical mechanical processes in the tannery. For this reason, Mercier Turner has spent the past seven years looking at ways to improve this operation. After introducing the Newsplit, it turned its attention to establishing the best way for leather manufacturers to use it. Through long and strong

experience based on the technical and morphological issues that arise in feeding limed hides, recently fleshed, into a splitting machine, it seemed clear to the company that the feeding operation was an area worthy of investigation.

An automated system appeared to offer several advantages:

- Elimination of operator contact with the band knife, thus improving safety,
- Increased output,
- Easier feeding and improved accessibility.

Having identified these advantages, development was pushed further in order to answer what is, in Mercier Turner's opinion, the end objective of making a splitting machine useable by anyone, with or without splitting skills, knowledge or experience. An added advantage is the ability



The main interface display in real time with the position of the 3 axes as well as the position of the hide into the machine. All analysis is made in the background, but the operator has, voluntarily, no control on this part. When the operator turns the machine on, the only thing needed is to press the Autofeed button and all elements of the machine start in sequential order and after only a few seconds a message informs the operator that they can feed the hides onto the conveyor. There is no need for any further interaction.



to put the splitting machine in a throughfeed fleshing line, without operators.

The complexity in operating a splitting machine cannot be underestimated as it has three axes totally dependent on each other, these being the upper bridge, lower bridge and position of the band knife according to both bridges.

For perfect splitting, if the parameters change for one, those of the others ought to be altered too. Considering also the morphological differences between individual hides, it is clear that continuous adjustments need to be made.

With this in mind, Mercier Turner has designed and patented the Autofeed system, which is able to analyse the characteristics of each individual hide before splitting. Thanks to particular algorithms, it is then able to translate those characteristics into automatic mechanical adjustments on the splitting machine prior to the arrival of the hide. This means that the splitting machine is adjusted automatically and instantaneously prior to each hide and splitting is carried out with a high level of accuracy, all without the need for operator involvement.

Since being unveiled for general purchase at Tanning Tech 2018, interest in the Autofeed machinery set-up has been encouraging, with steady sales throughout last year, according to Mercier Turner director Romain Chambon. Because of the spreading action of the Autofeed, employing newly patented technology, yield is increased, which is proving to be a selling point that large automotive tanneries, in particular, have been enthusiastic about. 🌐



Continuous analysis of the hides allows the machine to autocorrect for any changes in the limed pelt prior to splitting.

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