



Progressive engineering

North Italian machinery builder Bauce improves samm setting.



MVC4 VERSUS RCE 1.



MVC4 VERSUS RCE RETRO.

The industry of leather making has now been presented with new through-feed samm-setting equipment capable of increasing throughput combined with producing all-round high quality sammed hides. Bauce, as before, based upon many years of experience in the field of samm-setting starting with simple two cylinder machinery followed by multi-cylinder systems has now arrived at their model MCV – 4S VERSUS RCE 3400mm four cylinder machine also incorporating redesigned twin setting.

The core of the new MCV, apart from the number of pressure cylinders, allows two sammying pressure points. The diameter of the cylinders has been increased with the result that the dwell time of the leather through the pressure zone is favourably prolonged. Hitherto it has been general practice to employ hydraulic motors to drive the pressure cylinders of the machines, a system where cylinder speeds could not be varied. Further, hydraulic systems are expensive and require a considerable amount of careful maintenance, so a direct electric motor drive system has now been adopted by Bauce. The motors employed are inverter controlled, allowing easy and precise variation of speed, therefore driving the cylinders at the speed appropriate for the type of hide being sammed. The energy required with this type of construction is less than that of a hydraulic system.

The designation RCE at the end of the MCV signifies that the cylinders can be heated to variable temperature depending upon type of leather such as wet blue or vegtanned to produce the best grain and to achieve thorough opening of wrinkling.

With the through-feed samm-setting technology the effectiveness of the setting element as placed after the feed-in point is paramount. To meet this there is a newly developed cylinder group with a larger work diameter and an increase in the number of blades fitted to it, leading to improved stretching of the hide. This more powerful setting out group in turn requires new powerful motors capable of precise variable speed control. Bauce has chosen the so-called brushless DC electric motor for this purpose. A motor of this type is a relative

newcomer to the tannery machine field, and is detailed below.

Bauce reports that extensive comparison testing also confirms that the MCV-4 concept offers superior leather surface area and better drying quality. Amongst different applications are noted the belly to belly, butt to neck, belly to belly for leathers with hump and side leathers mode. Optionally the new system allows three passes through the bladed cylinders.

Coming to the brushless DC electric motor: The word brushless in the designation may seem a little odd; it arises from the fact that some years ago in order to achieve the properties of this motor, electrical brushes were needed. More recently redesign of this system made the inclusion of brushes unnecessary hence the designation electronically commutated motors is technically more correct. The motors now are synchronous powered by a DC electric source via an inverter supply producing an AC signal to drive the motor. This revised version is attractive to both the tannery machine builder and user because of relatively low weight, increased efficiency and reliability, as well as reduced noise and longer lifetime. ☺

