



The regeneration of used salt from curing

Henri Cadene, S.B.Techno Prest SAS, France

One of the major problems that the leather industry needs to address is the issue of salinity. It is well known that most of the salt component in tannery effluents is generated from the salt used for preservation of hides and skins.

There is always an excess of salt applied to ensure a complete cure, so, as a first step to reduce salinity, this surplus can be shaken from the hides and skins before beginning the soaking process. Various methods are used, but the question then arises, what happens to this contaminated salt.

If it is reused for preservation, then the hides will be stained and subject to bacterial attack. It cannot be discharged into the effluent or discharged to sewers, and if it is dumped as solid waste it will be leached from the waste tip. Unless disposal is entirely secure, it ends up as a contaminant in river and streams.

However, a machine has been developed



Hide preservation with regenerated salt



Salt recovery unit with a capacity of 500 tons per year

over a three year period where salt is continuously fed from a hopper (with a capacity for 48 hours reserve of contaminated salt) then subjected to thermal treatment provided by gas. The process can run for 24-hours per day, is energy efficient, and at the end of the treatment the salt is clean and free from bacteria, in particular Micrococaceae Brucellosis, being the cause of Foot and Mouth disease. Its capacity at present is 100 Kg/hour, an extractor and filtration system is installed to trap and emission particulates, and the system is fully automated.

The operation is being used as part of the preservation of cattle and ovine skins, and in addition, a sheepskin tanner is using recovered salt for the pickling of sheepskins. Alternative uses for the salt also include winter servicing of highways and road networks according to the Standard P98-181. 