Optimizing energy use in tanneries

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Abstract: The increasing energy prices incentivize the optimization of the energy inputs and outputs in any industrial process to be able to compete in a globalized market. It is well-known that the industrial process in tanneries is highly energy-consuming. In this paper a detailed assessment of the quality and amount of energy inputs and outputs will be done for the different steps in a typical modern tanning process. This analysis will try to optimize the use of energy, with an especial emphasis in the possibility of applying thermal energy storage strategies to reduce energy losses and overcome the mismatch in time/power/temperature of energy waste and demand.

Keywords: energy optimization, energy in tanneries, thermal energy storage