Consumption by tanneries – in detail

Sørensen Leather is a company with a conscience. Meaning we care about the environment. We do not perform the leather processes that involve water and related energy consumption. But we make a point of only choosing suppliers who comply with the industry requirements. We also stay updated with new industry developments regarding ways to help reduce consumption and protect the environment.

In order to promote a green environment, a large majority of the raw hides are received ready for processing at the tanneries. This results in a clear reduction in the amount of salt discharged into the wastewater system. Although salt has been seen as an inexpensive way to preserve hides, reducing the amount of salt needed as part of the tanning process is already better for the environment.

Chrome-tanned and vegetable-tanned are two of the most commonly used processes to create a variety of textures and surfaces with leather. Each one has its advantages and disadvantages, especially in terms of water and energy consumption. Given the respective pros and cons of each, neither tanning process is more ecological than the other.

Chrome-tanned
In production, chrome-tanned leather is more environmentally friendly than vegetable tanning, in that water and energy consumption is 35% lower with chrome-tanning. However in terms of recycling, chrome-tanning is at a disadvantage as it is not naturally biodegradable.

Chrome tanning agents
Chrome occurs naturally in the environment in stone, soil, plants and volcanic material. Chromium salt is found in foodstuffs and is also an important nutrient for the body. Chromium III salt is safe to use and non-toxic.

(Chromium III is NOT be confused with Chromium VI, which is toxic and prohibited for use in tanning.)

As much as 90% of the world's leather production is tanned with Chromium III salt. It is a highly effective tanning agent with flexible properties, giving the leather a more cohesive structure.

Vegetable-tanned

Vegetable tanned leather is made using the extracts from different types of trees, bark and fallen fruit contain tanning agents used for vegetable tanning leather. In particular, the Mi-

mosa and Quebracho trees along with the fallen fruit of the Tara tree in South America.

While it would be easy to assume that anything involving vegetables is more natural and therefore has less of a negative impact on the environment, the opposite is often the case.

Ironically, the consumption of water, energy and other resources involved with vegetable tanning agents is actually 10 times greater than the consumption for chrome tanning. And with vegetable tanning the hides actually shrink, resulting in a more complex and expensive process than with chrome tanning.

Leather vs. other industries
Studies reveal that an average of approximately 160 litres of water and 8 kg of CO2 are used by tanneries worldwide to produce 1 kg of leather, which generates 5 kg of organic waste. Compare that to other industries, such as textiles, that use a staggering 500 litres of water for the bleaching, dyeing, printing and completion of one pair of jeans.

Compared to textiles, the lifespan of leather is considerably longer. Thus going further to minimise any detrimental effects to the environment.

Recycling
In terms of recycling, the leather industry is one of the oldest industries of its kind. In fact, leather could easily be regarded as an early example of recycling waste, namely animal skins, which are a technically termed waste products from the meat industry.

Europe and Central Europe in particular has the lowest permissible limits for the discharge of environmentally hazardous substances. Other countries have similarly strict industry laws, but not all of them are enforced as consistently as in the EU.

Of course, there is room for improvement in terms of consumption reduction overall. But if you were to imagine a scenario where none of the hides were processed to make leather for furniture, and instead all hides were disposed of as waste ... The environmental effect would be far greater than the pollution accumulated from all the tanneries in the world. So the mere fact that hides are recycled into leather that’s suitable for a chair or a sofa makes our industry much more eco minded than other industries.