



TFL ECO TEC **ET**

# Low Impact Beamhouse and Tanning

- » Established processes and chemicals taking care of the environment



TFL - Great chemicals. Excellent advice.



# Eco challenges in Beamhouse and Tanning

The main challenges in processing raw hides and skins are high contents of sulfide, nitrogen, salts and chromium and too high COD / BOD values of the waste water. In addition there are obnoxious smells, solid waste and fresh water consumption to deal with.

## TFL ECO TEC in Beamhouse

### Soaking / Liming –

#### Low sulfide unhairing:

The TFL low sulfide unhairing provides a clean, relaxed, well opened-up pelt by using:

- PELLVIT® LSG or PELLVIT® LSS in soaking to clean the hair and hair follicles from grease to avoid hair root retention
- ERHAVIT® LSU to support the unhairing process and allowing to reduce the lime and sulfide offer
- BORRON® DLS to avoid fat smearing drum wall and pelt

### Delimiting / bating –

#### Ammonium-free delimiting / bating:

A safe, buffered system which cleans the pelt remarkably well without having a negative effect on the integrity of bellies and grain by using:

- DERMASCAL CD, ammonium free delimiting agent
- OROPON® ON2, OROPON® W, OROPON® MS, OROPON® MT, ammonium free bating agents
- BORRON® SCA bleaches and boosts scudd removal

### Benefits:

- Sulfide reduction
- COD / BOD reduction
- Odour reduction
- Sludge reduction in case hair is filtered
- Ammonium and total nitrogen reduction
- Risk reduction of H<sub>2</sub>S gas formation
- Energy reduction in waste water treatment plant
- Optimised hair and scutt removal
- Lay-out improvement
- Optimal cutting yield



## TFL ECO TEC in Tanning

### Pickling / Chrome tanning –

#### Low salt pickling:

A fine grain wet blue with reduced offer of chromium and common salt can be produced with:

- SELLATAN® PA Liq as a pickle acid which allows a more even chromium penetration and improved chromium exhaustion

### Benefits:

- Sulfate and chloride reduction
- Chromium reduction
- Better chrome distribution
- Finer grain
- Improved leather quality



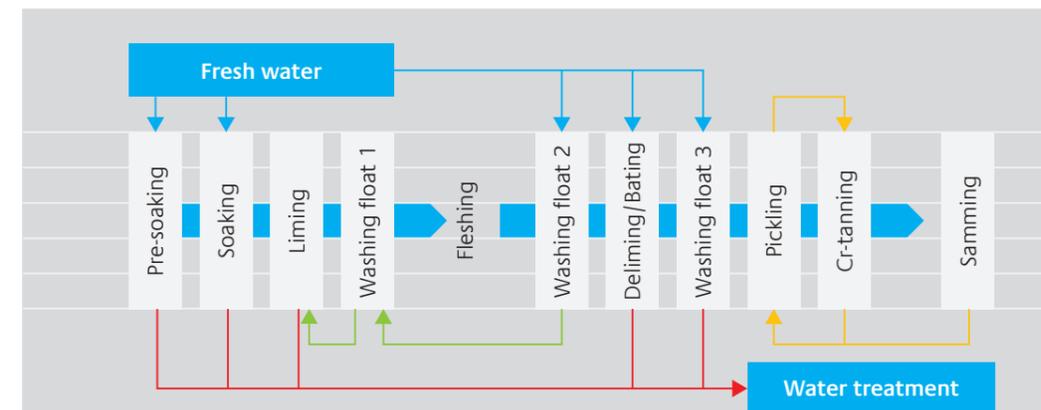
With TFL ECO TEC – we help you to significantly reduce your pollution



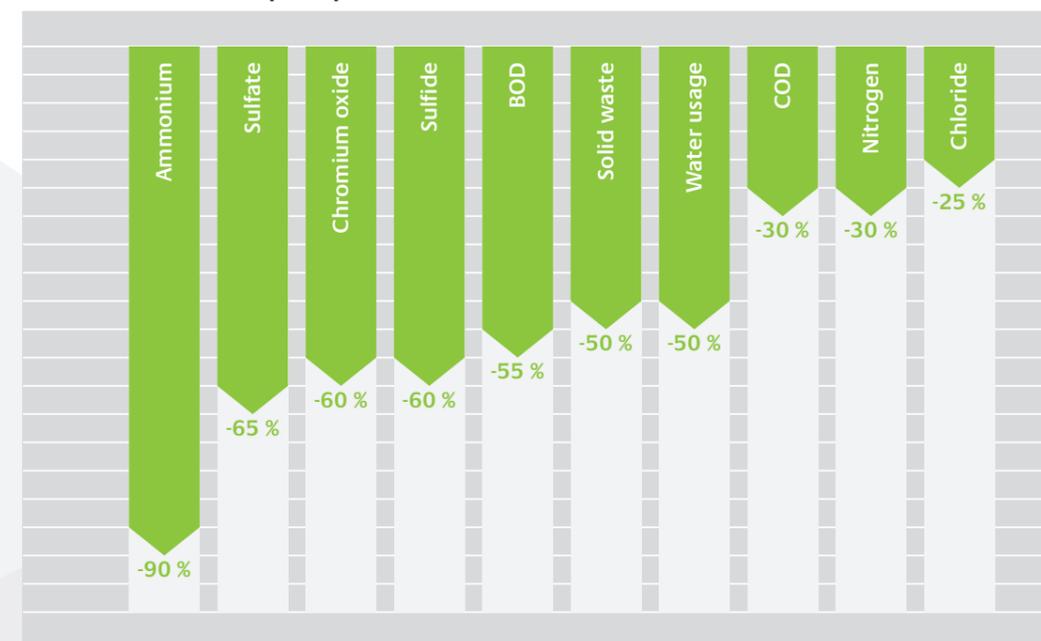
## TFL ECO TEC – we help you to significantly reduce your water usage

### Direct float recycling:

- Pre-soaking, main-soaking, the washing before delimiting and after bating are all done with fresh water
- The washing float from before delimiting is re-used as washing float after liming and this float is re-used as liming float
- Pickle and tanning floats are recycled in a closed loop
- Pre-soaking, main-soaking, liming, delimiting and the washing floats after bating are discarded as waste water



## Possible reduction (%) of the ecological impact of a typical wet-blue plant – standard vs. low impact process:



Based on typical waste water values found before treatment.  
Full substance wet-blue processed from salted bovine hides of around 30 kg.



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