

Animal meets Laser - Traceability of hides, skins and leather!

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Content

SLCR Lasertechnik GmbH has been a pioneer in the field of laser surface applications as a medium-sized company since 1997. SLCR has extensive experience in the treatment of industrial surfaces made of metals, plastics, composite materials and many other materials and offers solutions and systems for surface treatment. The main applications are cleaning; the pre-treatment or stripping of surfaces as well as the marking.

The lecture shows a way to improve traceability in the leather industry by using SLCR laser technology. We explain the general operating principle of the SLCR lasers and introduce the process properties. The main focus will be the topic of marking in the supply chain, from the skin dealer to the finished leather.

The marking / coding of the skin is essential for seamless tracing of a skin through the entire process chain of tanning, since the current marking is limited to mechanical punching of the skin, which must be repeated at regular intervals (steps in the tanning process). With each step there is a new number, so several numbers are assigned to a skin. This leads to an unnecessarily large amount of data and it becomes almost impossible to trace the skin.

We present our SLCR approach. This requires exactly one number which is retained through the entire fermentation process. This number is applied after the evaluation and sorting, so this data can also be saved for each number / skin.

This process offers an alternative for touch-free, gentle and dry treatment without media, only with light. The process is defined by a very short and controlled interaction of laser energy on the surface. Here the absorption property of the skin is used to bring in a non-lost number into the skin.

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Keyword

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