

SUPERSCAN & GRAIN CHECK

Surface Quality Control of Decor Panels and
Monitoring of the Grain with the Reflex Module



GreCon®

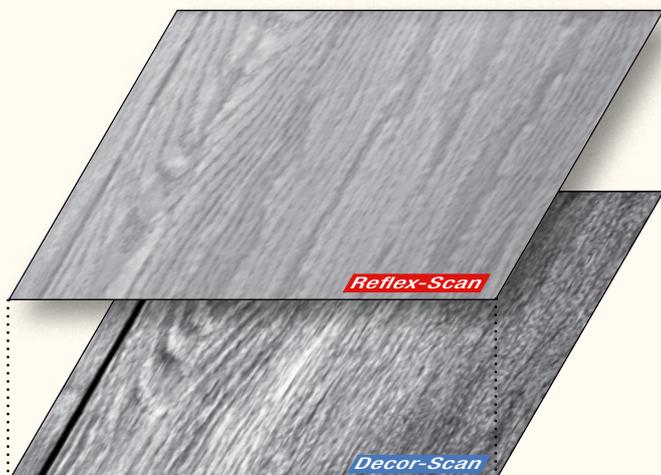
The Task

The impression of authenticity of laminate, whether wood or floor tiles, is determined by a number of features. For the end user, it is especially important that the optical impression and the haptic feeling leave a convincing overall impression. To achieve this, laminate collections were created that are their natural examples' equals in these features.

The surface structures, such as the wood grain or the joint structure of the tiles, are generated synchronously to the decor of the laminate flooring. To guarantee an optimum product quality, the monitoring of this synchronism during the running production process is imperative. This was the task that GreCon took care of.

The Technique

Pressing tools made out of stainless steel, which bear the desired surface structures, press the decors and the carrier panels to one unit.



Matching of decor and reflex

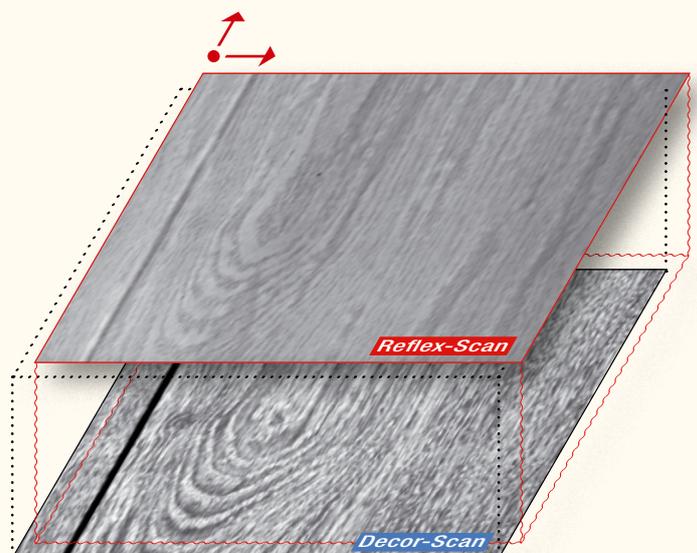
The result is the end product - the laminate - in its diverse shapes and colours. The required matching of decor and surface structure is a challenge to the accuracy of the fully automatic production, which operates with more and more decreasing cycle times.

The Solution

The surface inspection system SUPERSCAN of GreCon supplies a solution to ensure a constant accuracy and quality of the laminate.

The inspection system automatically determines the translation (displacement) and the rotation of both the decor and the imprinted structure. If these two structures (layers) shift against each other, this will be recognised. The detected changes can be used to optimise the positioning by the upstream layering unit.

Panels (laminates) with non-synchronous features (mismatch) are recognised and can be sorted out.



Mismatch of decor and reflex