



SCORPION WOOD VISION

Tordivel AS has developed three easy to use applications for the wood processing industry based on Scorpion and standard components:

*Scorpion Color Identification
Scorpion Laser Length Measurement
Scorpion Laser Profile Measurement*

Automatic Optical Inspection systems are important for securing quality and reducing cost of manual inspection. The wood processing industry was an early adopter of vision technology for yield optimisation and quality control. These pioneering systems have however been rather elaborate and expensive to install and operation.

A new generation PC based vision systems are now available – these systems are designed to take advantage of low cost and high performance PCs and high quality digital cameras.

Scorpion Vision Software is a robust, reliable and powerful tool for machine vision.

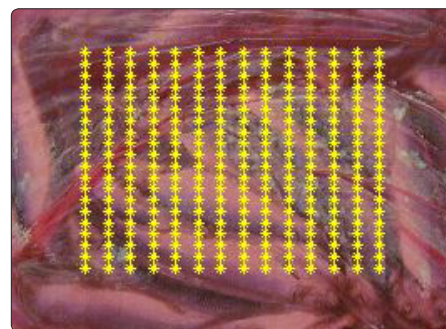
SCORPION COLOR IDENTIFICATION



Scorpion Color Identification installation

Scorpion Color Identification is suitable for detection of color coded boards or panels. The Scorpion Color Identification system is a camera based system for color identification or classification. The system picks the best color match from a set of reference images and estimates the color coverage of the inspected item. This is illustrated to the right using a piece of painted wood. The system is easy to train and based on the powerful Scorpion tool Color-Matcher™.

For detailed information, please refer to the Product Datasheet for Scorpion Color Identification System on <http://www.scorpionvision.com>.



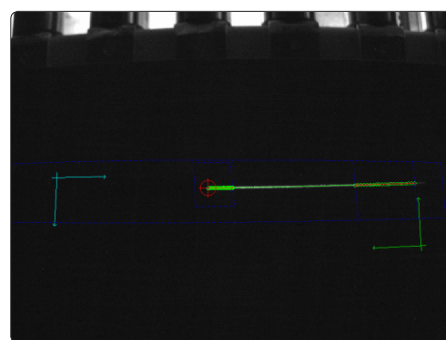
Multiple color sensors classify the color and coverage of an object.

SCORPION LASER LENGTH MEASUREMENT

The Scorpion Laser Length Measurement system is a general purpose length measurement system.

The system to the right uses a 7 mW diode laser with line optics and requires the other end of the object to be firmly positioned against a reference surface during measurement.

For detailed information, please refer to the Product Datasheet for Scorpion Laser Length Measurement System on <http://www.scorpionvision.com>.



In-line measurements of parquet lamellas.



SCORPION LASER PROFILE MEASUREMENT

Scorpion Laser Profile Measurement System is a camera based 3D measurement system dedicated to the verification of object geometry and dimensions.

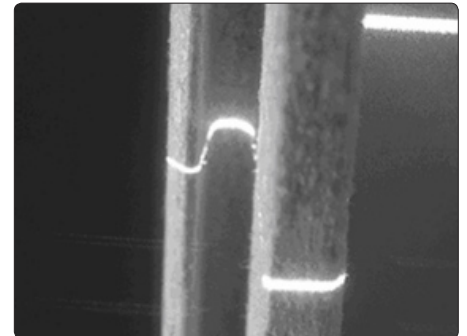
If the object is in motion, the system requires the object to travel at a fixed distance from the sensor during measurement.

Multiple profile measurement units can be combined in one Scorpion Laser Profile Measurement System.

For detailed information, please refer to the Product Datasheet for Scorpion Profile Measurement System on <http://www.scorpionvision.com>.



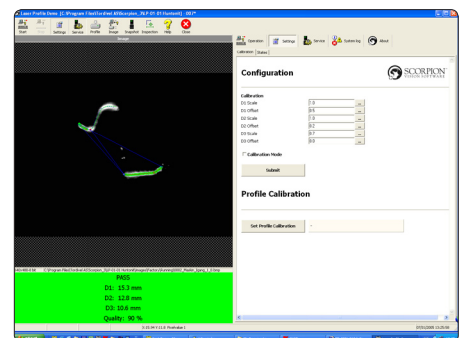
A junction box containing the camera and laser is placed about 60 mm from the object. A 7 mW diode laser with line optics illuminates the object, thus tracing a line corresponding to the cross section of the object.



The laser profile generated by the edge of a Medium Density Particle board.



The camera is mounted at an angle to the object in order to minimize sensitivity to lateral movement.



Using a combination of image processing tools available in Scorpion Vision Software, it is possible to verify the geometry with 0.1 mm precision.

Price information is found in the Scorpion Pricelist on <http://www.scorpionvision.com>