

The power of digital inspection

YOUR QUALITY. OUR FOCUS



INSPECTION OF **PLYWOOD**

CONSISTENT AND CUSTOMIZED GRADING OF EVERY PANEL



WHAT WE DO FOR YOU

ARGOS SOLUTIONS AS develops and supplies automatic surface grading and panel repair systems. ARGOS aims to provide efficiency by automatic controlling of the surface quality. We deliver innovative and creative solutions.

YOUR **ADVANTAGES**

- > 100% inspection at full speed
- > Separate Edge Inspection system
- > Every panel is graded
- > Customized and consistent grading
- > Objective grading, only relevant defects are downgraded
- > Reduce manpower cost
- > Automatic calibration
- > Automatic cleaning
- > Automatic registration of new products
- > Accurate reports and statistics, take control

The Argos Grading System (AGS) offers a complete solution for automatic surface grading and edge inspection. The modular and compact design can be installed either in a saw line, after a sander or in conjunction with overlay and other value added processes. A complete inspection solution is offered by installing the Argos Surface and Edge cameras in the same production line.

Traditional machine vision systems have been used for many years to grade veneer in order to ensure a high recovery of the most valuable veneer. At Argos, we have taken this concept a step further by focusing on the cut-to-size and finishing end of the panel production.

The AGS can easily be adapted to grade all types of natural wood used in production of softwood, hardwood, parquet and other wood panels. The grading system from Argos provides substantial savings by eliminating the human operators and ensuring a consistent and customized grading of every panel.

Argos was the first company worldwide to install grading systems for plywood finishing lines, the first system was installed more than 10 years ago. The AGS is modular and can either grade both or one side of the panel as well as edges.

The built-in recipe editor allows plant personnel to define accurate grading recipes for products and customers. The correct grading recipe is loaded automatically, ensuring that the product is graded according to its specification.

Maximizing A-quality without sacrificing customer satisfaction.

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NEW TECHNOLOGY

The Argos system utilizes the latest camera and illumination technology developed by world leading suppliers of the vision industry. The modular system can cover panel width up to +3.2 m. (+10ft.) and generates multiple images for detection of 2D and 3D defects.

The images are transferred to a PC and analyzed for surface defects by the Argos image processing software. The built-in defect library contains separate detectors for each defect. It keeps track of defects by size and location and grading rules can be defined according to type of defect, location and amount.

Digital signals controlling the sorter are activated based on the grading result. Customized grading depends on correct detection and categorization of all surface defects by down-grading only the defects that the customer cannot accept.

RELIABLE SYSTEM

Argos engineers has focused on reliability and low maintenance when designing the system. The system is equipped with solid state light sources, LED and LASER, to ensure maximum lifetime as well as reduced need for calibration. The intelligent control system, maximizes the lifetime of the light sources to +200.000 hrs. without replacement.

The system frame is preassembled and designed to ensure a quick and trouble free installation as well as reducing the risk of influence from vibration and external particles. The narrow designs makes easy retrofit to existing lines and reduces the opening in the conveyor to ensure smooth panel transportation. The latest generation includes new improved automatic cleaning methods ensuring stable operation as well as reduced need for manual cleaning.

USER-FRIENDLY OPERATION

The latest ARGOS Image Processing software includes easy-to-use functionality for operation and adjustment of defects and recipes. It includes defect specific parameters and functionality for grouping defects. Modifications can be made by defect category, size, location, density and group relationship.

GLOBAL COMPANY

- > One system covering all surface inspection needs from raw board, full-size laminates to furniture components.
- > 200 installations worldwide in 30 countries.
- > Reference installations with leading global manufacturers.
- > Owned by Løvenskiold - Vækerø, a privately owned company with a long history, established in 1649.



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