Customer Requirement:
Reliably read UV detectable mark used to sort lumber by grade

Banner Solution:
iVu Plus TG Image Sensor with integrated UV light and remote touch screen

Why Banner?
Cost-effective – A fraction of the price of the suggested UV detection system
Ease-of-use – Intuitive programming capabilities, remote touch screen display

Customer Benefits:
Durability – IP67 rated enclosure ensures reliable performance in difficult environment
Functionality – Match, sort, area and blemish sensing capabilities in one device

Background
A large specialty sawmill in the Northeastern United States offers a range of processed softwood products, including all the common grades of construction quality lumber. In an industry where success can be measured in board feet, this high-production facility produces over 25 million board feet a year.

Price per board foot is determined by the grade of individual boards, making it essential that every board be properly graded, sorted and processed. A system operator grades each board as it travels along a conveyor belt, marking it with a UV detectable crayon. A vision based UV detector reads the UV mark and directs the board to the correct collection area.

Challenge
Equipment used in saw mills faces unique environmental challenges from tree pulp, dirt and other debris. The UV detector used in this sorting system frequently failed to read the UV marked grade, resulting in numerous delays and slowdowns. The system operator was familiar with iVu vision sensors and wanted to see if iVu sensors could replace their aging, ineffectual UV detection system.

Solution
The iVu Plus Remote TG image sensor proved to be a reliable and cost-effective UV detection system. The system operator was able to set it up quickly, make adjustments and teach the iVu to consistently read the UV marks without any technical support. The remote touch screen made it easy for the operator to monitor and manage the system. The IP67 rated enclosure ensured the iVu would hold up to the environmental challenges in the saw mill. Total costs for the iVu Plus Remote TG system were a fraction of the estimated $30,000 to replace their existing system.