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Advancing Hardwood Processing Technology

During the Thursday morning session of HMA's National Conference and Expo, industry suppliers Duncan Ferguson of **Sawmill MD** and Federico Giudiceandrea of **Microtec** presented information on the technologies that are and will be advancing hardwood processing.

Duncan Ferguson was first up, and the 'meat and potatoes' of his presentation, "**What's New? What's Coming?**" was a summary of information obtained via interviews with industry vendors regarding their technology innovations. Ferguson began by updating attendees regarding electronics that are no longer supported, then provided information on replacement technology, and advised regarding system security measures. His presentation then moved to the heart of the matter ... **What's Up and Coming?**

Ferguson said to look for:

- The Improved/Expanded use of **Machine Vision** in the areas of sequencing, Cross up Detection, and Safety - with many improvements and new applications to come.
- **Machine Grading/Inspection advances** like "stepped up scanners to include HD color, more measurements, including end cameras.
- **Optimization Developments** such as denser and more accurate measurements, faster solution times, increased computer power, simpler designs, and scanning in sun-lit environments.
- Advances in **Controls** that include improved connectivity, speed and functionality, smaller and smarter devices, and less hardwiring.
- And coming down the **Tallying** pike, the ability to measure each board in a layer being placed at the Stacker.
- **On the Mechanical side**, look for a push towards all electric, (a fully electric resaw is available) improved speed of optimization and controls, concerted efforts to eliminate hydraulics, and more throughput using more Machine Vision.

Attendees then heard from Federico Giudiceandrea, CEO of Microtec, regarding "**machine vision**" and automated hardwood lumber scanning and grading technology.

- Emulating the capabilities of the human brain and eyes is tricky business. However, progress has been made, and continues to be made, in the development of "super eye" technology that analyzes and provides information on the overall quality of hardwood.

- **Multisensory scanning** uses five technologies – Color, X-ray, 3D Laser Triangulation, Laser Scattering, and Grain Deviation technologies - to measure density, coloration, defects, and other factors in determining wood quality and grade.
- Improving the detection and grading process is the dream of every sawmiller. The good news is that many vendors, including Microtec, are doing much to further the automation of the hardwood industry.

Questions from the audience were addressed by both presenters. HMA would like to thank them for their participation, along with Robert Slater of **Stiles Machinery**, who graciously and ably conducted an Industry Confab roundtable on Wood Processing Technology.