

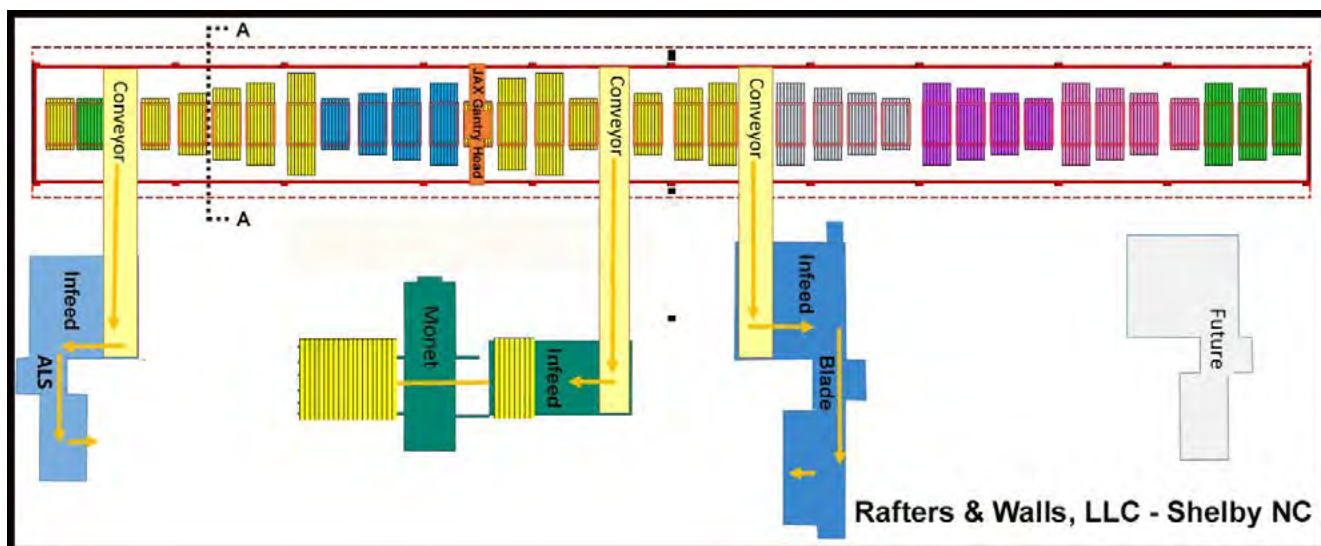


By Kathryn Pedde

Simplifying the Tough Tasks with JAX

In 2013, we took over a plant that ran only component saws with live decks, and we struggled to keep them fed. We arranged full bunks of lumber close to the feed decks, but that necessitated moving several bunks when we had to replace an interior bunk. When we replaced those saws with two linear saws, we wasted an equivalent amount of time rearranging bunks, even after purchasing a Combilift. And, we still had a dozen bunks of lumber arrayed around each saw. After we added a third saw, we had 40 bunks consuming floor space, and an untidy mess. Naturally, we had to break the bands on those bunks, and several of them remained unbanded for weeks, creating more culls to handle. Too often, our pickers would send below-grade boards to the saws, or even the incorrect lumber size. Unfortunately, picking lumber was the most arduous and repetitive job in our plant, and one for which we had the shortest retention. Finally, as we began cutting truss-by-truss, our number of picks multiplied, and we had to do something to improve the situation.

To improve the picking process, we examined how other plants were configured. For instance, in a highly automated plant in Cumming, Georgia, we saw an overhead trolley pick up one board at a time and place it directly on the infeed of a linear saw. That saw was tied to a conveyor that directly fed a two-station gantry, but this arrangement wasn't able to supply enough cut parts to keep two setup stations busy. We also observed plants with two or three separate trolley systems feeding linear saws, but this didn't resolve the duplication of inventory at each saw. And, these systems couldn't accommodate the 30 SKUs that we needed, even though they contained a cart with several SKUs (which also had to be hand-loaded). In addition, we needed a system that would feed our component saw, which we used especially to cut wide boards when we had long runs that required them.





Fortunately, after several false starts, we found a system that was moving other commodities in hundreds of plants, much the way we wanted to move lumber. We felt it could be adapted to the truss industry, but only if the manufacturer had the engineering expertise and motivation to pioneer a new application for a small-time user. Thankfully, we found those capabilities at Sage Automation in Beaumont, Texas. Their automated gantry pickup systems worked much like a roof truss gantry, gliding on two rails over pallets of products, lifting them up, and delivering them to a conveyor system. The only thing we had to add to it was a vacuum-based pickup system, which had been well proven in plywood and LVL mills. Sage worked closely with us to add a patented end-of-arm tool to pick lumber. When we installed that system in 2023, we called it JAX, The Wood Retriever, and, since then, JAX has overcome our prior limitations.



For the last two years, we've been able to feed any of our 30 SKUs to any of our three saws, enabling us to level their workloads. Keeping JAX fully stocked has become only a part-time job, and we can anticipate when restocking is necessary by glancing at the monitors around the plant, which graphically display the number of pieces of each SKU remaining in JAX, and what is on hand in the rest of our plant.

With JAX, the quality of our trusses has been markedly improved, because we now have only one bundle of each lumber SKU that is unbanded, thereby minimizing the time for boards to warp or crook before they go into the jigging on our tables. JAX can pick up one board or a full layer of any bunk of truss lumber, eliminating individual man-handling of the 200+ pieces in a bunk of 2x4s.



Now, as business has slowed, it's a great time to visit our booth #1710 at BCMC (just behind Triad, and on the way to MiTek's) and let us show you how well JAX may work in your plant. Or make plans to visit our plant near Charlotte, NC and see how JAX eliminates one of the most repetitive, error-prone, and hard-to-fill jobs in a component plant. Please call me or Richard Pedde at 980-404-0209 with any questions or to request a tour.

