What Our Client Said
Due to an increase in demand, we need to significantly ramp-up our production of hardwood flooring. We need new production lines, and we need robots, but our experience with robot cells has not been positive.

What We Heard
Build us robot cells we can count on and put them to work on additional production lines that can help us grow.

What We Did
As always, LSI started by listening. The client told us that they valued our 25-year relationship and that our ability to develop Siemens automation and Integrated Drive Systems gave them confidence. Then they described their goals, their challenges and their desire to utilize a unique combination of technology from a variety of manufacturers – something LSI specializes in. Together, we decided on new robotic cells and Siemens PLC-based coordinated supervisory controls for each additional production line. Supervised processes included dust collection, OEM equipment and all the robot cells.

LSI provided:
• The complete electrical design and schematics
• Custom design and fabrication of electrical and controls enclosures including an Ehouse
• PLC hardware and software
• Eight robot cells (base, tooling, setup, programming and HMI)
• Safety system design and implementation, including master E-stop control over all systems (regardless of manufacturer)
• Production Line Supervisory control, communications and monitoring master control and status to all OEM equipment per line

The control system consisted of:
• Siemens PLCs/HMI
• Siemens VFD Drives
• Robots
• Safety control
The Results Speak For Themselves

Product flexibility means new lines can evolve
- Quick-change palletizing or de-palletizing of multi-size products
- Recipe-driven configuration and on-the-fly pattern changes

Efficiency built into the process
- Optimized robot movements for a changing stack height
- Pick and place on pallets while in motion with accurate precision
- No downtime during pallet changes
- Stack lights for quick identification of equipment status

Safety for workers and equipment
- E-stop control centrally located and integrated with control system and HMI
- Automatic contextualized HMI popups on each OEM screen when an E-stop occurs

Simplicity makes robot cells easy to manage
- Simplistic control, no complex buttons or procedures ... just Start, Stop, Pause or Reset
- Easy maintenance with intuitive HMI screens and password protected robot adjustments
- Straightforward troubleshooting for plant personnel; no remote support required
- Consistent, easy-to-follow code structure

Let LSI listen to your challenges today, and we’ll work together to write a success story for you.

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