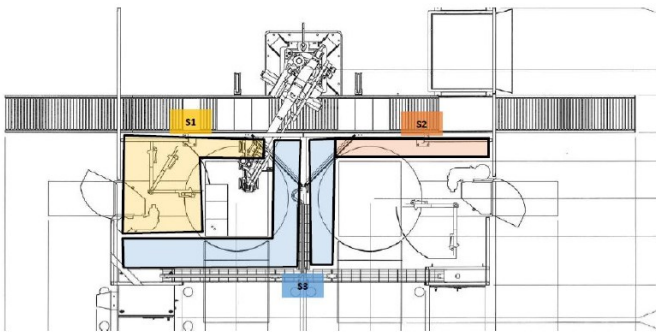


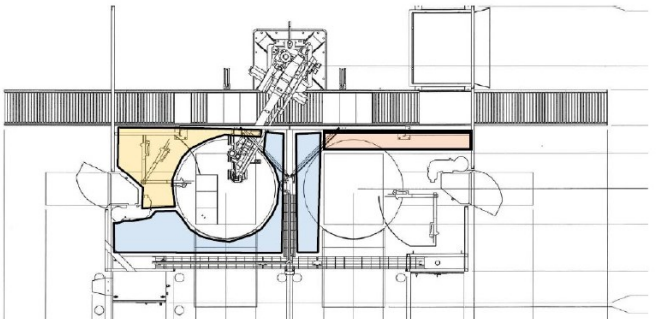
APPLICATION BREAKDOWN:

Robotic Palletizer Safety Proposal

Left Cell Working—Stacking



Left Cell Working—Wrapping



Safety is a critical component of any robotic work cell application. The best implementation of safety will do more than just protect the people in proximity—it will improve productivity.

In this example, a robot palletizes and wraps pallets of cases in two different stations. The customer would like to be able to manually remove one pallet while the other is being prepared. The challenge is to provide protection to the people doing the unloading while minimizing obstacles to access.

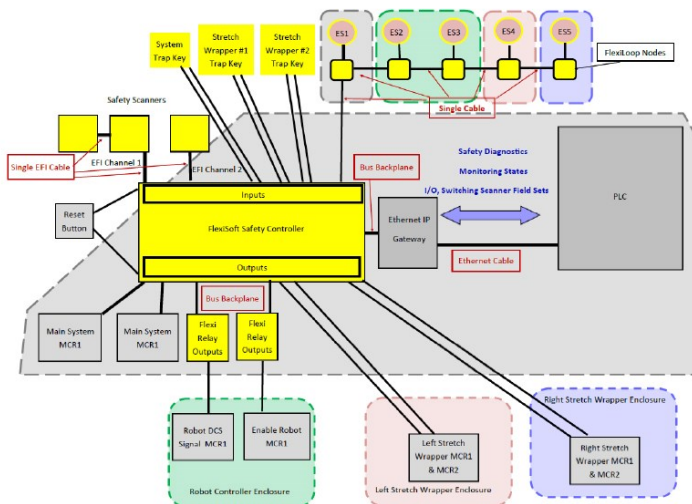
This application will use three safety area scanners, door interlocks, e-stops, and 3 trap-keys. The Sick Flexi-loop allows for extremely clean, easy to maintain wiring of the many devices. This eliminates the need for separate sets of wiring running directly from each individual device to the PLC.

The core of the safety application is the Sick

FlexiSoft safety controller system. The controller can handle the application's nine inputs and eight outputs. It also has Automation Configuration Recovery (ARC). ARC saves the settings of the "smart" devices on the network (e.g. safety scanner, light curtains, etc.) for quick commissioning of any failed components. The FlexiSoft will also interface with the PLC via its Ethernet IP gateway. That gateway will handle the switching safety fields of the scanner and will enunciate the E-Stops and other interruptions of the system.



Safety System Topology



Sensors Inc. does an excellent job of summarizing the specific applications and designing a topology that will create an efficient, reliable, easily maintained safety system. Please do not hesitate to call us with your applications.