



PROJECT PROFILE

PLANT ENGINEERING

AUTOMATION

PRINTING LINES MACHINE GUARDING

A client requested that PTS provide a design-build project to design and install machine guarding across its eleven printing lines to improve safety for their operators. The project began with a preliminary engineering investigation on one of the lines to develop a conceptual design and scope of work. Once our engineers developed the conceptual design and it was approved by the client, a capital project was initiated to implement the system on the first print line as a trial.

We then moved forward with final engineering and developed a mechanical and electrical drawing set for the project. Our design included a series of custom-sized aluminum wire mesh fencing panels, light curtains, safety curtain, emergency stops, and interlocked doors controlled with safety relays to fully guard the equipment. Our team of engineers and project managers has extensive experience with ANSI B11 Machine Guarding standards and ensures that all our designs comply with code. Once the design was reviewed and approved by the client, we procured the materials for the project, assembled the safety circuit control enclosures, and subcontracted local mechanical and electrical installers to install the system under PTS supervision.

Once installation was complete on the first line, punch list items completed, and the client was satisfied with the results, they initiated a project for PTS to implement the system on the remaining ten lines. We took our lessons learned from the trial system and made some improvements to the design. Then we went ahead and procured materials, assembled enclosures, and subcontracted installation. Installation was completed under PTS supervision while creatively scheduling to minimize impact to production for the customer.

By completing this project as a design-build, the customer was able to fully utilize the capabilities of PTS. Our engineering, automation, and project teams all worked together for a cohesive project from start to finish. In the end, the customer was able to utilize our resources to complete a large project with confidence in the safety of our solution.

