

Machine Safety Upgrade

A Safety Case Study

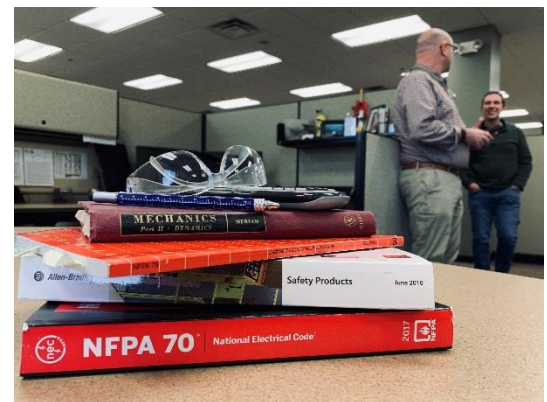
The Application

An existing Integration customer approached PCT for support with several machine safety upgrades. The customer didn't have enough internal resources or time to complete the safety upgrades before the required deadline. PCT, with our TÜV-certified Safety Engineers on staff, was able to help.

The PCT Solution

PCT was asked to design a safety system meeting the requirements identified in the customer's internal risk assessment. PCT made a field survey to collect physical measurements and discuss the safety system requirements with plant engineering, maintenance, and operations. PCT reviewed and refined the risk assessment with the customer. Working directly with the customer, PCT:

- ◆ Designed safety functions that meet the requirements of the risk assessment and applicable standards.
 - ◆ ISO 13849-1, EN ISO 13850, ISO 13854, ISO 13857, EN ISO 14119, EN ISO 14120
- ◆ Verified all safety circuits meet the PLr determined during the risk assessment using SISTEMA.
- ◆ Designed and created drawings for the safety guarding and access gates.
- ◆ Designed and created drawings for modifying the electrical control system.
- ◆ Created a validation plan to validate the design, wiring, and safety system per ISO 13849-2.
- ◆ Provided on-site support for installation and commissioning.
 - ◆ Including validation of the safety circuits per the plan.
- ◆ Provided all documentation to the customer.
- ◆ Conducted training for the customer's staff.



Having both electrical and mechanical engineering capabilities, coupled with TÜV-certified Safety Engineers, makes PCT your one-stop shop for machine safety.