

Demand Moore Reliability

Iron Ore Producer Opts for Safety with the STA

A major producer of iron ore in Brazil needed to add 122 alarm functions for burner temperature limit control in their furnaces. Because local regulations don't require IEC 61508 compliance, some engineers suggested using non-certified alarm trips or just using a PLC by adding more I/O modules to the existing hardware and making programming changes.

The project manager wanted the higher level of safety offered by the STA Safety Trip Alarm despite the lower cost of the other options. The STA offers several advantages over a PLC in this setting:

- The STA is a simple solution with no additional software or software expertise needed.
- Any change or correction made to a LMC program may require a test of the logic at all points prior to going back online. In contrast, the STA is a logic solver, meaning a change on one does not impact the STAs on other loops.
- The PLC is single point of failure, while a failure on any one STA will not impact the other loops.
- If an I/O card must be added to a PLC later, this cost is greater than adding a single STA.

