Recently, **Saltec SA**, an international leader in large scale surveying equipment, and industrial contracting solutions, has chosen to implement **ICP DAS** embedded controllers at the Altamira iron ore mining facility, in Southern Chile. Saltec has chosen to implement a series of **ICP DAS I-7188XGD** ISaGRAF powered embedded controllers. In this particular application, Saltec has implemented the I-7188XGD modules to control railway safety functions for the mining facility’s ore transport system. By using ICP’s **I-7188XGD** modules, Saltec is able to monitor and control an emergency “run-away track”, in the event of a brake failure of any of the facility’s locomotives.

The **I-7188XGD** itself, is a robust member of **ICP DAS**’s family of compact embedded controllers. The module is powered by a 40MHz AMD CPU, with 512Kb of static RAM, and 512Kb of flash memory. The module also features: a real time clock, battery back up, optional 10BASE-T Ethernet port, remote configuration diagnostics, and 14 user defined I/O lines. The specific controllers used by Saltec are utilizing a proprietary version of ISaGRAF control software; enabling them to function redundantly as reciprocal fail safes, ensuring consistent and dependable safety on the facility’s ore transport system.

Saltec was elated with ICP’s abilities to produce a product which was able to withstand the harsh exposure of the elements, while offering phenomenal control and reliability in a PLC. Being that the **I-7188** series embedded controllers are rated to operate between -25ºc and 75ºc, they are able to withstand the ever-changing ecosystem of southern Chile. Saltec also mentioned that they were impressed with the level of technical support **ICP DAS** provided, when initially setting up the dual redundancy safe guard function. By implementing **ICP DAS** embedded controllers; Saltec made the Altamira Iron Ore Mining Facility a safer and more efficient establishment.

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