



A Rockwell Automation Company

Suncor Oil Sands Group Replacement of Flyash PLC

The Client:

Suncor Energy Inc. is one of the major producers of Oil from the Oil Sands in Northern Alberta. The Fort McMurray Oil Sands complex has been in existence

since 1967 and is being expanded through the late 1990's to improve efficiency and increase production.

The Requirement:

Energy Services provides the utilities required for the Extraction, Upgrading and Mining areas of the Fort McMurray Complex. The Fly/Bottom Ash System removes and transports ash from Boilers 1, 2 and 3 to the sluice ponds. This is accomplished by controlling a number of discrete valves and two pumps. The existing Westinghouse NumaLogic PLC was obsolete and no longer supported by the manufacturer. This made it extremely difficult maintain. The existing

control cabinet was in poor condition and the cabinet drawings were not up to date. The project requirement was to replace the PLC and control cabinet while maintaining all existing functionality. All work was to be conducted during the 1997 Plant Shut Down.

The Design Solution:

In order to minimize site installation time it was decided that a new panel would be constructed and tested off site.

The Fort McMurray site has standardized on Allen-Bradley PLCs (programmable logic controller), so it was decided to replace the existing PLC with an Allen Bradley SLC 5/04.

The existing NumaLogic program had to be replicated in the SL5/04. The SLC communicated with the valves and pumps on the Data Highway Network. The new program was carefully tested to ensure that it

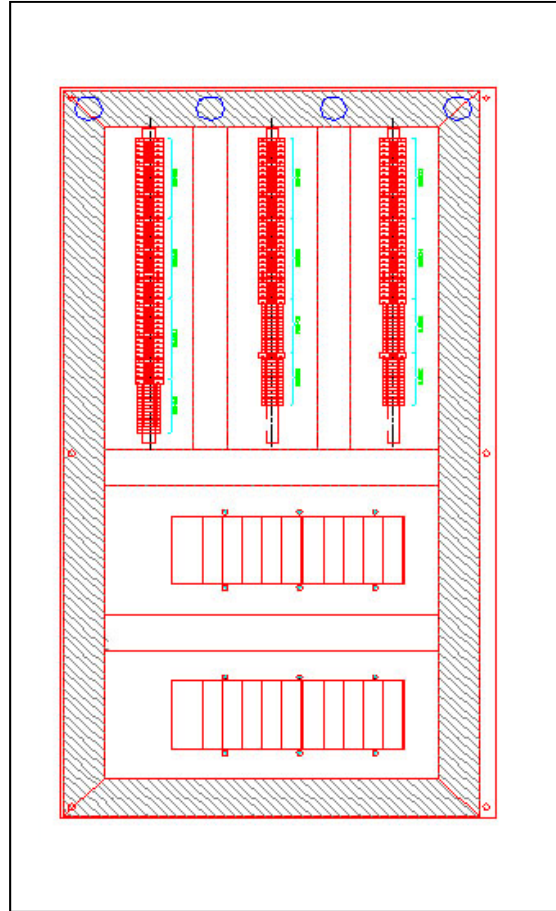
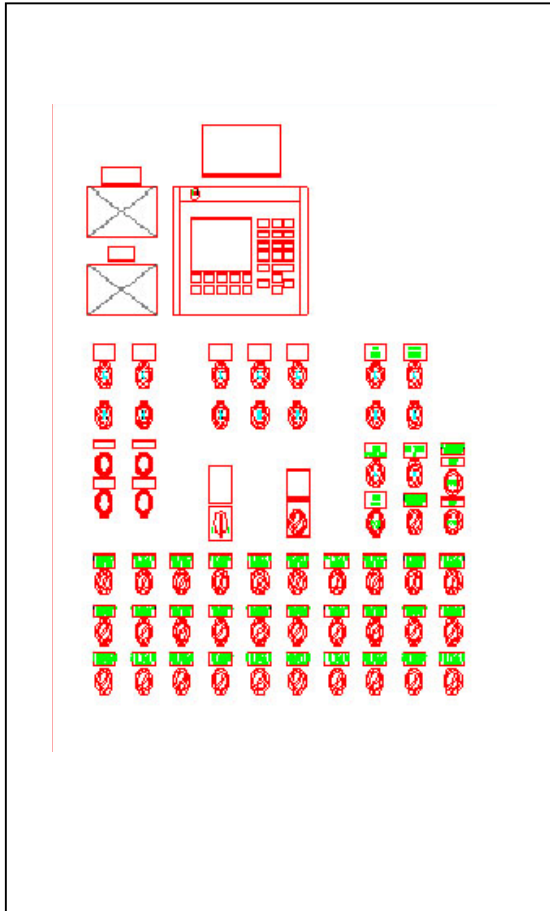
provided all of the control and monitoring capabilities that had been provided by the NumaLogic PLC

The control panel was fabricated in Calgary by Raffin Electric. The panel was installed, tested and commissioned during the shutdown.



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System Specifications:

- Allen Bradley SLC 5/04 PLC (2 chassis)
- Allen Bradley PanelView 550
- 4 - 4-20 mA Inputs
- 80 - 120VAC Discrete Inputs
- 80 - 120VAC Discrete Outputs

For further information or to contact a Hinz office near you, please check our website at:

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