



A Rockwell Automation Company

Syncrude Canada Ltd. UE-1 PLC/HMI Panel Supply

The Client:

Syncrude Canada Ltd.'s Upgrader Expansion 1 (UE-1) is undertaking a major addition to its bitumen processing facilities in Fort McMurray, Alberta.

As part of that incremental production capability, its prime contractor, ABB Inc., has awarded Hinz in Calgary a contract to design, procure and manage construction of the fabrication of over twenty Programmable Logic Controller (PLC) and Human Machine Interface (HMI) panels, as part of its Process

Electrical Equipment Building (PEB) additions. A PEB is generally defined as a building that houses the 13.8kV, 4.16kV and 600V motor control centers, transformers, switchgear, motor protection relays, logic controller panels, UPSs, and VFDs used to energize various process trains in the upgrade facility.

The Requirement:

The magnitude and complexity of each PEB called for as much standardization as possible in all aspects of design, as well as adherence to a set procedure of RFQ/RFE/RFF project execution, in order to contain review cycles, design rework, schedule delays and of course, cost of construction. Syncrude, through its partnership with the major engineering firms SNC-Lavalin, Co-Syn Engineering and Fluor Daniel, assigned

enormous engineering teams to each PEB, adding to many layers of requirements definition, specification standards and end-user performance expectations.

The Design Solution:

Hinz successfully interfaced with the various levels of the process and electrical design team hierarchies as well as the sub-vendors to put together a proven PLC/HMI panel design for basically two types of applications: (1) Single non-redundant ControlLogix PLC configuration and (2) a Dual-redundant ControlLogix PLC configuration.

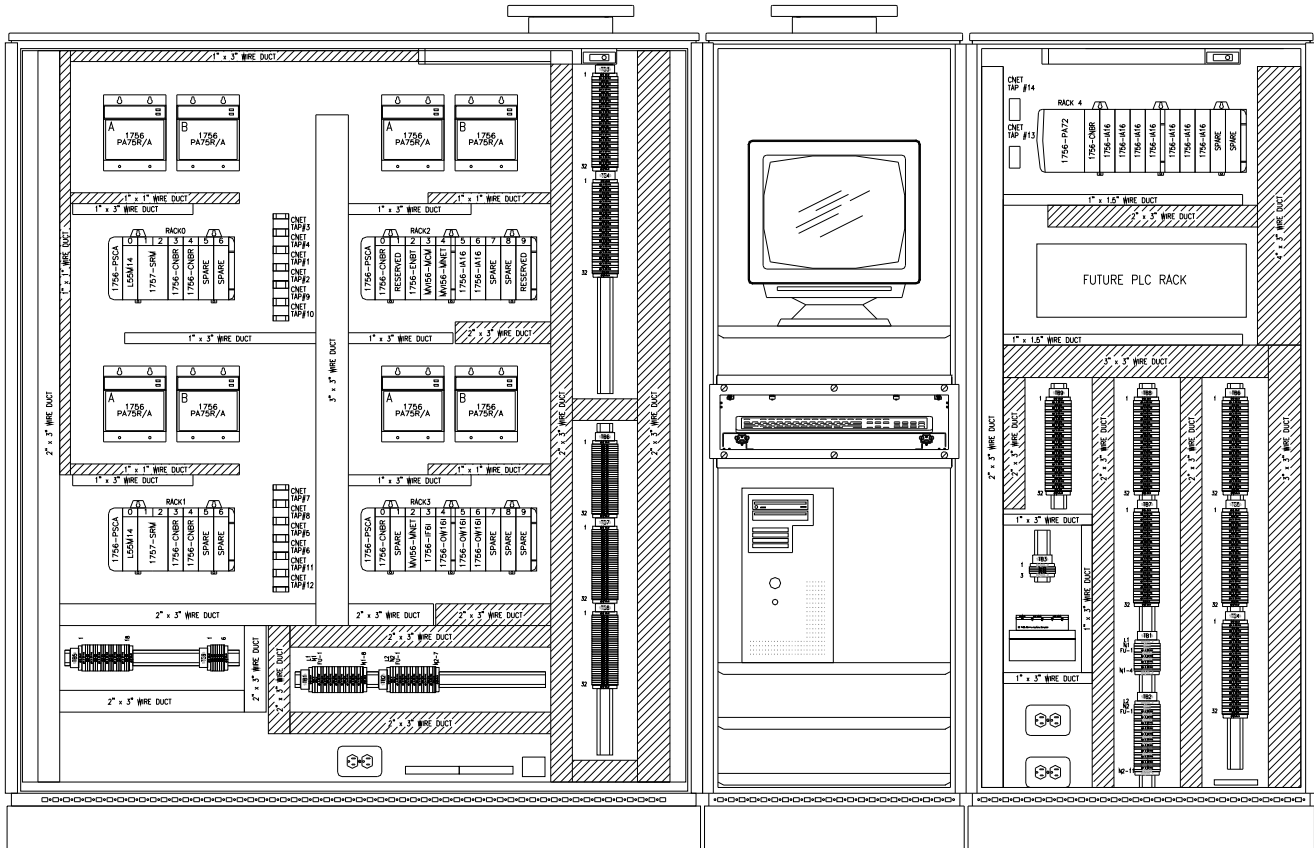
Each panel is equipped with a PC-based HMI that acts as a window into the PLC logic, as well as a direct

interface into the various controller devices, using third-party software interfaces.



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UE-1 DUAL REDUNDANT PLC CONFIGURATION

System Specifications:

- Allen-Bradley ControlLogix 5555 Series PLC
- System Redundancy Module
- Redundant Power Supply Assembly
- ControlNet Redundant Bridge Module
- Ethernet/IP Bridge Module
- Prosoft MCM Modbus Module
- Prosoft MNET TCP/IP Module
- Hoffman Proline Modular Series cabinet
- Dell HMI Computer
- GE F485 RS232/485 Converter

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

www.hinz.com