



NAME OF PROJECT: New production plant for inactive yeast and yeast extracts

FIELD: Food Industry

LOCATION: Ontario

YEAR OF EXECUTION: 2018-2019

AREA OF EXPERTISE



Process Control

SERVICES PROVIDED



Design



Programming



Software



Machine Safety

CONTEXT

Wishing to increase its yeast extract production capacity, now mostly in Europe, our client purchased a plant, closed at the time, that formerly dried milk products. The goal was to reuse what could be salvaged and put in new process equipment to satisfy the new production requirements.

MANDATE

The PCI team performed the electrical engineering, programming and integration of all the modernized plant's equipment. Specifically, the plant includes the following equipment:

- Storage tanks (8), with an autolysis process
- Centrifugal separators (3), pasteurizer, evaporator and dehumidifier
- Spray dryers (3)
- CIP system with 3 tanks
- Wastewater treatment system

PCI PERFORMED THE FOLLOWING TASKS

- Functional analysis for the equipment control logic.
- Electrical design of the control panels (7).
- Design of the network architecture and of the control system.
- Configuration of the SCADA system and of the historian.
- Programming of the PLC and SCADA system.
- Supervision of the electrical installation.
- System start-up and 24/7 support.

SOLUTIONS DEPLOYED BY PCI

- Complete review of the control philosophy of the existing equipment, such as the evaporator and the dryers, to adapt their operation to the new type of products being dried.
- SCADA system with redundant servers installed in a virtual machine environment.
- Operator stations using thin clients to simplify the network architecture and optimize the servers' resources.

TOOLS AND METHODS USED

- Schneider Electric architecture
- M580 processors
- Citect SCADA system and Wonderware historian
- HP thin clients (5)

3 SIMILAR
PROJECTS
UNDERTAKEN

