

CASE STUDY: Moka Foods



Contrast Electrics P/L was awarded the contract for the engineering design, manufacturing and installation of a fully automated control system and electrical hardware for Moka Foods production facility in Laverton Nth Victoria. The project involved a complete major upgrade of the electrical and refrigeration systems for the facility including blast freezing automated continuous automated frying equipment. Installation of conveyor system and manufacturing equipment.

All major components for this project were manufactured at Contrast Electrics P/L workshop in Laverton Nth. Contrast Electrics Delivered the system on time and to the complete satisfaction of the Customer.

Project requirements.

Install 2000A consumer mains from new onsite kiosk substation.

Design, build and install 2000A Form 4 MCC.

Installation of wiring and controls for the following plant.

2 of Mycom compressors

All compressors, condensers & evaporators are controlled by variable Speed drives.

Pumped liquid ammonia system.

1 of BAC Condensers.

1 of Ammonia / glycol flooded plate heat exchanger with duty standby recirculation pumps.

Reticulated glycol cooling system.

Duty and standby automated pump system.

2 of fully automated Spiral freezers.

1 of ceiling hung evaporators in chiller.

Mechanical ventilation and fresh air system for plant room & MCC room.

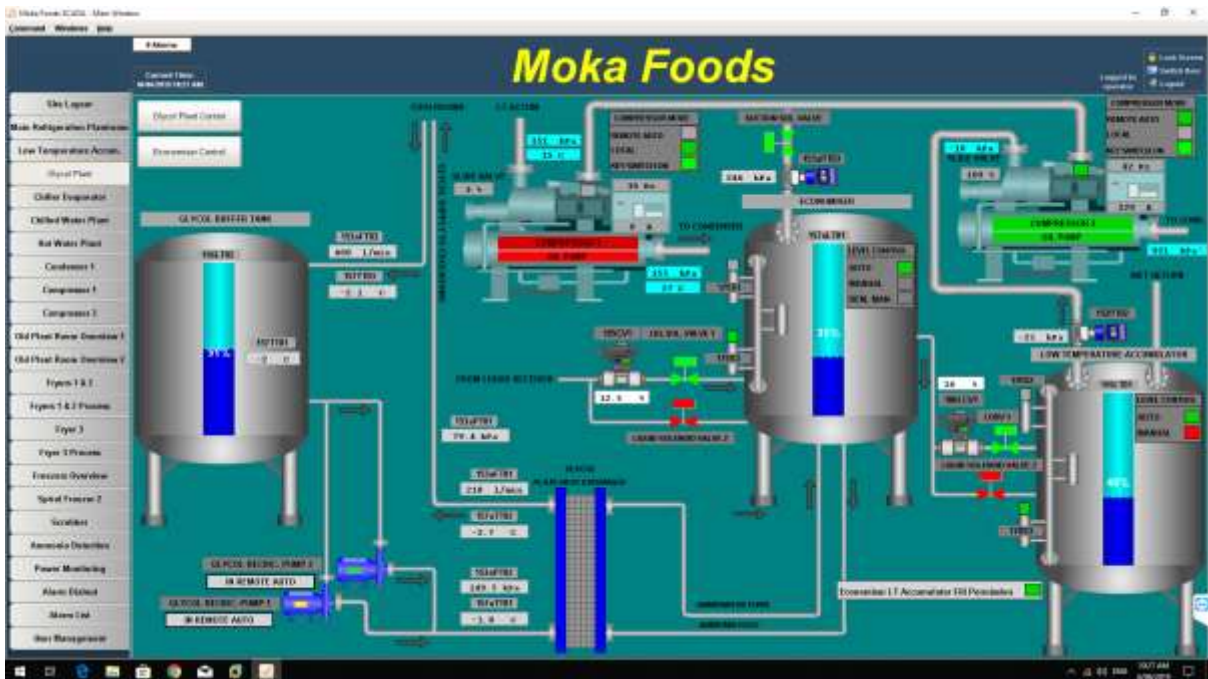
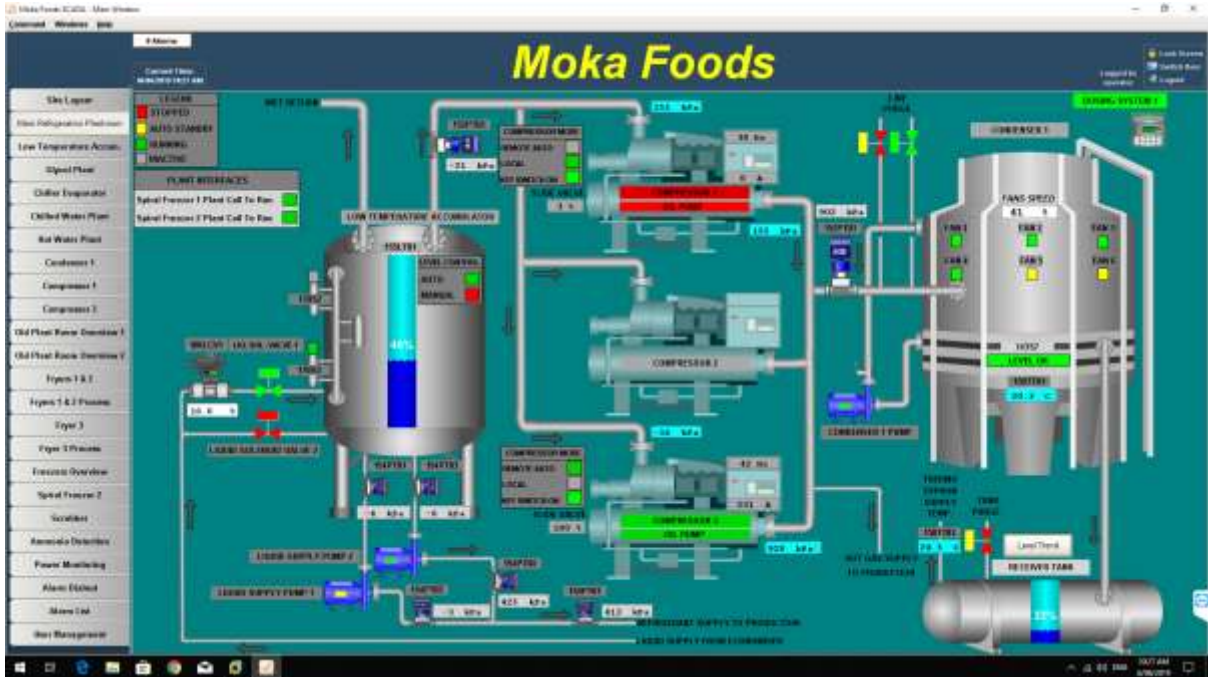
Ammonia gas detection system.

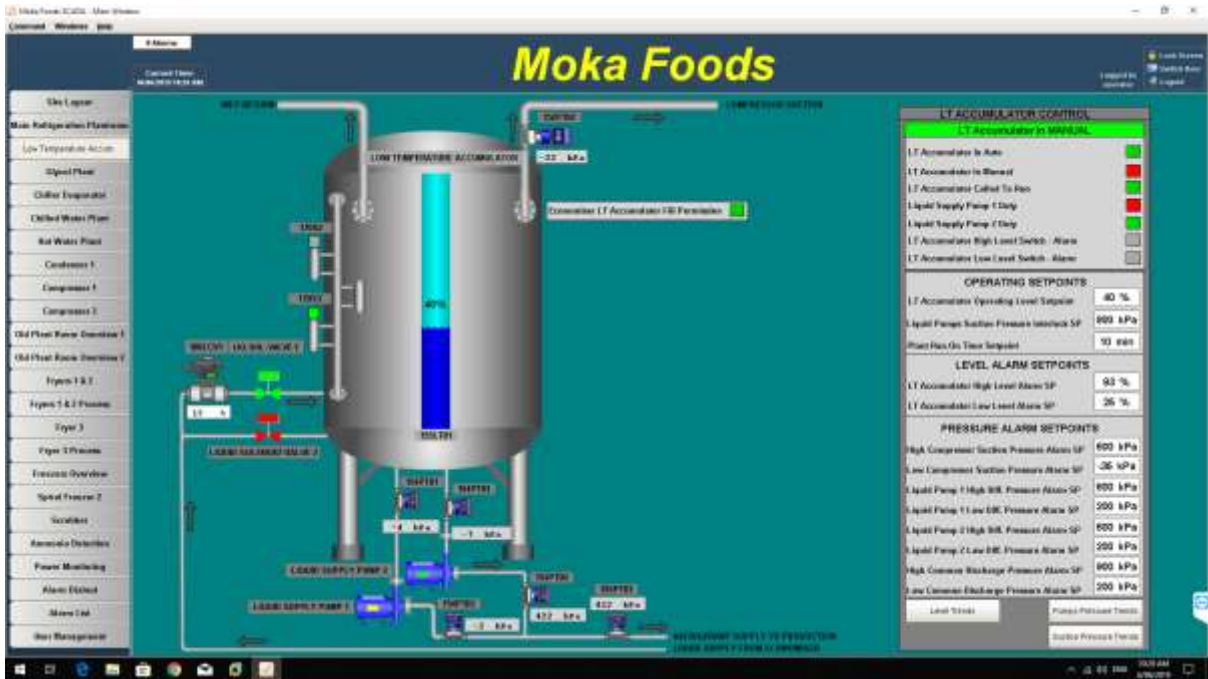
Automated continuous fryer with gas fired heat exchanger and oil heating system.

Automated conveyor system and process line.

Allen Bradley PLC system comprising of 5 separate processors with over 300 Digital & analog I/O.

Ignition SCADA system.





Engineering and programming solution.

Design complete electrical and automation system,

Instrumentation control loops design and calibration

Produce Electrical Schematics with Auto Cad Electrical.

Program PLC system.

Program Adroit SCADA system.

On site commissioning.

New Main Switchboard.



New ammonia refrigeration system plant room.



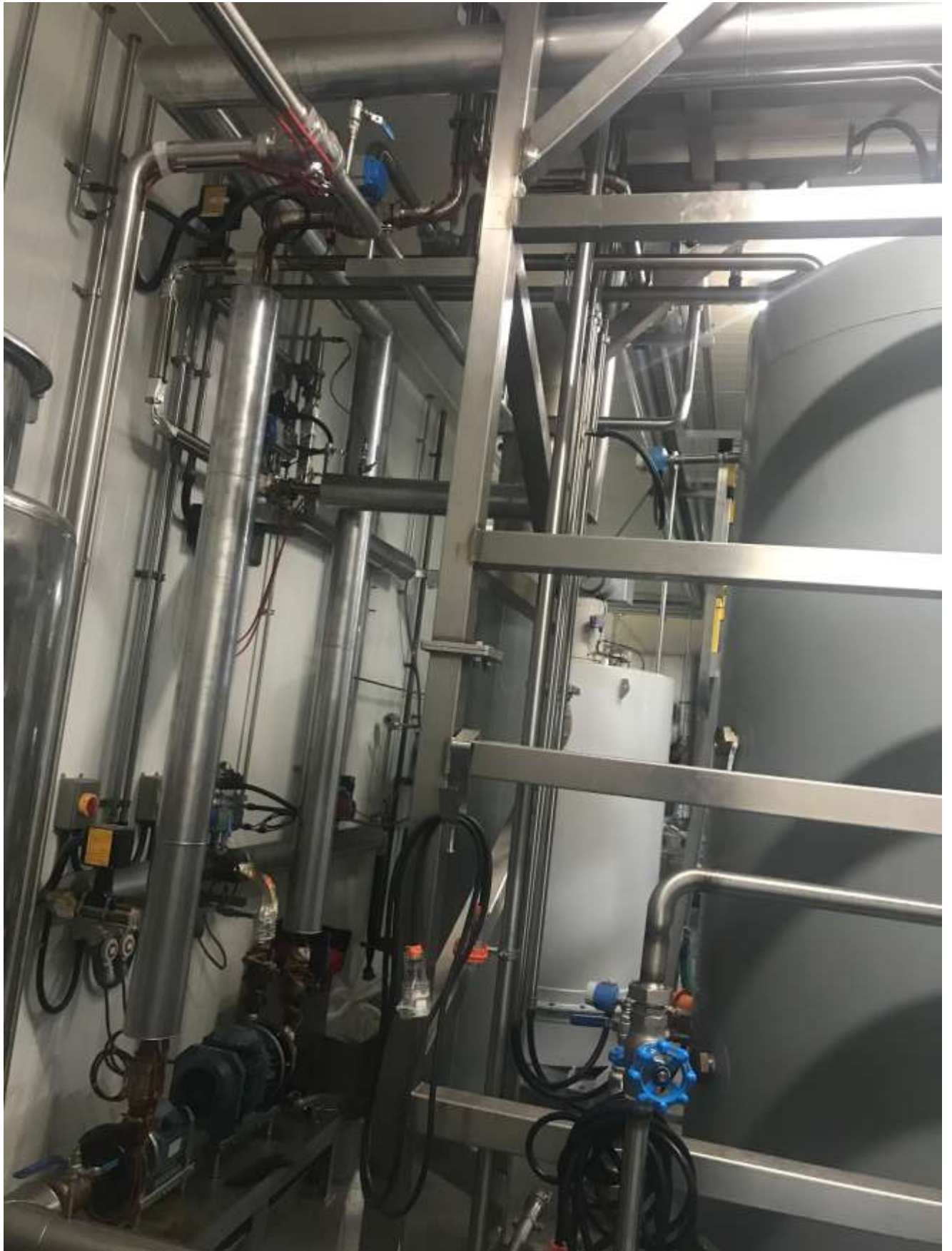




Automated Oil heating system.



Automated Hot Oil System



New main switchboard and MCC. Automate continuous frying system.

