CASE STUDY: JALNA DAIRY FOODS.



A little pot of purity

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 Jalna Dairy Foods yoghurt production facility. This included 6 of fast chiller cells, reticulated -5Deg.C Glycol system, and Yoghurt incubation cell heating, this project presented several challenges as the existing facility must remain operational during the works with scheduled cut overs required outside production hrs.

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.

Design, build and install 2500A Form 4 MCC.

Installation of wiring and controls for the following plant.

2 of Mycom 250L Compressors.

Pumped liquid ammonia system.

2 of BAC Cooling towers.

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

Glycol tempering loop.

Glycol hot and cold tank holding system.

Duty and standby automated pump system.

6 of fast chill cell controlled to within .1 degree C.

4 of yoghurt incubation cell with automated incubation cycle.

Mechanical ventilation and fresh air system.

Ammonia gas detection system.

Hot water batching and delivery system.

Hot water wash down system CIP system.

Allen Bradley Compact Logix PLC system comprising of 7 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 Ignition SCADA system. On site commissioning.























