

FOOD INDUSTRY

COUNTRY: NEW ZEALAND

PRODUCT: CHEESE PRODUCT

KEY BENEFIT: PROCESS VALIDATION

YEAR: 2011



New Zealand based Dairy Company needed a research and development package for process validation

LCI – The Big Cheese

Background:

LCI has a history of supplying and working with various dairy processors manufacturing cheese products. LCI has supplied over 15 thin film evaporators specific for processed cheese manufacture.

Problem:

In 2010 LCI was contacted by a major dairy company in New Zealand for the supply of a thin film evaporator for validating a new process the company had developed for a very viscous high solids product on an expedited timeline.

Solution:

LCI process engineers worked closely with the R&D team to develop the equipment package. This process validation package ultimately entailed a 1 square meter thin film evaporator, flash tank, vapor condenser, pumps, CIP system, valves, control elements, instrumentation and all assembled in a stainless steel frame.

Total time from award of order to shipment of the package was about six months. The compact footprint allowed for air-freight shipment from Charlotte, NC to Auckland, New Zealand.

In late 2011 an LCI process engineer assisted in commissioning, start-up, and operation of the package. On spec product was realized within the first couple of days after startup. The client was very pleased with not only the mechanical package as delivered, but also the process experience LCI was able to bring to the table.

Results:

The Client operated the skid package for several years performing a variety of process validations and development work. Cheese was produced at 65% milk solids which is extremely high in viscosity.



LCI Cheese-Base Processor Skid
&
High Polished Rotor