

Savings Through Equipment Design Innovation:

A Chocolate Manufacturing Company Case Study

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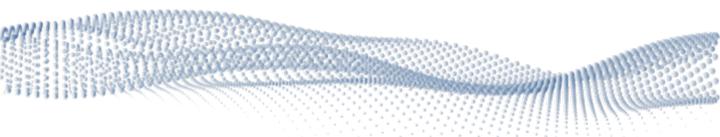


#### **About Kelmic**

Kelmic Consulting helps organizations capture opportunities and dramatically improve their operations.

Helping our clients improve their operations since 2002

We partner with our clients to drive bottom-line impact by addressing and dramatically improving efficiencies in People, Processes, and Property. Our exceptional people draw upon more than 100 years of combined experience to bring you the right perspectives and expertise to help you tackle complex challenges and realize your strategic ambitions.







### Background

## About the Client

- Largest West Coast
   Canadian chocolate
   manufacturer with over
   70,000 sq ft of
   manufacturing and
   warehousing
- Manufacturer of chocolate and coated candy products
- Lease due to expire in five years with view to relocating to new, purpose built facility
- Lack of space for immediate expansion needs

"Expanding production was also creating a requirement for seven bulk chocolate and liquor storage tanks – 60,000 lbs each."

A major west coast Canadian chocolate & candy manufacturer was experiencing space limitations preventing urgently needed expansion. New product requiring 6,000 sq ft to 10,000 sq ft of additional manufacturing space required sourcing a new facility.

Leases over the exiting three facilities (located on the same lot) were due to expire in five years. These facilities were old and largely unsuited for candy production. The client planned to relocate on lease expiry into a more suitable, purpose made facility.

Expanding production was also creating a requirement for seven bulk chocolate and liquor storage tanks – 60,000 lbs each. Existing foundations would not support these.

In addition, six new belt coating machines had been ordered to meet production needs. There was no space to install these.

The client had identified two possible sites for a temporary 5-year leasing to accommodate the new manufacturing equipment and associated manpower and storage needs. These were both within 1 km of the exiting site.

One site was new, requiring a new TI office buildout. It was slightly larger than the required manufacturing footprint, but could accommodate some raw material overflow.

The second site was older with slightly lower rent.

The client's concept was to establish the new production lines, some overflow storage and some manpower in the older facility. The new storage tanks were to be located in the exiting facility on an already subsiding floor.

This proposed second facility required some improvements to the offices, had no fire protection system installed and exhibited some significant challenges necessary to upgrade to food safety / CFIA requirements.



# Implemented Solution

Kelmic suggested a revised manufacturing facility plan. A new DC was established in the newly identified facility and all exiting finished goods were relocated.

The new facility was racked with over 1,100 pallet locations using used racking, saving over \$20,000 compared to new.

The offices were finished to accommodate the senior office staff and a new head-office established. The offices were linked via line-of-sight microwave for data and telephone.

The facility was food certified and operational in four months

In the vacated warehouse space the floor was partially removed and new foundations cast to support 8 new 60,000 lb tanks.

New production rooms with 30' high demising walls were established and air cooling installed.

The tanks were designed to be heated by wrapping each with 3,000 ft of PEX pipe and spray-foam insulation. This saved over \$10,000 per tank over conventional jacketing designs.

Installing equipment in the exiting facility avoided the cost of installing a new fire protection system saving over \$150,000 in up-front costs.

The TI build-out in the DC was completed for the landlord's allowance as part of the lease further reducing up-front investment by more than \$40,000.

A new 2,000 sq ft mezzanine was installed along with the new belt coaters and over 4,000 ft of 3" and 4" heat traced pipe in 4 months.

Innovation to jacketing bulk tanks drives cost savings in excess of

\$60,000





### Key Results Achieved

- Installed 7 x 60,000 lb tanks complete with:
  - new foundations, over 4,000 ft of 3" and 4" heat traced pipe;
  - 2,000 sq ft production mezzanine;
  - 6 automated belt coaters:
  - packaging line and demising walls.
- Changed immediate facility plan to a separate 25,000 sq ft DC to allow production expansion in exiting space
- Developed innovative tank heating system saving over \$80,000
- Completed 2,600 sq ft office TI for \$150,000 less than nearest competitor
- Project completed in 7 months; savings over \$60,000 for jacketing bulk tanks



7x
60,000 sq ft
Jacketing bulk tanks

\$60 thousand

CAPEX savings

Expanded production

In vacated space



### Kelmic at a Glance



