

## Client and Application:

Feihe Canada Royal Milk (CRM), a division of Feihe International, is Ontario's newest food manufacturing company, with production starting in September 2019. Canada Royal Milk manufactures formula for infants and young children using both cow dairy and goat dairy, building local supply chains to benefit the Canadian economy.

The new packaging line required a dust collection system to capture milk powder nuisance dust. The system needed to match the following design criteria:

- Contain and capture the dust; prevent it from escaping to the facility
  - Comply with the Ontario Ministry of Labour and Ontario Fire Code

### Solution:

The solution was capture at source from the packaging cell as per machine manufacturer recommendation. AST installed an 1,100-1,300 CFM dust collector for capturing and filtering the milk powder from the packaging line. The followings are the details of the solution:

- The dust collector is grounded, and the ductwork electrically bonded to the collector.
- The collector is fitted with a flameless explosion vent c/w a burst indicator.
- Fire protection is installed.
- An explosion isolation valve c/w indicator switch is installed in the dirty air ducting.
- A signal from any of the above will de-energize the fan and create an alarm.
- Transport velocities exceed 1068 m/min.
- The packaging line is interlocked to the operation of the dust collector fan.

#### **Equipment:**

One (1) DFE 2-4 Downflo Evolution cartridge filter dust collector

One (1) PB-15A pressure blower side mounted 10HP TEFC fan with silencer

One (1) 6"CI Rotary Airlock

One (1) AST-CP-10HP-575V control panel

One (1) Q-Box Flameless Explosion Vent

One (1) VigiFlap 8"D

One (1) Fire Trace Fire Protection System

One (1) Mechanical and Electrical Installation

## Installation pictures:



# Industry:

Food Plant

#### Contact:

For an update on the performance of the system, please contact:

Farshid Mohammadi Engineering Department

Canada Royal Milk ULC 1680 Venture Drive Kingston ON K7P 0E9

www.canadaroyalmilk.com, mohammadi@canadaroyalmilk.com, Tel: 613-483-8430