



FLO-CREST AUTOMATED TRUCKFILL SYSTEM (2016)

General Information:

The Smart Card system is a "paperless" system that is designed to offer a Municipality a safe and cost-effective method to handle bulk water sales. The card reader system activates the control and delivery of water automatically, with no money kept on site for added security.

The outlet is generally a 2.5" Cam-Lok type connection or a 2" or 3" overhead fill. The size of the pipe and control valves will vary based on the required maximum flow rate. A complete system package includes all the control, and safety mechanisms to insure protection of the potable water supply from potential contamination and accurate recording of the water dispensed. The billing function is totally eliminated. All payment for water is in advance of any actual transaction. The stations are "Self Service" and operate 24 hours a day. All of this means no additional operating cost to the Municipality. The station may be installed in an existing building or a complete package can be provided to allow the control valves and piping to be insulated in a skid enclosure.

There are two basic versions available: Single Outlet and Dual Outlet systems. Single Outlet will typically be used for a truck fill application (2"-3" piping system). A Dual Outlet system can be used for Truck and Pail applications.

We also offer a new optional feature on these systems for installations which would like to use the water system for filter backwash cycles. The unit will accept a signal from the backwash control system to lock out users from dispensing water during a backwash cycle. The unit will also send a signal to the backwash control system during dispensing so that a backwash cycle cannot commence until dispensing is completed.

Smart Card Personalization Terminal (Office Terminal):

This terminal is generally located at the Municipal Office. It is used to "Load" the individual Smart Cards with any cash amount.

The interface is a LCD touch screen with tactile buttons.

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|---|---|--|
| <p>Card Information:</p> <p>Card ID: idLabel</p> <p>Type: typeLabel</p> <p>Balance: balLabel</p> <p>Location: locLabel</p> <p>Activate New Card</p> <p>Reload Card</p> <p>Erase Card</p> | <p>Card Type:</p> <p>User</p> <p>Location:</p> <p>1</p> <p>Balance:</p> <p>\$0.00</p> <p>Create</p> <p>Cancel</p> | <p>Amount to Add to Card:</p> <p>\$0.00</p> <p>maxValue</p> <p>Add</p> <p>Cancel</p> |
|---|---|--|



Smart Cards:

Each card has a programmable chip embedded in it to record the user information and act as the cash storage mechanism. The card is reusable. No magnetic strips are used. There is virtually no limit to the amount of cards that may be issued. The card will work at any dispensing station located within the Municipality.

Smart Card Transaction Terminal (Field Terminal):

Each dispensing station will require one transaction terminal. When the Smart Card is inserted a read out will be given of the value (cash) amount remaining on the card and the price per litre. The user is then prompted to enter the amount of units (Litres or Gallons) that he wants. If there are insufficient funds on the card, they are asked to select a new amount. The system will then start dispensing water. A progression bar graph is displayed as the water is dispensed. The customer can stop the transaction at any time. At the conclusion of the transaction the card balance is updated and the terminal will prompt the user to remove the card including a "Delivery Complete" message. Each transaction terminal (dispensing station) may be programmed with a different cost per unit of water. The unit cost may be changed at any time by reprogramming the terminal. The terminal will store the following information in a *.csv log file:



Auditing Functionality:

Each terminal (field and office) will log the following information with date and time stamping:

Field Unit (FieldLogfile.csv):

- Purchases**
 - a. Card ID
 - b. Purchase price in dollars
- Pumped Volume**
 - a. Card ID
 - b. Volume pumped in litres
- Refund (Refunded)**
 - a. Card ID
 - b. Value refunded in dollars
- Failed Refund**
 - a. Card ID
 - b. Value of failed refund in dollars - Means that the correct card was inserted, but failed to write the new value back to the card. Could indicate failing and/or damaged card.



LOST Refund

- a. Card ID
- b. Value of lost refund
Means the correct card was not reinserted before the timeout occurred.

Office Unit (OfficeLogfile.csv):

In all cases, first column is Date and Time.

Card Erased

- a. Card ID
- b. Old balance
- c. Old Location

Card Loaded

- a. Card ID
- b. Value added in dollars
- c. Total balance on card after addition in dollars

Card Created

- a. Card ID
- b. Card Location
- c. Card Balance in dollars

This information may be downloaded to a computer and reports generated at any time.

For more information or to request a system proposal please contact us:

Flo-Crest Equipment
48 Stevenson Rd.
Winnipeg, Manitoba R3H 0W7
Tel: (204) 633-0682
Fax: (204) 632-5461
Toll Free 1-800-665-8029
Email: sales@flo-crest.com