



VeriFill Presentation

By **CROSSE**COM



Fuelling Excellence in RFID Solutions and Retail Automation



A faded background image of the Chicago skyline at night, with various skyscrapers illuminated and their lights reflecting on the water in the foreground.

VeriFill Presentation

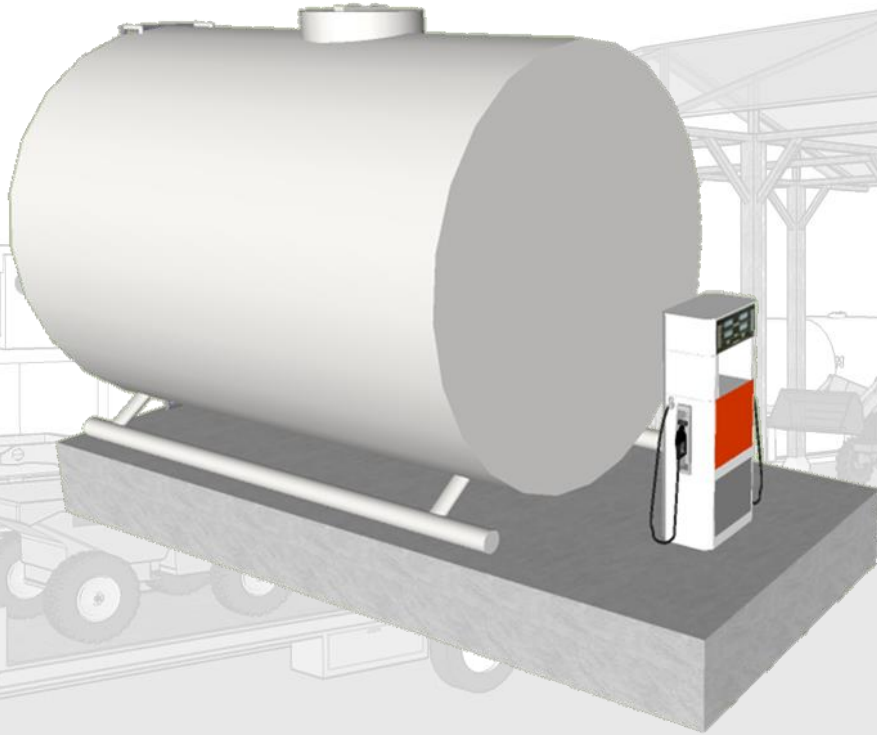
Electronic Fuel Delivery & Fleet Usage System



Fuelling Excellence in RFID Solutions and Retail Automation









Introduction









- ✓ RFID Fuelling Dispenser
- ✓ RFID Verification Technology
- ✓ Fast Fuelling of Vehicle
- ✓ Single Depot / Standalone Site
- ✓ Paperless Fuelling Transaction








Product Features

-  Uses RFID contactless technology to eliminate fraud
-  Holds Aust. Govt Testing Authority issued “Certificate of Intrinsic Safety”
-  Speeds up fuelling vehicle at the pump
-  Eliminates fuelling paperwork, wallet or purse completely
-  Uses passive batteryless tag requiring no connection to the vehicle electrical system
-  Requires no hole drilling in the vehicle body






Product Features

-  Easy, simple, quick and inexpensive to fit—little downtime
-  Has virtually unlimited life for batteryless vehicle tag
-  Tags are rendered inoperative if removed from vehicle
-  Optional pinpad odometer reading entry for fuel usage reporting
-  Optional pinpad for driver ID entry for identification and reporting
-  Virtual tank levelling (when used with Crossecom FASTFILL site system)

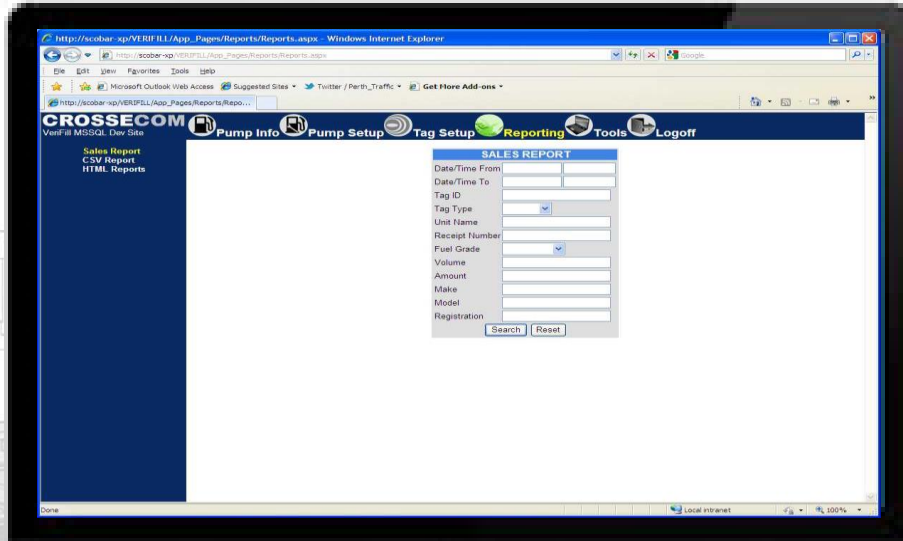
System Features

-  Minimises filling attendant intervention
-  Reduces fuel shrinkage
-  Optimises control over fuel sales
-  Reduces filling process time
-  Improves fleet fuelling security

System Features

-  Ensures only authorised vehicles are filled with correct fuel
-  Allows budgeting of fuel usage for individual vehicles or groups
-  Eliminates need for logbook documentation
-  Provides full audit trail
-  Allows emergency fillings of non-authorised vehicles when necessary — with full audit trail

Report



- ✓ Sale Report
- ✓ Exception Report
- ✓ CSV Data Export
- ✓ Others



Fuelling Excellence in RFID Solutions and Retail Automation



System Component

Vehicle Tag



This is a small **batteryless** electronic data storage unit (20-50mm in diameter) **epoxied** to the vehicle near the fill pipe. It can contain information such as vehicle details, owner identification, driver identification, fuel type etc.

The tag uses RFID contactless communication techniques to release its details to the authorising reader. This technique employs two-way authentication allowing only genuine authorised tags to ensure the correct fuel is pumped into the authorised vehicle.

To prevent fraud, a high security challenge and response crypto-algorithm is used.

System Component

Nozzle Antenna / Reader



The antenna, mounted conveniently on the dispensing nozzle spout, comprises a small loop antenna with its low power electronic components. It is connected to the reader (mounted inside the pump housing) via a special petroleum resistant cable.

An optional panel reader (with or without pinpad for odometer entry if required) can be mounted on the pump itself for driver identification purposes. It can also be used to authorise fuel deliveries if the additional security offered by the vehicle mounted tag is not required.



System Component

Controller



The System Controller stores information on all authorised vehicles and their respective owners as well as the fuelling requirements for each vehicle.

This information is continually updated and shared between all devices on the network.



System Component

Controller

The Site Controller checks the data obtained from the tag against available information on that particular vehicle to determine if fuelling is permitted. In the case where the vehicle is not authorised for fuelling or if it has been reported stolen or missing, a suitable alert can be raised.

This system enables vehicles to be fuelled even if communication with the Head Office system is temporarily unavailable by keeping a local copy of the database, but will be updated as soon as communications is restored. Sales and other events are transferred to Head Office for reporting and analysis.



System Component

Photos



Fuelling Excellence in RFID Solutions and Retail Automation



System Component

Head Office

RECORD:GULFT 03/09/2013 [NT] Logoff

Alerts Find Accounts Vehicles Staff Tags Operations Dashboard Reports Admin

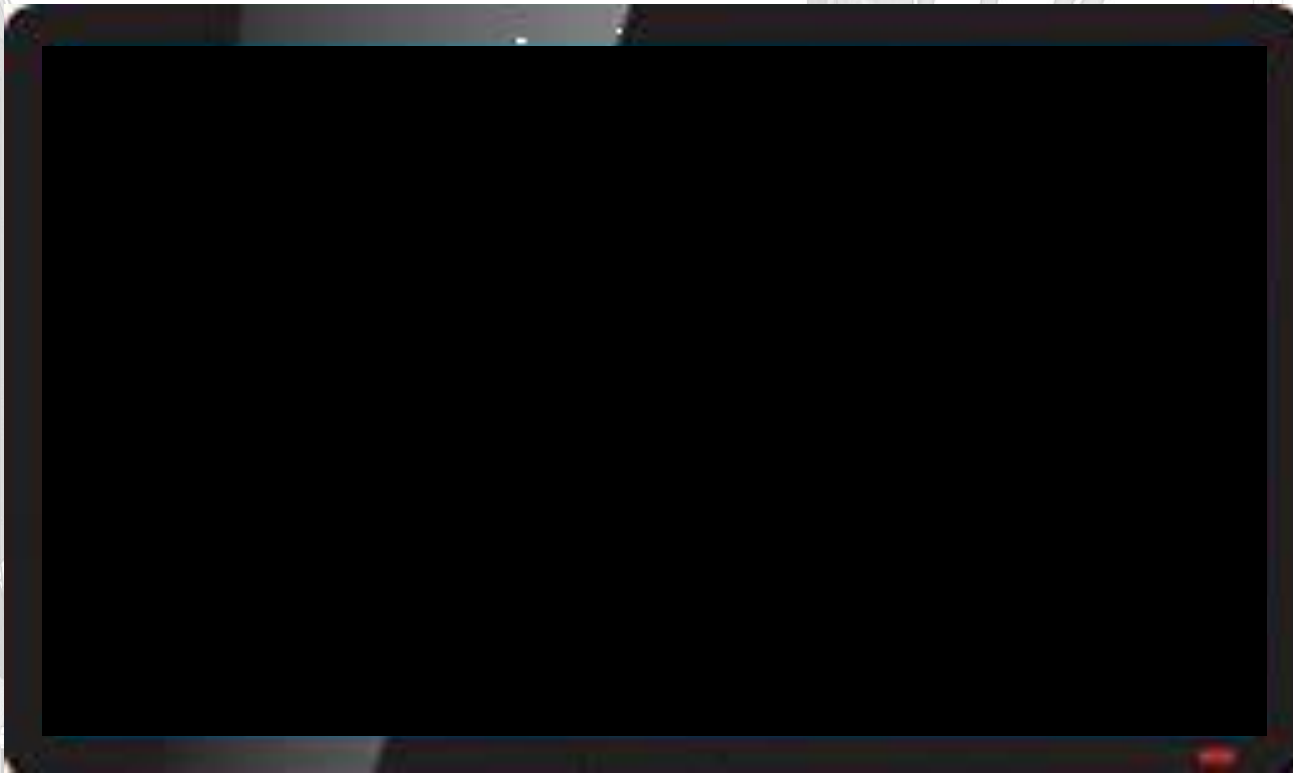
TERMINAL ACTIVITY REPORT - [DATE]

ID	Time	Status	Details
KCT:10002 m	03/07/2013 21:15:35	Exception	! Site-MOB 160 MF Status: Fault 'CG'
KCT:10002 m	03/07/2013 21:16:13	Exception	! Site-MOB 160 MF Status: Fault 'C'
KCT:10002 m	03/07/2013 21:16:43	Exception	! Site-MOB 160 MF Status: Fault 'CH'
KCT:10002 m	03/07/2013 21:16:44	Exception	! Site-MOB 160 MF Status: Fault 'C'
KCT:10002 m	03/07/2013 21:16:44	Exception	! Site-MOB 160 MF Status: Fault 'CG'
KCT:10002 m	03/07/2013 21:17:22	Exception	! Site-MOB 160 MF Status: Fault 'C'
KCT:10002 m	03/07/2013 21:17:43	Sale	Vehicle RTG KC02 Diesel 102.00
KCT:10002 m	03/07/2013 21:17:53	Exception	! Site-MOB 160 MF Status: Fault 'CG'
KCT:10002 m	03/07/2013 21:18:31	Exception	! Site-MOB 160 MF Status: Fault 'C'

The Head Office System comprises a number of different applications that control the overall operation.

These applications are responsible for the tag information database & authorisation process as well as the production of various management reports for sales, vehicle usage etc. Exports to third party systems are supported.


VeriFill Site View – Plantation Fuel Depot



- Backhoes
- Dump Trucks
- Tankers
- Tractors
- Utility Vehicles
- Others

Brief Process



-  Fuel Station
-  Vehicle
-  Verify
-  Leave Site
-  Database
-  VeriFill Site
-  Read Tag
-  Start Fuelling
-  Saved Data
-  Real-time

Brief Process








-  Depot/Site
-  Supervisor
-  Fuelling Info
-  Easy Access
-  Manager
-  Efficient
-  Access Server
-  Reports
-  Anywhere
-  Devices





Benefit of VeriFill – To Fleet Manager & Owner

- ✔ Ensures fuel actually pumped into correct machine
- 🔍 Better monitoring of fleet fuel consumption
- 👍 Improved data collection
- ⚙️ Reduced errors due to minimised human intervention
- 🗑️ Elimination of plastic cards or paper coupons






Benefit of VeriFill – To Fleet Manager & Owner

-  Minimisation of fuelling to non-authorized vehicles
-  Elimination of stolen cards problem
-  Reduced disputes on unauthorized fuel transactions
-  Reduction of manpower requirements
-  24x7 operation

Benefit of VeriFill – To Fleet Manager & Owner

-  Auditable “Super tags” allow filling of un-tagged vehicles
-  Full auditing of every litre of fuel dispensed
-  Allows vehicle performance analysis
-  EVERY LITRE PUMPED IS AUTOMATICALLY RECORDED TO AN AUTHORISED TAG OR SUPER TAG

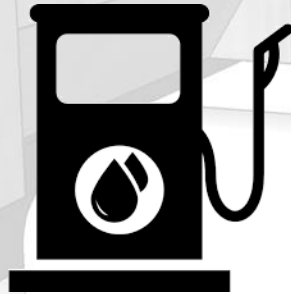
Benefit of VeriFill – To Driver & Operator

-  Reduced process time
-  Elimination of paperwork and logbooks
-  Elimination of signed chits or plastic cards
-  No disputes over fuel allowances
-  Automatic vehicle/machine identification

Benefit of VeriFill – To Business Owner



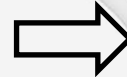
Operation



VeriFill



Productivity



Profitability

Crossecom (Australia) Pty Ltd

Over 25 years of Retail Fuel Industry Experience

Clients to have used Crossecom systems since 1984 include:

Bechtel (Malaysia)
Singapore Petroleum Corporation
Shell (Singapore)
BP (Singapore and Malaysia)
BH Petrol (Malaysia)
Hindustan Petroleum Corporation (India)
ESSO (Australia, Singapore and Malaysia)

Emarates Petroleum (Dubai)
Kuwait National Petroleum Corporation
JomoGAS (Jordan)
Conoco (Malaysia)
Duty Free Stores (Okinawa)
Public Bank Berhad (Malaysia)
American Express (Malaysia)

Our products and services include:

Retail Automation - ISSAS
Point of Sale Hardware and Software - TouchPOS, FuelPOS
Protection of goods in storage and transit - CrossESEAL
Radio Frequency Identification (RFID) - FastFILL Automated Fuelling System
Latest;
CheckFILL- Patented Technology for NGV/CNG Industry
visit us on: www.crossecom.com.au



Fuelling Excellence in RFID Solutions and Retail Automation



A grayscale image of a city skyline at night, with buildings illuminated and their lights reflecting on a body of water in the foreground. The image is semi-transparent, allowing the text to be clearly visible.

VeriFill Presentation

Thank You



Fuelling Excellence in RFID Solutions and Retail Automation

