FasTrack AVI (Automatic Vehicle Identification)

Overview

The FasTrack AVI system creates a whole new world of fleet fuelling on your sites. We all know that fuel is a near cash commodity and open to theft and fraud. The Fastrack AVI system provides a tight bond between the vehicle, the flow of fuel, and the account, which puts you in control of your fuel. Whether you operate a retail service station, a home base fuelling depot or a commercial truck stop, FasTrack will make a significant financial impact on your business.

The FasTrack AVI system provides benefits to fuel retailers, their fleet customers, and the fleet drivers, a unique win, win, win situation. Fuel retailers using AVI have seen a rise in overall sales. This is because the AVI system provides a unique form of loyalty to the retailer's sites. Additionally, retailers can use the fuel/vehicle data and account management to create new service revenue and differentiated marketing offerings to help lift overall sales.

For fleet owners who use retail or homebase sites to fuel their vehicles, AVI will ensure every drop of fuel is placed in an authorized vehicle. Fleets will receive more accurate tracking reports and invoices, automatically. Both of these lead to significant cost savings for the fleet and allow them to focus on their core business.

Is FasTrack AVI for you?

- Are you an oil company in a highly competitive market? Are you looking for a differentiated offering to bring new fleet customers to your sites and keep your existing customers loyal?

- Are you an oil company with innovative marketing ideas? Are you looking for new technology to implement these ideas?

- Are you an oil company or homebase fleet operator looking to reduce the cost of fuel losses and fraud?

- Are you a homebase fleet operator looking to simplify your fuel tracking back office process?

- Are you a homebase fleet operator looking to improve your vehicle/engine maintenance tracking process?

Key features

Maximun uptime and reliability

The FasTrack AVI solution is configured to work with the powerful, robust, and proven Postec controller, as well as the Foresight head office and account management software. All Fastrack components have robust IP ratings and industry certifications. The unique UHF technology used by the Fastrack wireless receiver ensures all transactions are read from the nozzle readers.

Industry leading encryption and security

The Fastrack RFID vehicle tag and nozzle reader use the same chip and encryption key technology used by a major contactless credit card provider. FasTrack uses a variety of vehicle tags to ensure fraud and tamper-proofing is maintained across all vehicle types, and all tags are equipped with a self destruct mechanism.

Fast and easy site and vehicle installation

FasTrack tags do not require any drilling or screws to be used on the vehicle. Instead, tags use self-adhesive backing and glue/epoxy for attaching to vehicles, making installation a 5 minute process. FasTrack vehicle data devices are also designed for quick and easy installation.

Most cost effective design

The unique UHF communications of the wireless receiver means FasTrack can cover most forecourts with just one receiver. The ATEX approved, replaceable battery on the nozzle reader provides a quick, easy, and cost effective method for future maintenance of your system.

End to end solution

The Fastrack AVI system is just one component of a broader automation solution. Trax Retail Solutions can also provide industry leading products for forecourt control, head office/back office, account management software, driver and attendant tagging, outdoor terminals, tank gauges, installation and service.

Business benefits

Increase oil company revenue

Oil companies can use FasTrack AVI as a differentiated payment and service offering to fleets. Fleets will become loyal to your network to ensure they get the benefits of the AVI system and any accounting and data reports you provide to them.

Reduce fleet fuel costs

The unique benefit of an AVI system is the assurance that fuel only goes into authorized vehicles. FasTrack simplifies reporting, invoicing, and managing, and eliminates many of the manual back office processes used today.

Simplify fuelling process

The FasTrack AVI system eliminates all human intervention of the payment transaction process. This makes the entire forecourt process faster, simpler, and more accurate. Both drivers and attendants will be free from handling cash and cards when purchasing fuel.

Increase fleet vehicle maintenance

Fleets that use the optional vehicle data device will automatically receive information about their vehicles each time they fuel. Engine hours, odometer readings and fuel per distance travelled consumption information are readily available. This information will assist in tracking maintenance issues, scheduling maintenance, and prevent fuel siphoning from vehicle tanks.
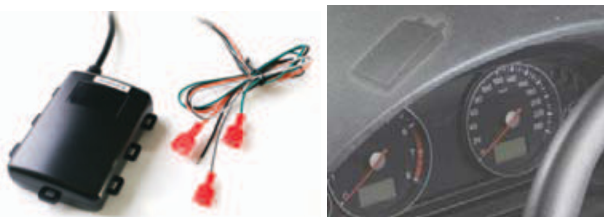
On the Vehicle

RFID Tags: EEach fleet vehicle is equipped with a wireless, battery-less, passive RFID tag. The account number and additional account, vehicle or driver information are encoded on this tag to provide a physical link between the vehicle, the flow of fuel, and the account. FasTrack offers a variety of tag styles and sizes to ensure a perfect fit with different types of vehicle tank inlets, thus eliminating any sources of fraud. With a unique peel-and-stick design, FasTrack vehicle tags are quick and easy to install (less than 5 minutes), and still provide a self-destruction design to prevent removal or tampering.

Vehicle Data Device: The data device is an optional feature for a vehicle. It installs under the dashboard and draws power from the vehicle battery. The data device collects engine hours and odometer readings from the vehicle and wirelessly reports them to the receiver/forecourt controller. FasTrack data devices come in a variety of connection options to suit the needs of various vehicle types. FasTrack can also collect additional information that a vehicle manufacture provides over its OBD connector.

On the Site

Nozzle Readers: A wireless, battery powered RFID reader is installed on selected nozzles on a forecourt. When the nozzle is placed inside the vehicle tank inlet, the reader uses an encrypted low frequency to interrogate the vehicle tag. The nozzle then communicates via UHF to the wireless receiver and forecourt controller to check for the account authorization. If the account is approved, the controller will release the pump and fuel will flow. The nozzle reader will continuously poll the tag during the fuelling process to ensure the nozzle is not removed from the vehicle inlet. If the nozzle is removed, the nozzle will inform the controller via the wireless receiver and the flow of fuel will stop. FasTrack nozzle readers use a unique ATEX approved replaceable battery design. The nozzle reader components are protected by a rubberized nozzle cover, which is available in a variety of colors and vendor specific designs.

Wireless Receiver: The FasTrack receiver is responsible for maintaining all wireless communication between the nozzle readers, vehicle data devices, and the forecourt controller. The FasTrack receiver uses a unique UHF technology to ensure that communications are always established with nozzle readers and transactions are quickly authorized. The receiver is designed to mount into the site's canopy, on a pole, or on a refueller truck. The FasTrack receiver is built for the forecourt with all components and antennas contained in an IP55 rated enclosure.
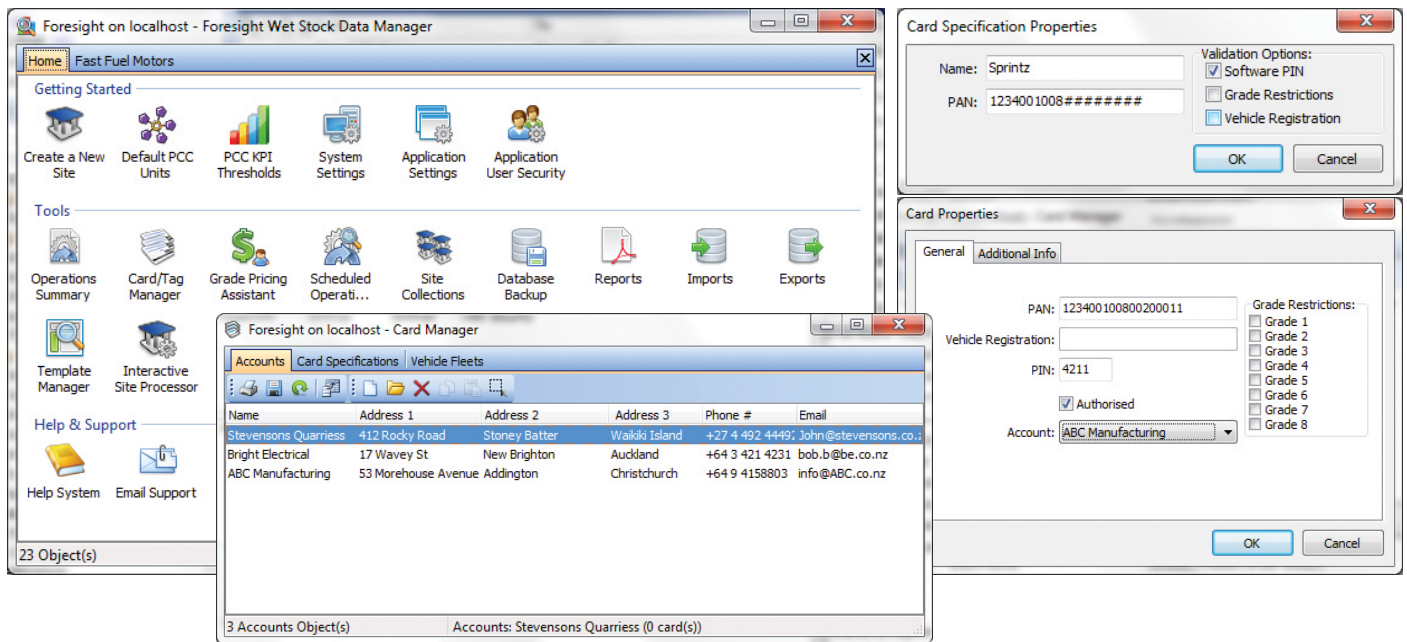

PCC (Postec Communications Controller): All AVI systems require a forecourt controller to provide the business logic for the system. This applies for both site and refueller truck installations. For FasTrack it is the PCC that collects and verifies all account and vehicle information before releasing the pump to dispense fuel. The PCC also provides all transaction details to the head office system for tracking and invoicing of the account.

TVD (Tagging Visual Display) and 4DET (Data Entry Terminal): While the TVD and 4DET are optional, we strongly recommend using one of them with the Fastrack AVI system to provide instructions to the user, particularly on unmanned or self-service sites. These devices also allow the flexibility to use driver tags, conduct manual overrides, print receipts, or collect additional information.

Trax Retail Solutions offers Foresite head office software for managing the accounts of your FasTrack AVI solution. The Foresight system provides integrated account and wetstock management applications that can be used in an online or offline environment and in single site or multi-site networks. All Data is presented in an intuitive manner enabling users to manage their core business objectives.

The first head office option is the Postec Foresight head office system. Foresight is designed for the commercial homebase user. A variety of AVI-based restrictions are available to apply t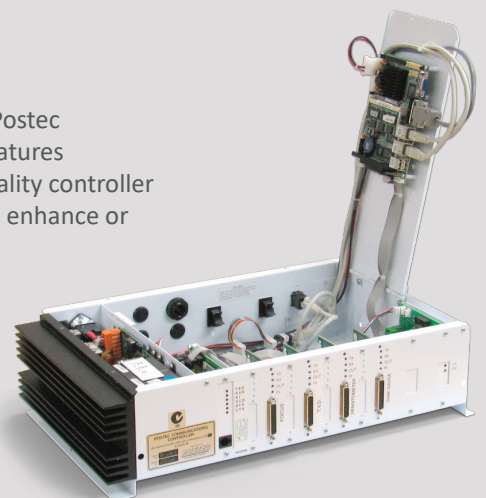o individual tags and groups of tags. For example, you can create grade restrictions, authorized site restrictions, and expiry dates for your tags.

The second head office option is Postec's Foresight Fleet application, which is designed for retail oil companies. Foresight Fleet provides more advanced restrictions, such as volume and sales limits, but also included invoicing and accounting functionality.

Other Products

Postec Communications Controller (PCC)

At the heart of today's low margin, volume based, fueling environment is the Postec Communications Controller. The PCC operates a wide variety of devices and features comprehensive onboard reporting. Built on solid state technology this high quality controller has been proven in the harshest of conditions and provides the opportunity to enhance or develop new products, without replacing the existing device..

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