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INNOVATIVE FUEL STORAGE SOLUTIONS

TRANSPORTABLE & STATIONARY STORAGE TANK SOLUTIONS





In 2011, we started as Smart Filtration Solutions, providing Bulk Fuel and Oil Filtration Solutions for increased uptime and, ultimately, greater profitability. Ultra High Efficiency Filters designed to capture 99.98% of particulate matter in a **Single Pass**. It was the result of a strategic partnership with Donaldson Company, Inc. a leading worldwide provider of filtration systems.

Today we bring two world class brands together under Smart Fuel Solutions: Smart Filtration Solutions & Smart Fuel Storage Solutions. A merge of innovative fuel storage solutions and an impressive range of **Ultra High Efficiency Filters**.

Smart Fuel Storage offers specialization in manufacturing of engineered self-bunded tanks, remote refueling systems, bulk fuel farms and plug & play dispensing solutions. From diesel, petrol, lubricants, HFO, Jet A1 and Avgas storage, we design and manufacture a unique, robust, turnkey, plug & play solution to meet your site requirements.

A handwritten signature in black ink, reading "Mohammad Atif".

Mohammad Atif Manzoor
Managing Partner



Turn-Key, End to End, Innovative Fuel Storage & Filtration Solutions

Self Bunded Tanks Ranging From 1,000l To 110,000l

We offer unbeatable quality and immense versatility for a fast and flexible storage and pumping solutions. Compatibility with a wide range of pumps and dispensers ensures a unique solution to suit your requirements. You won't find a safer, more reliable, or cost-efficient tank than a Smart Fuel Storage Solution.

Longer Lasting Portable Storage Tanks

Our tanks last longer thanks to stainless steel fittings and an extra thick protective coating to help prevent rust and corrosion. Additionally they are designed with a Safe Fuel Limit (SFL) which is 10% greater than standard tanks of similar capacity. This means that each tanks goes longer in between refills, giving you long term savings in labour and admin costs. This benefit is especially useful if your fuel tanks are sited in remote locations.

Easy To Use Fuel Tanks

It's easy to get inside an SF Tank for cleaning and inspection, as they come with dual manways so there is no need to disconnect the pump. Fittings have been specially positioned and designed for ease of dispensing, based on our practical experience with fuel tanks in many different situations. All Smart Fuel Storage Tanks are 'Australian Standard' certified to prove they comply with current Australian Health & Safety regulations.

Portable For Easy Transport And Relocation

Our storage tanks can be transported by road, rail or sea, and come in various sizes, all of which fit within a standard ISO shipping container. That makes it easy to get them on site fast, or relocate as and when refuelling needs change. Installation is easy, as our portable fuel storage tanks can be sited almost anywhere, with no requirement for concrete bund walls or construction.

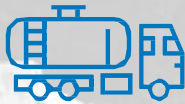
Tanks Designed Specifically For Your Needs

All our tanks are manufactured to our own specific designs in a state-of-the-art factory, which we regularly visit to ensure that our strict standards are being adhered to. This gives you the flexibility to order a tank specially adapted for your particular requirements. Please feel free to discuss your needs with us, and we'll work with you to develop and specify a tank that's exactly right for your situation.

Complete Fuel Management Service

At Smart Fuel Solutions, we offer turnkey refuelling solutions to make sure you get the best tank and dispensing system for your needs. Take advantage of our free consultancy service. You'll receive sound advice from experts with years of practical experience in both fuel supply and distribution.

INNOVATIVE FUEL STORAGE SOLUTIONS



• Fuel Farms

Interconnecting tanks together for unlimited storage capacity. Increase capacity as fuel requirement increases with kit form, interconnecting pipework. Easy to relocate or split tanks and fuel locations as projects requirements change.

• Onsite Refuelling

Provides hassle free, on site refueling for large / small scale construction, mining and logistic equipment. No civil work or bund wall required on site. Easy to relocate. Minimize refueling distance and equipment optimization.

• Portable Energy

Rapid deployment for standby power and extending running times.

SF SERIES TANKS



The SF Series Tanks range offers self bunded storage tanks for combustible liquids as well as other nonhazardous liquids up to 110,000 liters. The SF Series is a premium fuel storage solution designed for harsh operating environments with minimal site preparation. Pressed corners and a reinforced top means a robust tank for your fuel storage needs.

Incoming Fuel / Product

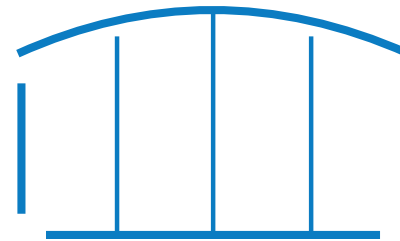
- 80nb tanker fill pipework
- Fire safe flanged ball valve, camlock adaptor and cap
- Non return valve
- Hydraulic overfill valve with optional unload pump
- Internal pipe work serviceable
- High level alarm; hazardous rated and battery powered

Outgoing Fuel / Product

- Anti-siphon valve (foot valve) x 2
- Pipe work terminating under walkway with ANSI flanges
- 6 inch sockets in both manholes for the mounting of submersible pumps standard
- Pump suction line including priming point plug

The tanks are constructed to international ISO container footprints for ease of transport and transfer. The standard footprints are 3, 6, 12, and 14 meters utilizing the container lock dimensions. This means these tanks can be transported without the need for specific costly logistics. The range of tanks are primarily designed for the storage and dispensing of combustible liquids.

All SF Series Tanks are certified to Australian Standards by Australian Engineers.



Curved Tank Roof

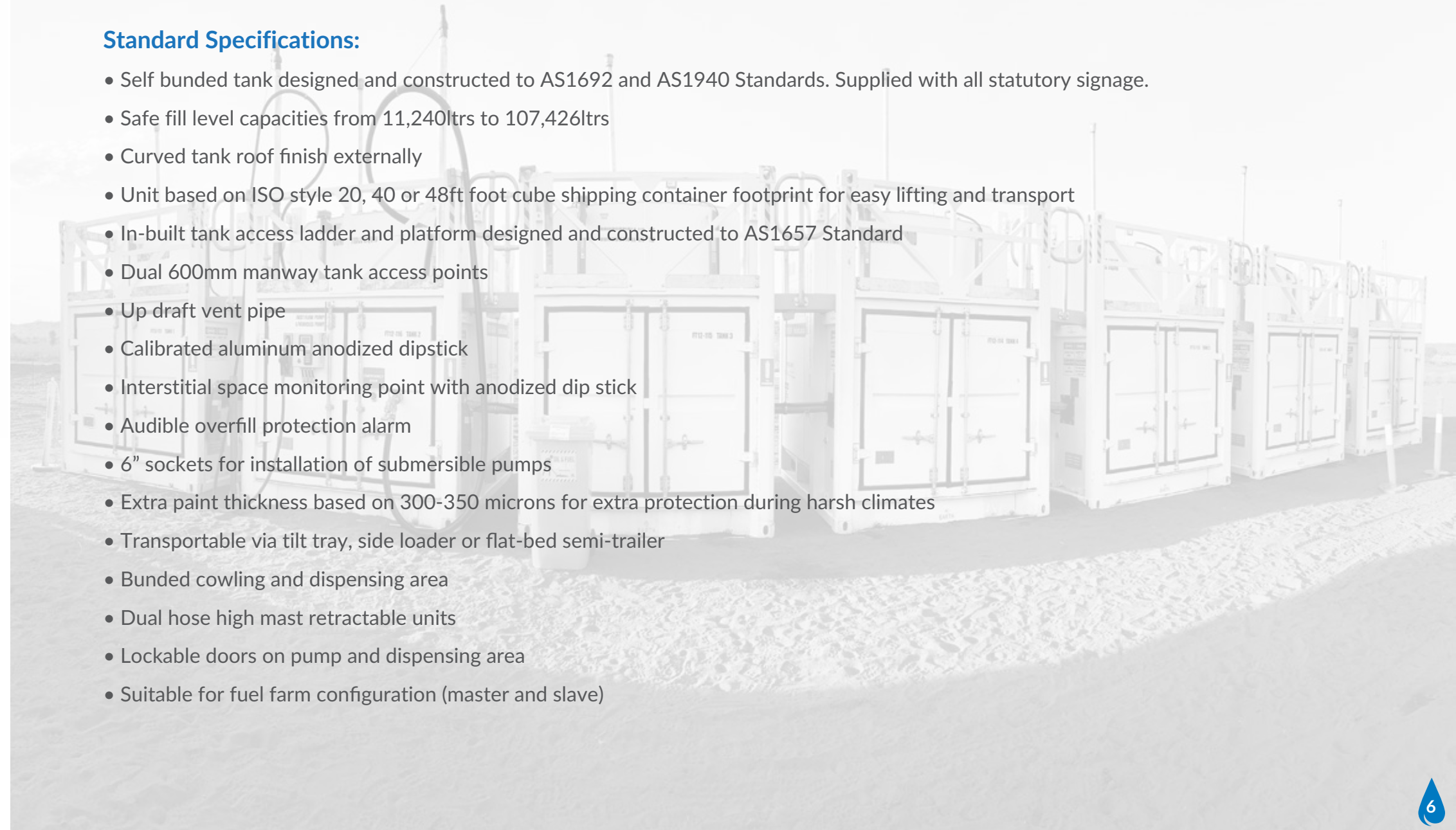
The main points in this design is a curved tank roof finish, greater capacity for safe fill and the ability to see under the tank.

SF SERIES TANKS



Standard Specifications:

- Self bunded tank designed and constructed to AS1692 and AS1940 Standards. Supplied with all statutory signage.
- Safe fill level capacities from 11,240ltrs to 107,426ltrs
- Curved tank roof finish externally
- Unit based on ISO style 20, 40 or 48ft foot cube shipping container footprint for easy lifting and transport
- In-built tank access ladder and platform designed and constructed to AS1657 Standard
- Dual 600mm manway tank access points
- Up draft vent pipe
- Calibrated aluminum anodized dipstick
- Interstitial space monitoring point with anodized dip stick
- Audible overfill protection alarm
- 6" sockets for installation of submersible pumps
- Extra paint thickness based on 300-350 microns for extra protection during harsh climates
- Transportable via tilt tray, side loader or flat-bed semi-trailer
- Bunded cowl and dispensing area
- Dual hose high mast retractable units
- Lockable doors on pump and dispensing area
- Suitable for fuel farm configuration (master and slave)





Pump Bay

- Bunded pump bay complete with water/product drain valves
- Internal access for hoses from pylon kits
- Pylon kits with counterweights (optional)
- Lockable bund doors with rubber dust seal
- Access ladder to work platform mounted on left or right hand side
- Bund ventilations
- Front earth connection
- Built in safety handrail system
- Lighting (optional)
- Dual 50mm side wall cavity sockets

SF Series Tanks Dispensing Options

- Tank fitted with AC/DC electrical or engine driven dispensing equipment
- Bowser, dispenser units or retractable hose reel systems available
- Heavy and / or light vehicle refueling
- Pump electrical switch box with start / stop / e-stop station fitted
- Flow rates from 40lpm to 400lpm (400+lpm on request)
- Bulk fuel dispensing unit (quick fill for onsite service trucks)
- Fuel Management System compatible
- Outdoor payment terminal compatible (EFTPOS and credit card)

Optional Extras

Additional extras or optional add-ons can be reviewed at any time before, during or after your tank purchase to help achieve the most from your fuel equipment systems.

A fuel management system or inline filtration unit can go a long way to improve equipment and availability and longevity.

Flammable Storage

- Under AS1940 Standards it is possible to store flammable products up to 55,000 liters in self-bunded tanks.
- Please check the local regulation and install relevant emergency vent for flammable storage.

Multi Compartments Tank

SF Series tanks are based on container-sized footprints for ease of transportation and handling. They can be supplied with pumps, reels, meters and filtration ready to use. Standard and custom build add-on compartments can be specified to hold lubricants, coolant or waste oil as required. Multi products within same tank footprint are available if required.

End mounted security cabinets can be fitted including steel or roller shutter doors and internal spillage trays, to house pipe work, pumps, gauging, alarms and controls.

SF Series Tanks Specifications

Dimensions are nominal only. Alternative capacities available upon request.

MODEL	CAPACITY	SFL	LENGTH(mm)	WIDTH(mm)	HEIGHT(mm)	TARE (kg)	PUMP BAY
SF 12	11,839L	11,240L	2,991	2,438	2,896	4,825	YES
SF 20	18,183L	17,274L	2,991	2,438	2,896	4,730	NO
SF 30	30,901L	29,350L	6,058	2,438	2,896	7,695	YES
SF 38	37,250L	35,380L	6,058	2,438	2,896	7,550	NO
SF 55	60,982L	57,933L	12,192	2,438	2590	12,550	YES
SF 68	69,023L	65,570L	12,192	2,438	2,896	13,575	YES
SF 75	75,498L	71,723L	12,192	2,438	2,896	13,470	NO
SF 90	90,600L	86,000L	14,630	2,438	2,896	16,095	NO
SF 100	101,000L	95,900L	14,630	2,438	3,200	17,190	NO
SF 110	113,080L	107,426L	14,630	2,438	3,550	21,040	NO

4hr Fire Rated protection options available.

* Ad Blue and fuel additive products within tank design available on request

* Additional bolt on bunded pump bays available on request

Smart Fuel Tanks are the best solution for the storage and dispensing of diesel, petrol and lubricant oils. They offer a flexible solution to storing combustible liquid as well as improving fuel dispensing and management solutions. A practical design ensures a fast, easy and convenient installation in any location, indoors or outdoors.

Smart Fuel Tanks Offer a Fast, Easy & Convenient Fuel Storage Solution

Mobile and modular units ensure fast and easy transportation options to site. Easily relocatable.

Minimal site works and preparation required. A place, fill and pump installation process offering versatility and speed on commissioning.

Free standing design allows for 360° tank viewing and inspection.

High-grade paint finish ensures longer durability in the elements.

Double-Wall Containment For Added Security

Smart Self-bunded Fuel Tanks are AS1692 and AS1940 designed as integral secondary containment and therefore do not require independent bunds for leak containment.

110% bunded tank = 100% Primary Tank + 10% interstitial space.

Inside Lid

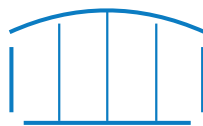
- 1 x 2” Dip / Fill Point
- 2 x 2” Suction Ports
- 2 x 2” Return Ports
- 2 x 1” Suction Ports
- 2 x 1” Return Ports

Exterior of Tank

- 1 x 2” Interstitial Dip / Vent
- 1 x 2” Suction Port
- 1 x 2” Spare Port
- 1 x 4” Submersible Pump Provision
- 1 x 6” Submersible Pump Provision
- 1 x 2” Free Vent Port

Mobile & Modular

- Forklift pockets and certified tie down/lifting points at each corner.
- Larger Smart Fuel Tanks incorporate skid tray base for tilt tray loading.
- Smart Fuel Tanks can be stacked three high when empty.



Curved Tank Roof

Standard Features

- Meets AS1692 and AS1940 Australian Standards.
- Bunded tank construction consists of a 5mm primary steel tank and a 3mm secondary steel tank.
- Baffled internally to reduce product movement should the unit be moved with contents.*
- Accessible and removable tank manway for internal tank maintenance and cleaning.
- Recessed spill box area under lockable lid to secure transfer pump.
- Sectional cut-outs on sides of spill box to allow flexible hoses or pipework to external requirements (i.e. generators).
- Curved roof feature for water drainage to top of tank.*
- Complete with aluminum gauged dipsticks, 1 x galvanized updraft vent breather system and multiple port fittings.
- Air tested and hydro tested prior to leaving our factory.
- Mobile and modular design allows for ease of transportation.
- 300-350 micron thickness 'WHITE' paint finish as standard. Other color options are available upon request.
- Flammable and combustible liquid safety labels and decals supplied as standard.
- Forklift pockets and certified tie down/lifting points at each corner.

Custom colors, coatings, dimensions and refueling equipment packages are available upon request.

*Conditions apply. Some features standard, some optional extras. Depends on product range.

Smart Fuel Tank Specifications

Dimensions are nominal only. Alternative capacities available upon request.

MODEL	CAPACITY	SFL	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	TARE (kg)	BAFFLED
Smart Fuel Tank 1000L	1,250L	1,000L	1,864	1,100	1,306	739	YES
Smart Fuel Tank 2500L	2,755L	2,500L	2,274	1,674	1,254	1,189	YES
Smart Fuel Tank 4500L	4,785L	4,500L	2,774	2,274	1,254	1,678	YES
Smart Fuel Tank 6000L	6,180L	6,000L	3,574	2,274	1,254	2,036	YES
Smart Fuel Tank 10000L	11,500L	10,000L	6,058	2,438	1,295	4,443	YES

4hr Fire Rated Protection options available.



The storage of flammable liquids can be accommodated with the relevant venting and accessory change. Remember to check with local authorities.



LOADERS TANKER TO TANK LOADING

- FLOWRATES RANGING FROM 300LPM TO 1200LPM
- WIDE RANGE OF FILTRATION AND METERING OPTIONS

REFUELLERS MEDIUM AND INDUSTRIAL REFUELLING

- FLOWRATES RANGING FROM 80LPM TO 450LPM
- MEDIUM AND HEAVY VEHICLE REFUELLING



GEN FEED LOCAL AND INDUSTRIAL GENERATOR FEED

- FLOWRATES RANGING FROM 32LPM TO 110LPM
- MANUAL AND AUTOMATED OPTIONS



HOME BASE REFUELLING LIGHT AND MEDIUM VEHICLE REFUELLING

- FLOWRATES RANGING FROM 40LPM TO 130LPM
- REFUEL MORE THAN ONE PRODUCT AT ONCE



AVIATION AIRCRAFT REFUELLING

- FLOWRATES RANGING FROM 80LPM TO 500LPM+
- AVAILABLE AS DIESEL OR ELECTRICALLY DRIVEN
- JIG COMPLIANCE



OVERVIEW OF SMART FUEL MANAGEMENT

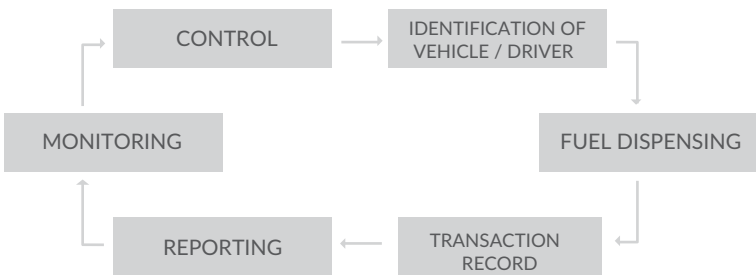
- Fuel Management is a cycle of activities**
- Control access to fuel
 - Record fuel transactions
 - Easy access of transactional data in a useful format

THE SMART FUEL GEN 2 RANGE

- A solution for the complete fuel management cycle
- State of the art fuel management system built on a reliable, embedded hardware platform
- Can store up to 5000 transactions and up to 2000 vehicles and drivers
- Uses NFC (near field communication) fobs or cards.
- Users can be prompted for odometer, hour meter, job number and a user defined input for each transaction or selected transactions.
- Power system specifically designed to cater with unstable power and provide a level of protection from lightning strikes
- Remote upgrade capability allows new features and functions to be added without a site visit
- Extensive diagnostic information accessible to tech support personnel via the web enables quick and accurate fault diagnosis
- Modular design provides for easy upgrade or repair in the field

REFUELING

- 1) Operator identifies vehicle/ equipment using a card or fob.
- 2) Operator authorizes themselves using a PIN
- 3) If required, operator enters odometer and/or hour meter
- 4) Selects pump, lifts nozzle and starts refueling
- 5) When finished refueling transaction details are stored in unit and transferred to the customer's website automatically



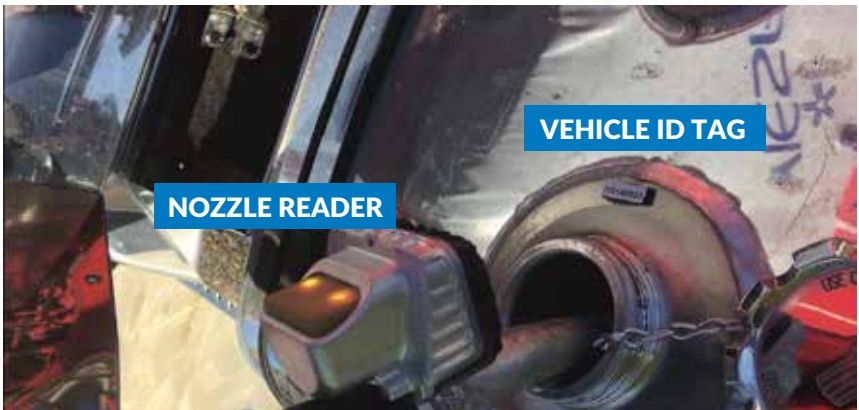
CLICK-IN CLICK-OUT



TWO PUMP OPTION DISPLAY

NOZZLE ID – AVID SYSTEM

- The Smart Fuel Solutions System can currently use keys (RFID fobs), magnetic swipe cards, HID cards or codes to identify vehicles/assets.
- The Automatic Vehicle Identification System (AVID) allows the identification device to be mounted on the vehicle and the reader to be mounted on the nozzle.



NOZZLE ID – COMPONENTS

- 1) Smart Fuel Gen 2 FMS with required pump control modules
- 2) Comms (Bluetooth) module, SFS2055, one installed in each Smart fuel
- 3) Nozzle Transceiver, AVID1000, one per nozzle
- 4) Vehicle passive Tags –adhesive UHF tag for vehicle identification



WHAT ARE WE DOING DIFFERENT?

- Most other nozzle ID systems simply authenticate continuously
- Unless the system is finely tuned, this can limit the ability to remove the nozzle from the fuel inlet without the authorization being terminated. It also tends to drain the battery on the nozzle in a relatively short amount of time.
- Our design uses an inertial measurement unit (IMU) on the nozzle, which doesn't require continuous authentication with the nozzle and allows us to detect the nozzle's movement and terminate the transaction before the nozzle exits the fuel inlet. This increases battery life and makes the system less likely to be defeated when attempts are made to take unauthorized fuel.



TELEMATICS MODULE

- Connects to vehicles ODB port and automatically transmits odometer/hour meter data to the Smart Fuel during the refueling process
- Ensures the value shown on the dashboard at the time of refueling is the same as the value recorded with the fuel transaction. Unlike GPS based system no variance or need for calibration
- No more driver entry errors



WEBSITE

- Website provided for each customer at no charge
- Transactional data from the unit is combined with other data such as reg number, driver's name and displayed on a transactions page
- Driver and vehicle details managed from website and automatically updated on all units
- Transaction report can be exported as .csv file

WEBSITE: PRO VERSION

Provides customizable/automated reports

- Totals – used to generate reports such as total fuel by vehicle or driver used per week of month. The reports can be customized to whatever the customer wants totaled and then saved for regular use.
- Reconciliation – You need to have tank gauging fitted to the unit(s) to use this report. It takes the tank level at the beginning of the requested time period (current week, previous month etc) subtracts all the transactions from the tank, add the deliveries, generates a calculated level for the tank and compares that to the dip at the end of the time period.
- Consumption – Using the entered odometer data and the fuel usage to calculate the litres/100Km value for each vehicle for litres/hour for equipment using hour meters.
- Service – Generates a report showing vehicles nearing or overdue for service based on entered service interval, odometer at last service and using the odometer values entered by the drivers.
- Provides the ability to email tank levels on a daily/weekly basis and any of the reports that have been created

➤	92649	92649					EGTC	N/A	N/A			
➤	92943	92943					EGTC	N/A	N/A			
➤	0105007C	22354					AGT	6.97	N/A			
➤	0105A67B	21907					AGT	7.21	N/A			
➤	010DA57B	21902					AGT	7.18	N/A			
➤	01102E7C	22355					AGT	7.40	N/A			
▼	01129D7B	20601					AGT	6.67	N/A			
Key / Code	Timestamp	Imperial Gallons	Odometer	Hours	Pump	Employee Name	PLATE NO.	COMPANY NAME	Transaction Id	KM/L	Gallons / Hour	
01129D7B	2019-03-03 19:26:54	74.44	847800	0	3	ISIDRO DE LEON TOLENTINO	20601	AGT	3645003661	N/A	N/A	
01129D7B	2019-03-03 19:27:11	68.35	847800	0	2	ISIDRO DE LEON TOLENTINO	20601	AGT	3645003662	N/A	N/A	
01129D7B	2019-03-06 10:31:46	56.79	848406	0	3	ISIDRO DE LEON TOLENTINO	20601	AGT	3645003902	N/A	N/A	
01129D7B	2019-03-06 10:32:01	33.34	848406	0	2	ISIDRO DE LEON TOLENTINO	20601	AGT	3645003903	6.72	N/A	
01129D7B	2019-03-09 09:30:30	69.68	849392	0	3	ISIDRO DE LEON TOLENTINO	20601	AGT	3645004128	N/A	N/A	



ACCESSING DATA

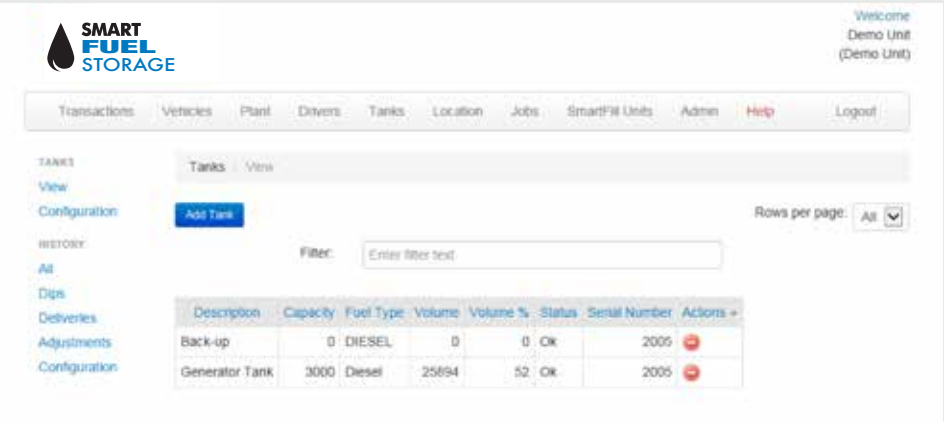


OPTIONAL TANK GAUGING - SMARTDIP

- If the unit is online, tank levels can be viewed on the website in close to real time (update every 90 secs)
- Tank Alerts allow an email or SMS* to be sent showing current status and alert users if tank is too low or high.

10 KEY DIFFERENTIATORS

- 1) Most current technology on the market – NFC, standard data SIMs, color graphics display. A platform that allows for future development.
- 2) Single solution for both mobile and fixed equipment.
- 3) Highly flexible and intuitive solution that allows the customer to capture the most appropriate data for their business.
- 4) No charge for access to data on website.
- 5) Easy to configure via intuitive on-screen menus.
- 6) Modular design – easy repair and upgrade by skilled and unskilled staff.
- 7) Automated nozzle identification technology for convenience and theft protection.
- 8) Automated odometer/hour meter solution that is not GPS based.
- 9) Application Programming Interface (API) available to allow customers to integrate data into their own applications.
- 10) Tech support for the life of the product.

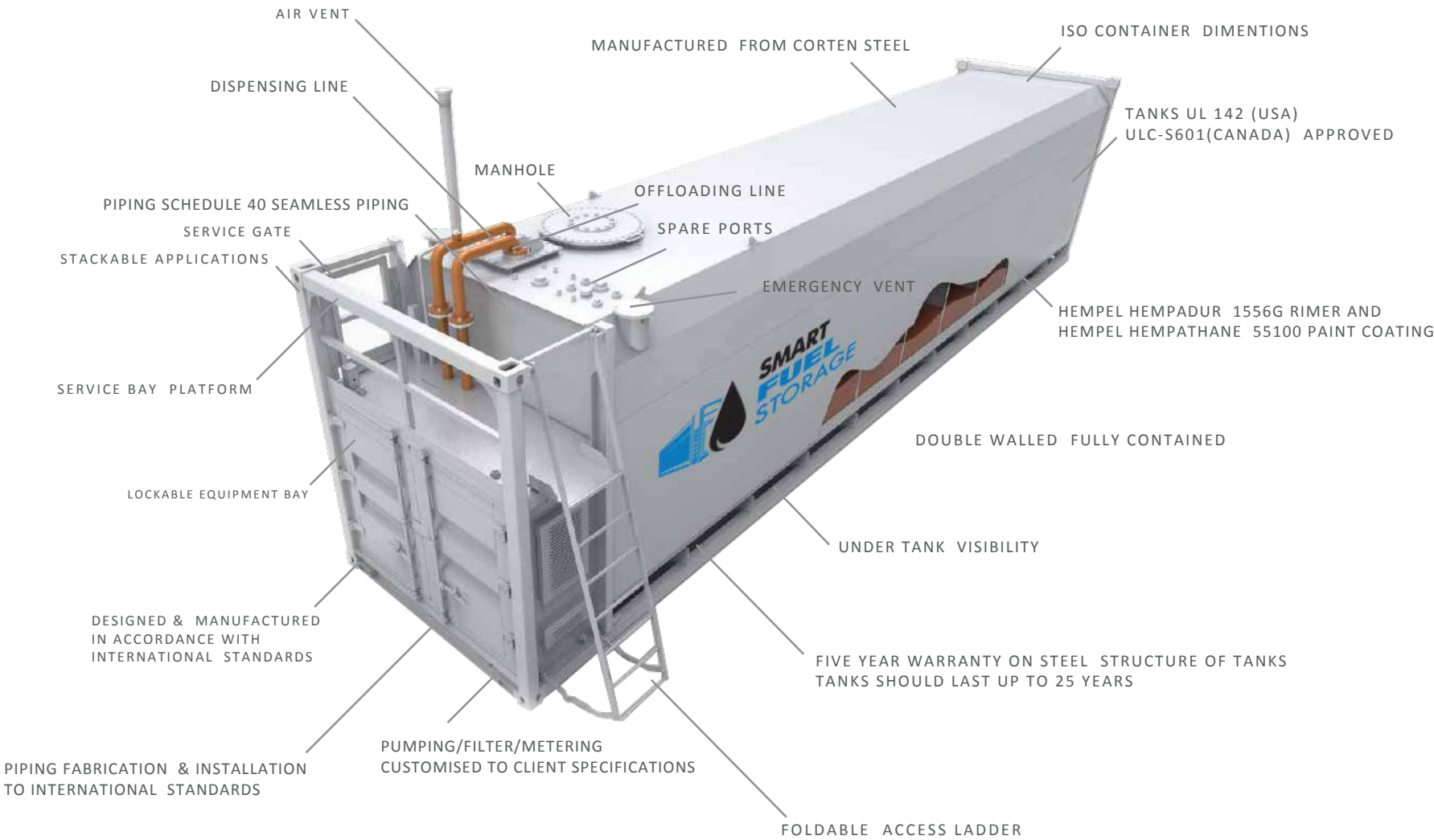


The experience and expertise of Smart Fuel Storage’s in-house design and engineering team are available to design your unique fuel storage and dispensing solution.

Optimizing fuel refueling time and ensuring your fuel is where you need it, when you need it.



PERSPECTIVE SHOWING THE TANK ARRANGEMENT



ULC-S601-14

The Canadian acceptable standard for shop fabricated steel aboveground tanks for flammable and combustible liquids.

AS 1692

Australian standard for steel tanks for flammable and combustible liquids.

AS 1940

Australian standard for the storage and handling of flammable and combustible liquids.

The USA / NA Recognized Standard for Safety: steel aboveground tanks for flammable and combustible liquids.

NFPA

National Fire Protection Association: Flammable and combustible liquids code applicable in the USA.

TRANSPORT CANADA

Department responsible to serve the public interest for developing regulations, policies, programs and services to promote safe, secure, efficient and environmentally responsible transportation in Canada.

VLAREM II

Flemish environmental regulation; Chapter 5.1 for oil or petroleum products.

UN IBC 31 A/Y

The United Nations approved international standard on design, manufacture and use of intermediate bulk containers for the transportation of dangerous goods. The UN IBC 31A/Y is applicable to the use of specially fabricated steel tanks that allows the legal transport of dangerous good by road, rail and sea, packaging groups II & III.

UN IMDG

Carriage of dangerous goods by sea is regulated in order reasonably to prevent injury to persons or damage to ships and their cargoes. Carriage of marine pollutants is primarily regulated to prevent harm to the marine environment. The objective of the IMDG code is to enhance the safe carriage of dangerous goods while facilitating the free unrestricted movement of such goods.



AS1692

AS1940



VLAREM II



LIGHT AND HEAVY VEHICLE REFUELLING



HOSE REEL RACK



80 + 450 DISPENSING



LUBRICATION WORKSHOP



SPLIT COMPARTMENT TANKS. PETROL / DIESEL AND PARAFFIN