

# MOBILE PRODUCT RECOVERY TANK

- ◆ **STAINLESS STEEL CONSTRUCTION**
- ◆ **FULLY MOBILE**
- ◆ **STABLE AND MANOEUVRABLE**
- ◆ **ZERO FUEL WASTE**
- ◆ **FAST PAYBACK**
- ◆ **150 LITRE OR 400 LITRE CAPACITY**
- ◆ **WIDE RANGE OF OUTLET OPTIONS**



## Why Product Recovery

Aviation fuel storage and dispensing systems must be regularly checked for water and dirt accumulation, but the problem is, what do you do with the fuel samples?

There are a number of undesirable solutions, such as downgrading to heating oils or disposal as hazardous waste. However, these solutions are either environmentally unfriendly or a waste of money, or both. The most efficient solution is to return fuel samples into the main fuel system, but contaminated fuel samples should not be returned to any part of the fuel system unless the contaminant has been completely settled out and removed.

Aljac Fuelling Components can offer you the correct piece of equipment to meet this need, the Aljac Product Recovery Tank (PRT).

## Description

Our PRT has been developed with fuel quality and ease of operation as the primary design criteria. The PRT is based on a self-supporting 2mm thick Stainless Steel tank. It has a double taper base sloping to a low point at one end. The maximum use has been made of folded radiused corners to minimise the number of welds, and all welds are ground flush internally to allow drainage to the 1/2 inch diameter drain point, and this also permits easy internal cleaning.

The PRT has a full area Access Cover secured by four hand tighten star knobs which allows it to be removed quickly and easily, and also provides full access to the tank internals for cleaning. Within the Access Cover is an opening which is covered by a Hinged Lid, and the opening contains an easily removable 100 mesh Strainer which is set into the tank by 100mm, allowing fuel samples to be poured into the tank rapidly from a bucket or jar. The Strainer can be fully dismantled if gauze replacement is ever required. The PRT is fitted with a free vent/filter which prevents contaminant ingress.

The PRT is fully mobile, highly manoeuvrable and very stable when part or completely full. It is fitted with fixed centre wheels at one end and swivel castor wheels at the steering end. All wheels are 200mm diameter to allow the PRT to ride the bumps in most depot surfaces, and the castored wheels are each fitted with a foot operated parking brake.

The PRT has been designed to accommodate the maximum number of outlet options. It can also be fitted with emptying/filling pumps, Closed Sampling Systems and inlet/outlet hoses with appropriate stowage brackets.

The unit is supplied self colour bead blasted externally with welding heat marks removed from the internal surfaces. The PRT is fully labelled with fuel grade stickers (JET A-1 or Avgas).

Two sizes are available, 150 litres for the small/medium sized airports and 400 Litres for the larger fuel depots.

### Operation

Successive fuel samples are poured into the PRT over a period of time through the Strainer, which removes any large scale contamination. The fuel is then allowed to settle fully and the Low Point is purged to remove settled out dirt and water, which will collect there by virtue of the double taper base design. The settled, clean fuel is then returned to the main fuel system using the specified outlet option(s).

### Specification

**Design:** Self supporting monocoque construction, double taper tank base sloping to a low point. Fitted with a Hinged Lid, Strainer and full area Access Cover. Free vented, vent fitted with a filter. Fitted with a dedicated bonding point

**Capacity:** 150 Litres or 400 Litres (useable).

**Tank Material:** Type 304 Stainless Steel, self colour, bead blasted externally, all welds ground flush internally with heat marks removed.

**Access Cover Seal:** Nitrile 'O' ring, 4mm diameter.

**Strainer:** 100 mesh Stainless Steel, supported by a Stainless Steel frame.

**Running Gear:** Pressed Steel wheels, solid rubber tyres, 200mm diameter. 2 off fixed centres, 2 off swivel castors with foot operated parking brake.

**Low Point Drain:** Ball valve with Aluminium Kamlok male fitting with cap/keep chain, 1/2 inch nominal bore.

**Testing:** Leak tested under full tank head.

**Marking:** Full grade labelling Jet A-1 or Avgas.

**Outlet Connection:** TW1 flange drilling to accommodate options listed.

**Spare Connections:** 2 off 3/4 inch BSPP female (normally plugged).

**Nett Shipping Weight** (no options fitted):  
85 kg. (150 Litre), 125 kg (400 Litre).

### How To Order

Quote the relevant **Part Number and fuel grade** (for labelling purposes):

**0903000010.** Basic 150 litre capacity PRT.

**0903000100.** Basic 400 litre capacity PRT.

Add any of the following outlet options:

**0903000011.** Gravity or suction outlet point fitted

with internal pipework, 3/4 inch valve and Kamlok male fitting/cap.

**0903000013.** Large bore suction outlet fitted with 2 inch bore internal pipework and an aviation tank unit/cap to connect a pressure refuelling coupling and 'defuel' the PRT into a bowser. Can not be used with 0903000016 or 0903000019.

**0903000015.** On board outlet hose, 1 inch type C by 2.5 metres long, with ball valve and Kamlok 3/4 inch or 1 inch (on request) female fitting/plug at each end. Can be used with 0903000011 or 0903000019. The tank is fitted with hose stowage brackets.

**0903000016.** Large bore suction outlet fitted with 2 inch bore internal pipework, ball valve and suction hose connection/cap, 2.1/2 inch BSPP. The suction hose is not included. Can not be used with 0903000013, 0903000020, 0903000021 or 0903000022.

**0903000017.** Dummy aviation tank unit set inside the Hinged Lid above the Strainer to allow connection of a pressure refuelling coupling and drainage of the hose prior to hose end strainer checking.

**0903000018.** Float operated level gauge fitted to the Access Cover.

**0903000019.** Hand pump emptying option (15 Litres/Minute), fitted with 316 Stainless Steel small bore suction pipe, non return valve and isolation ball valves. Use in conjunction with 0903000015. Can not be used with 0903000013.

**0903000020.** Large bore suction outlet fitted with 2 inch bore internal pipework, ball valve and suction hose connection/cap, 2 inch BSPP. The suction hose is not included. Can not be used with 0903000013, 0903000016, 0903000021 or 0903000022.

**0903000021.** Large bore suction outlet fitted with 2 inch bore internal pipework, ball valve and suction hose connection/cap, 3 inch BSPP. The suction hose is not included. Can not be used with 0903000013, 0903000016, 0903000020 or 0903000022.

**0903000022.** Large bore suction outlet fitted with 2 inch bore internal pipework, ball valve and suction hose connection/cap, 3 inch BSPP. The suction hose is not included. Can not be used with 0903000013, 0903000016, 0903000020 or 0903000021.

If you require an outlet system or connection which is not listed, or alternatively a closed sampling system, please contact our Sales Department for a quotation. Our PRT will probably be able to accommodate your special requirements with little or no modification to the standard tank construction!

**Available Options**

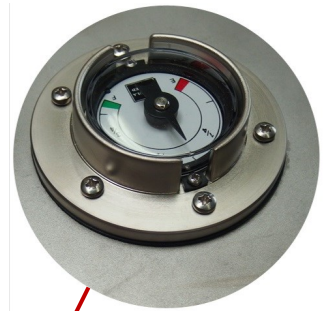
**Strainer Basket  
(Fitted as standard)**



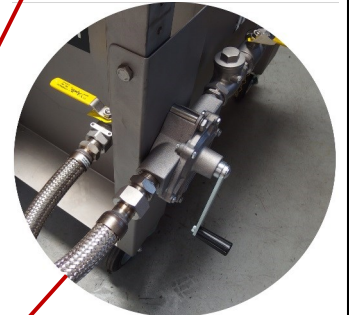
**0903000017**



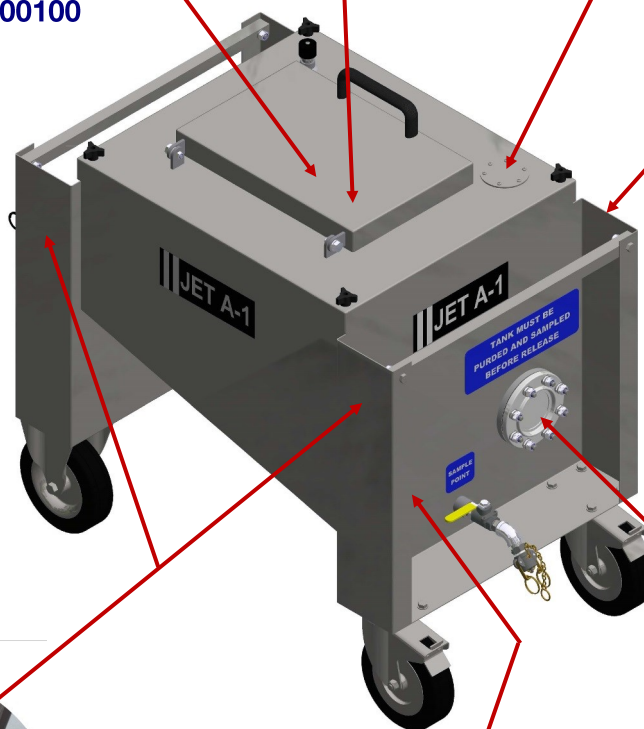
**0903000018**



**0903000019**



**0903000010/0903000100  
Basic PRT**



**0903000013**



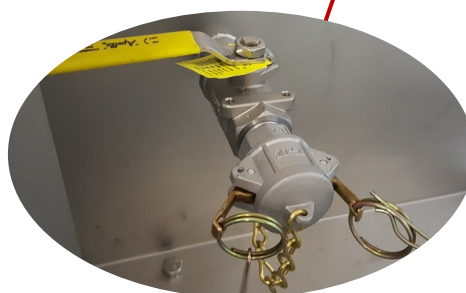
**0903000015**



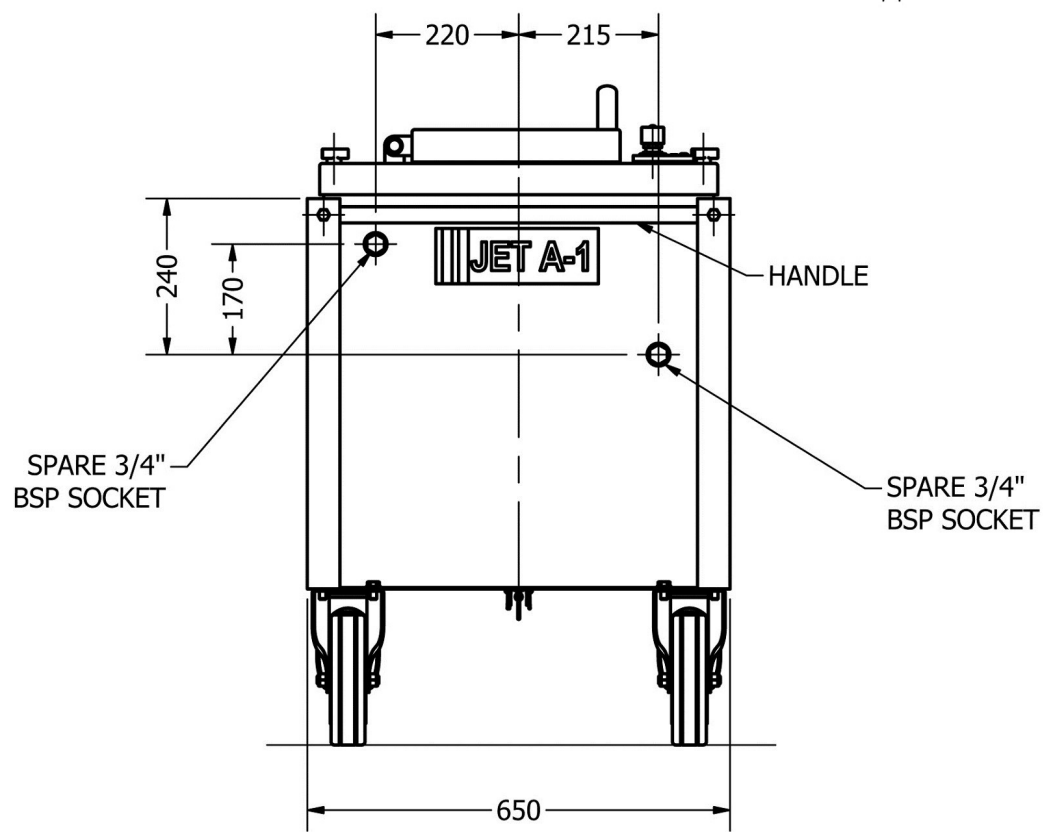
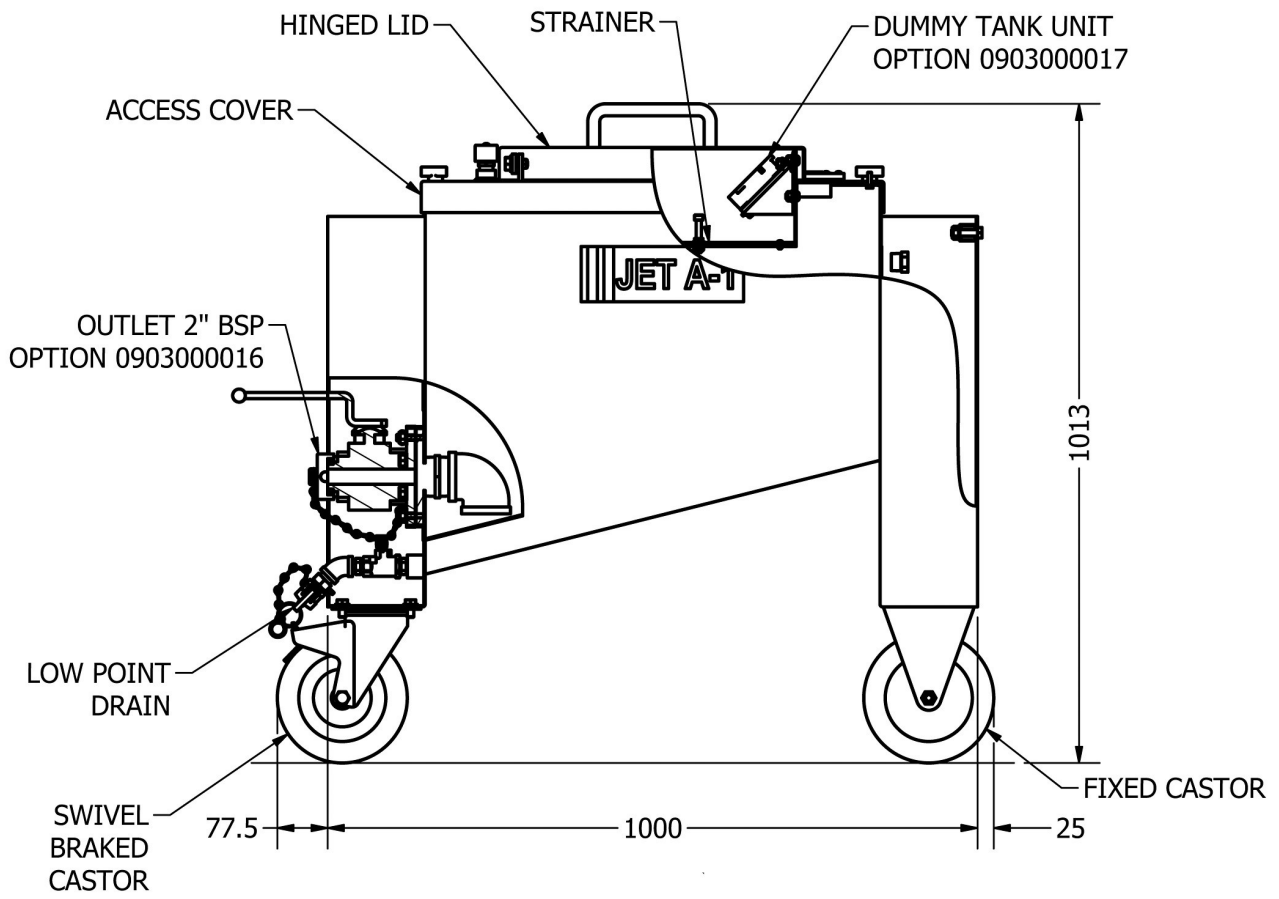
**0903000016**



**0903000011**



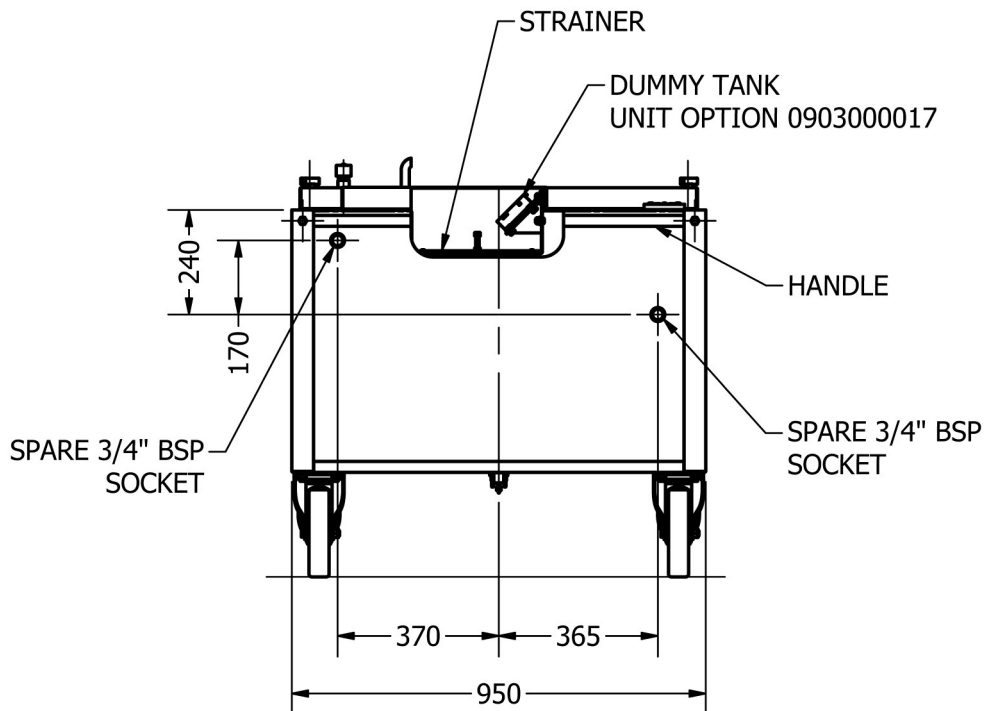
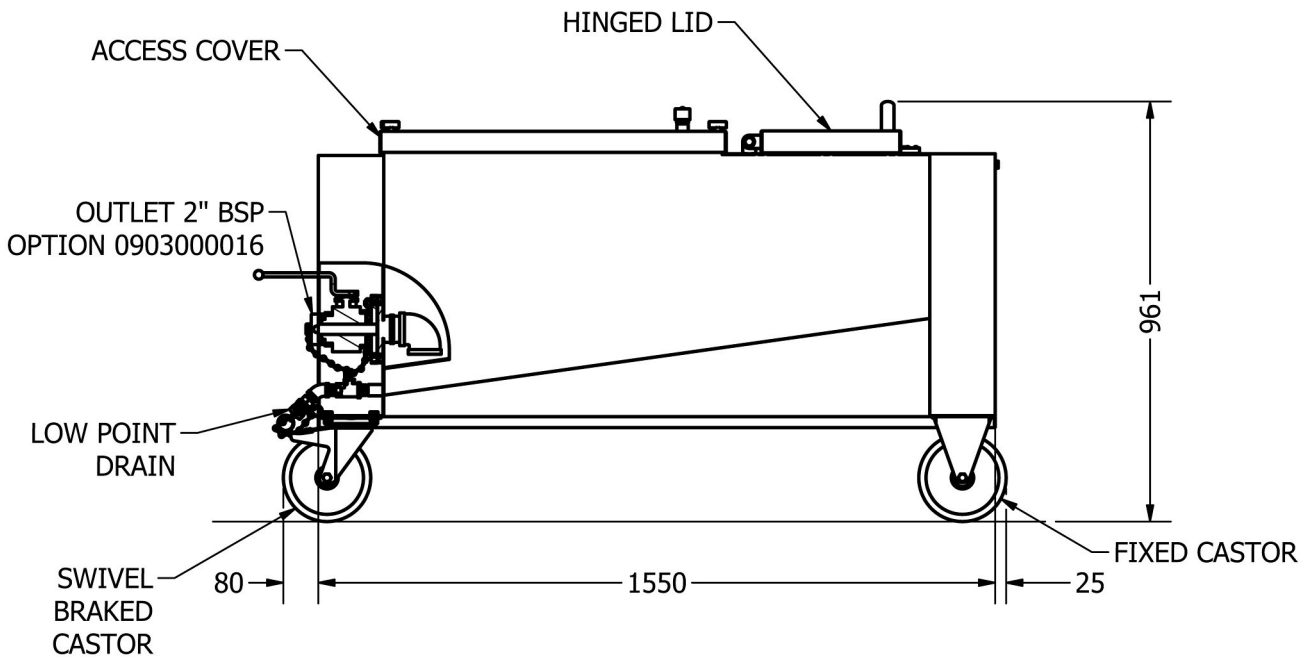
**General Arrangement Drawing :150 Litre Capacity PRT**



**ALL DIMENSIONS IN MILLIMETERS UNLESS STATED OTHERWISE**



**General Arrangement Drawing: 400 Litre Capacity PRT**

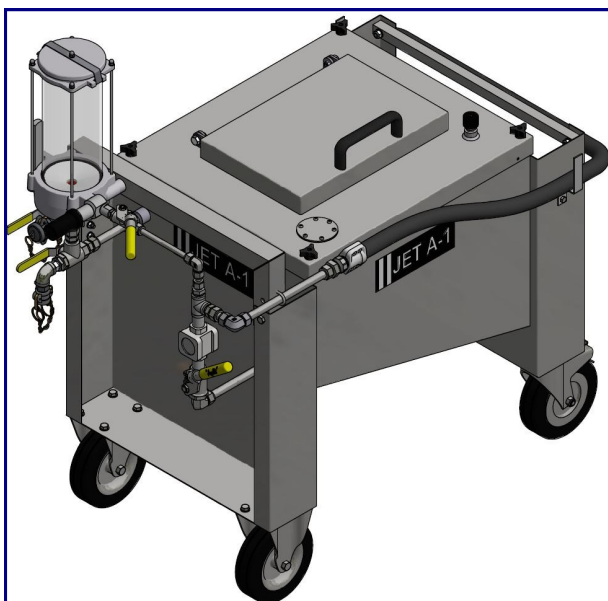
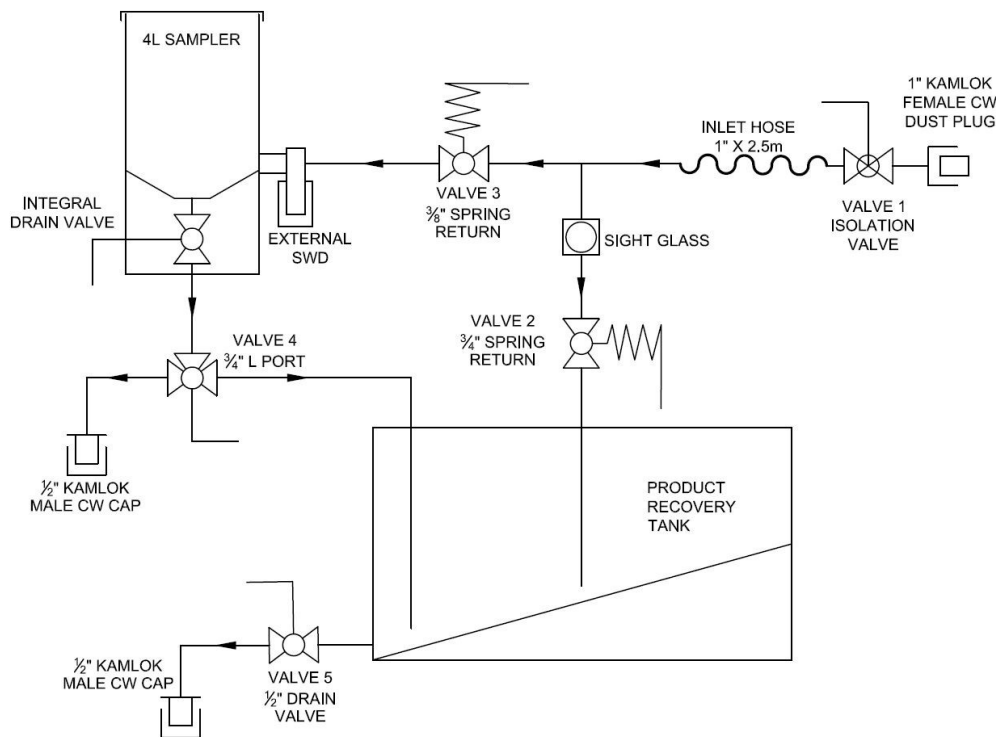


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## Closed Sampling System

We are able to fit Closed Sampling Systems to our 150 Litre and 400 Litre PRTs. A typical gravity fed system is shown below. The Kamlok/Hose is connected to the point which is to be sampled and Valve 1 is opened. The fuel system is then flushed into the PRT through the Sight Glass by opening Valve 2. A visual examination of the fuel quality (clear and bright test) can be performed by operating Valve 3 to fill the 4 Litre Sampler. A Shell Water Detector test can be carried out, along with density and temperature checks (depending on the options fitted to the 4 Litre Sampler). After the checks have been completed the 4 Litre Sampler is emptied by opening the Integral Drain Valve, and can either be drained into the PRT or passed to a sample retention container or slops bucket by using Valve 4.

Typical applications include sampling airfield refuelling vehicles, above ground fuel storage tanks, filter water separator vessels, road tankers and any pipework system. The Closed Sampling System can of course be combined with all other PRT options to offer you a truly multi-purpose mobile fuel processing system.



The above pictures show a typical gravity fed Closed Sampling System, however, we can supply Closed Sampling Systems with a hand pump to sample underground tanks or other applications with a low available pressure. We can also supply custom designed systems to your specification. Please contact our Sales Department with your requirement.