Self-Bunded Fuel Storage Tanks
for aviation fuels

Australian Fuelling Systems & Equipment manufactures a wide range of aviation fuel storage tanks. These include self-bunded and conventional single skin tanks. We also specialise in the design and fitting of all required dispensing, filtration, metering and management equipment. All systems are thoroughly wet tested prior to despatch to minimise onsite works and commissioning.

Aviation fuel storage & dispensing systems

Australian Fuelling Systems & Equipment
PO Box 7162 NEMSC 2348 7-11 Armstrong Street Tamworth 2340
Ph: +61 2 6760 7816  Fax: +61 2 6760 7826
www.fuelequipment.com
General Information

The following information is provided for general guidance only on topics as shown. No responsibility is accepted for any outcomes or situations arising from your interpretation of any of the guides. In all cases it is recommended that a qualified consultant be engaged to guide your installation of fuel storage and dispensing systems.

### Aviation fuel tanks

Our tanks are specifically designed and incorporate features required for the safe storage & dispensing of aviation fuels. With 304 stainless steel inner tanks, 30:1 sloped floors, collection sumps with sampling/dewatering pumps that are operable from ground level, our tanks meet all requirements of the major suppliers of aviation fuel within Australia.

### Compliances

Tanks constructed by Australian Fuelling Systems & Equipment are built to the following Australian Standards:
- AS1692- 2006 Steel tanks for flammable and combustible liquids
- AS 1940-2004 The storage and handling of flammable and combustible liquids
- AS1657 Fixed platforms, walkways, stairways and ladders - Design construction and installation.

Other compliances to many Australian & International aviation industry standards. We have a rigorous QA testing regime which every tank undergoes prior to delivery. These include pneumatic bubble testing & full hydrotesting, depending on tank type.

### Float & Play systems

As much as possible, our tanks are generally ready to go when delivered - except for assembly of the ladder/platform which is shipped separately. The ladder can be installed on either side of the tank to suit your installation. We prefer to install any specified dispensing equipment or other accessories so that we can test the complete operation of the whole system prior to despatch.

This means that onsite work is minimised to provision of suitable footings, connection of required power supply and filling for operation.

### Retailing fuel from your tank

We can supply and fit, calibrate & certify all required dispensing equipment to National Measurement Institute standards for legal reselling of fuels if required.

### Dispensing systems

Getting the fuel out of your tank into aircraft requires much planning and consideration of your requirements.

**Basic considerations:**
- Flow rate required (in litres per minute at the nozzle outlet)
- Hose length & hose storage method, hose protection, hose certification.
- Nozzle type - over or underwing types or both

**Pump system & pressure requirements.** Power requirements to achieve desired flows (See separate entry on this page)

**Flow meter - is the system to be used for reselling? Register visibility.**

**Filtration - on delivery only or into storage as well as delivery.**

### Onsite Commissioning

If required, we can provide expert help to commission your aviation refuelling system.

### Tank filling methods

Self-bunded tanks compliant to AS1940 must be filled via a “tight-fill” connection to ensure proper operation of the overflow prevention system. Connection to the inlet is usually by a product selective Kamlok. Where delivery tankers are not fitted with a transfer pump, we can design the pumping system to carry out inflitting as well as dispensing functions - usually at different flow rates.

### Warranty

Our tanks have a 20 year warranty for integrity when used in accordance with standard industry practice.

All equipment fitted is covered by 12 month warranty for performance as specified and to the limits of the manufacturers warranty.

### Transporting your tank

We can arrange quotation for delivery of your tank or you can arrange this yourself. Generally, you will also need to organise & co-ordinate a crane to unload & place.

Enquiry? - call 1800-025 869 or email sales@fuelequipment.com

---

**Australian Fuelling Systems & Equipment**
PO Box 7162 NEMSC 2348 7-11 Armstrong Street Tamworth 2340
Ph: +61 2 6760 7816 Fax: +61 2 6760 7826

[www.fuelequipment.com](http://www.fuelequipment.com)
### Self-bunded Aviation Fuel Tanks

**JET-A1 AvGas**

<table>
<thead>
<tr>
<th>Cat#</th>
<th>Type</th>
<th>SFL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>123170</td>
<td>T12</td>
<td>11260</td>
<td>4100</td>
<td>2412</td>
<td>2980</td>
<td>3710</td>
<td>2100</td>
<td>3125</td>
<td>3845</td>
</tr>
<tr>
<td>123095</td>
<td>T22</td>
<td>20840</td>
<td>6700</td>
<td>2412</td>
<td>2980</td>
<td>3710</td>
<td>2100</td>
<td>3125</td>
<td>5484</td>
</tr>
<tr>
<td>123044</td>
<td>T35</td>
<td>32640</td>
<td>7050</td>
<td>2862</td>
<td>3430</td>
<td>4170</td>
<td>2350</td>
<td>3510</td>
<td>6967</td>
</tr>
<tr>
<td>123105</td>
<td>T50</td>
<td>48750</td>
<td>10100</td>
<td>2862</td>
<td>3430</td>
<td>4170</td>
<td>2350</td>
<td>3510</td>
<td>9862</td>
</tr>
</tbody>
</table>

**Self-bunded cylindrical tank dimensions**
Airport Installation

Commercial on-airport Avtur refuelling system - includes 22,000 litre storage, on-demand pump delivery system, remote dispenser with NMI approved-for-resale metering system. Fitted with closed circuit fuel quality testing station, pressure differential gauge across filter, high visibility digital register for remote reading, powered hose rewind.

With all piping, valves & fittings in 316 stainless steel, the tank is equipped with pumping system to load into tank from delivery tanker and to supply fuel to the dispenser some 70m’s away.

Closed circuit fuel testing station and pressure differential indicator for filter element monitoring.

Custom fabricated slops tank with inspection hatch, emergency vent & drain.

High visibility digital register allows precise fuel measurement - display is fitted with glare shield and swivel.

Digital register allows precise per delivery totals and cumulative totals and rate of flow.
Self-bunded cylindrical tanks

Above system incorporates both over wing dispensing facilities with 20m hose and high flow transfer from delivery tanker into storage. The heart of the system is a 50mm vane pump that can be driven at different speeds using our specially developed electrical control system that is certified for use in the hazardous area. Push button selection of high or low speed according to function.

- Geared manual rewind hose reel
- Certified hose 20m x 32mm
- Facet filtration
- Industry standard over wing nozzle
- Macnaught flowmeter with large digits
- Stainless system pressure gauge
- All piping & fittings in 316 stainless steel

- Pressure differential gauge
- Thermal pressure relief on all pipe sections
- Emergency Stop station
- Inlet aviation standard strainer
- All low points fitted with drain valves.
- JET-A1 selective kamlok for infill with dust cap.
- All welds & joints passivated
Self-bunded aviation fuel tanks

A Type 50 tank used in a commercial application. The pumping system is designed to rapidly unload a delivery tanker into storage - with all fuel passing through a filtration unit before delivery into tank. This system was fitted with a remote dispenser system to refill an onfield refuelling tanker.

Remote tanker filling dispenser with NMI certifiable flow meter
Two systems set up with Compac MR80P aviation pumps with digital meter & money displays. Manual rewind hose reels fitted along with Facet filtration, over wing nozzle, static reel and Emergency Stop stations.

A 22,000 litre self-bunded tank set up for 24/7 unattended refuelling. Fitted with a Compac card acceptor, the system accepts major credit cards. All dispensing equipment is securely stored in lockable alcove of tank, allowing control over access.

All with 304 Stainless Steel inner tanks
Helicopter refuelling system

Complete helicopter fuel storage & refuelling system built and installed by Australian Fuelling Systems & Equipment. With a 35,000 litre self-bunded tank, on-demand pump system, underground stainless piping supplying fuel to hydrant pits and a mobile hydrant cart, this system provides the ultimate in safe, convenient, clean & dry refuelling. Built to service the needs of the WestPac Rescue Helicopter, the system is set up for reliable 24/7 use and includes a backup engine driven system.

Custom built hydrant cart incorporates filtration with pressure differential gauge, NMI certifiable flowmeter, hose reel & delivery hose with nozzle, hydrant connection hose with drybreak fittings. Also included are spill kit, static reel & fire extinguisher. The unit is easily manually maneuvered to where required.

Self-bunded storage tank with on-demand pump system and emergency backup refuelling equipment

Shows hydrant cart connected to fuel supply in pit.
Self-bunded rectangular aviation tanks

Self-bunded rectangular tank

<table>
<thead>
<tr>
<th>Cat#</th>
<th>Cat#</th>
<th>Type</th>
<th>SFL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>123037</td>
<td>123104</td>
<td>T1.5</td>
<td>1380</td>
<td>2400</td>
<td>1150</td>
<td>700</td>
<td>2480</td>
<td>1770</td>
<td>880</td>
<td>800</td>
</tr>
<tr>
<td>123040</td>
<td>123106</td>
<td>T2.5</td>
<td>2470</td>
<td>2410</td>
<td>1120</td>
<td>1210</td>
<td>2490</td>
<td>1730</td>
<td>1390</td>
<td>1070</td>
</tr>
<tr>
<td>123031</td>
<td>123107</td>
<td>T5</td>
<td>4940</td>
<td>3200</td>
<td>1120</td>
<td>1810</td>
<td>3280</td>
<td>1730</td>
<td>1990</td>
<td>1675</td>
</tr>
</tbody>
</table>

Notes
All dimensions shown are nominal and can vary due to manufacturing and plate dimension variations
Safe Fill Level is 97% of gross volume
Tanks for Class 3 Flammables supplied with vent risers to 4m from ground level - to be fitted on site
We normally supply all self-adhesive signage for Class 3 product tanks to be fitted onsite due to transport regulations.
Venting - AvGas tanks fitted with P&V vents, JET-A1 tanks fitted with downdraft vents

Engine powered pumpsets
Portable or static engine-powered pump systems for aviation fuels. The engine/pump must be located 8m's from the storage or other Hazardous areas. Diesel engines equipped with flame arrestors and mechanical engine stranglers for emergency shut down. See separate brochure.
Self-bunded aviation fuel tanks

A 5000 litre self-bunded aviation tank fitted with low volume 240v dispensing system. Includes pump, flow meter, static reel, manual geared rewind hose reel, 15m x 25mm aviation hose assembly with over wing nozzle & aviation grade filtration. All tank top equipment - fill point, access hatch, inspection hatch, venting etc is enclosed within lockable aluminium cover. Tank can be slung or forklifted whilst empty only.

Other aviation refuelling equipment in our range

- Diesel engine powered pumps
- Self-bunded aviation fuel tanks
- Aviation fuel trailers
- Hydrant carts
- Aviation fuel tanks
- Hydrant pit cleaning & fuel quality test trailer
- DC fuel pumps for aviation
- Hydrant carts
- Aviation fuel trailers

Got a question? Need a quote? Call 1800-025 869 or email sales@fuelequipment.com