

PETROL TANKS EXPERT GUIDE

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Read our expert guide to petrol storage tanks for a concise introduction to everything you should know about petrol storage tanks including the types of petrol tanks available, storage regulations and getting the best price for your fuel. What makes us experts? We've been manufacturing bulk fuel storage tanks for over 30 years and are known to be industry experts with an innovative range of superior quality tanks and highly knowledgeable staff.

1. What is petrol?

Petroleum (petrol) is a naturally occurring fossil fuel created by the decomposition of organic matter – primarily zooplankton and algae – which has been subjected to intense heat and pressure over millions of years. Petrol is primarily used as a fuel to power vehicles, heating units and machines. Byproducts of petroleum can also be used to make plastics and other products.

2. What are petrol storage tanks used for?

We have manufactured petrol tanks for a huge range of industries and enterprises from construction to country estates. Most typically we find that the leisure and sports industry use our petrol tanks for grounds maintenance. Recently we manufactured a petrol tank for Leicester City Football Club's new £103m state-of-the-art training ground. This is being used to fuel the dozens of John Deere maintenance vehicles required to maintain the 185-acre complex.

Similarly, the constant and fastidious attention a golf course needs to keep the green in optimum condition means the golf industry often requires onsite petrol storage. To keep their 210-acre golf course running Northampton County Golf Course recently replaced their 15-year-old petrol tank with a Tuffa 975 litre petrol dispenser which powers the numerous maintenance machinery.

3. What are the advantages of owning a bunded petrol tank?

Any company that uses large quantities of petrol as an essential part of their operations can benefit from onsite bulk petrol storage and dispensing. An onsite fuel tank offers you the convenience of forecourt-style dispensing and can enable you to save money by bulk buying petrol at lower rates offered at the pumps. For some businesses the sheer quantity of petrol used means filling containers or mobile bowsers at the pump isn't feasible and onsite petrol storage is a basic necessity. This was an issue faced by Tony Hill, owner of Seafari Adventures in Scotland before he purchased a Tuffa tank:

“On a busy day in the height of the summer our daily petrol requirement is in excess of 1200 litres. An instant supply of petrol can be required should a lighthouse require immediate repair. With the nearest petrol station 16 miles away, and every 320 litre load transported by trailer, one trip to the petrol station took 2 hours and was a full-time job for one member of staff.

Investing in a 3,000 litre Tuffa Petrol Tank was the sensible option for Seafari. Delivery of fuel by tanker 3 times a week is safer, greener and more efficient for the company.”

- Tony Hill, Seafari Adventures



4. What types of petrol tanks are available?

Above ground petrol tanks

Above ground petrol storage tanks benefit from being simple and inexpensive to install requiring only a flat, smooth concrete base able to support the full weight of the tank when full. These tanks are relatively easy to maintain, replace equipment, repair and even relocate when circumstances necessitate the move.

Tuffa's bunded petrol tanks

Our above ground bunded petrol storage tanks are manufactured in capacities from 975 to 3,000 litres. These tanks are steel welded, bunded and fire protected to provide a safe and fully compliant petrol dispensing tank.

All of our petrol tanks are available with a range of options which will adapt our tanks to fit most site requirements including locations without mains electricity. Pumping options include hand pumps, 240v pumps, and 12v pumps powered by a vehicle's battery. We also manufacture a forecourt style dispenser set on a purpose-built plinth for those requiring a high flow rate and a fuel management system. This is the style of tank chosen for Leicester City Football Club at their [£103m training grounds](#).

All of our petrol storage tanks are known to be incredibly durable and reliable with a 30 year life expectancy when properly installed, used and maintained. We also provide a 10 year guarantee on the bund and primary tank and a 12 month guarantee on ancillary equipment.





Underground petrol storage tanks

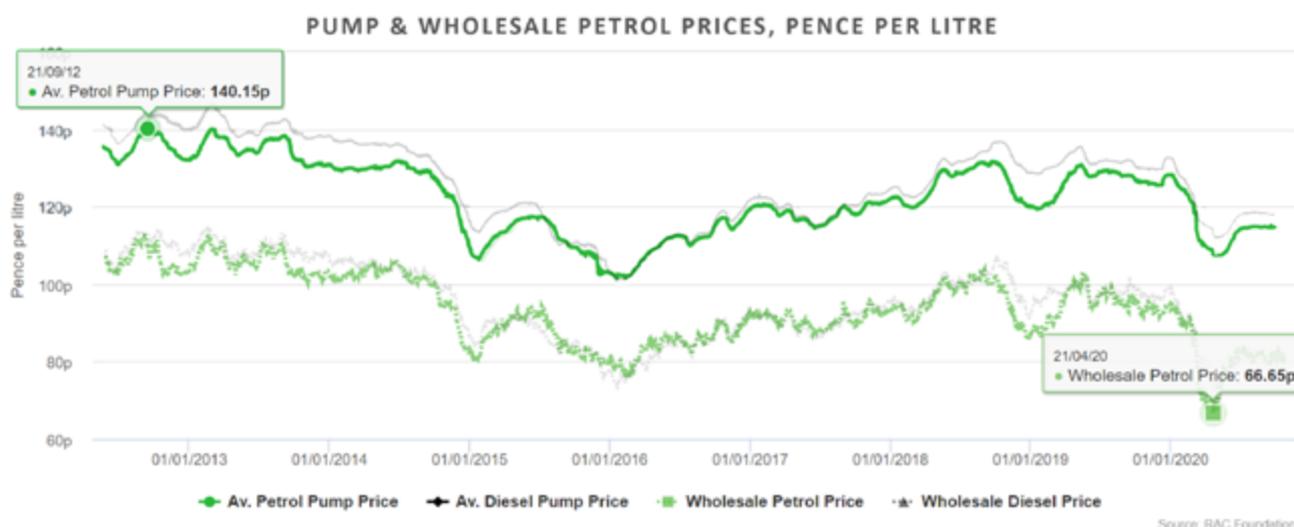
Underground petrol storage tanks are typically available in sizes from 2,000 to 100,000 litres. Due to their underground position these tanks benefit from carrying less risk from fire, explosions, theft and impact damage. As the name implies, underground petrol storage tanks take very little above ground space requiring pipes for venting and access points. Underground petrol tanks are often the best storage solution for commercial forecourts.

However, for the majority of businesses above ground storage tanks are more suitable than underground tanks. That's because underground petrol tanks require significant excavation work, repairs are considerably more difficult and costly, and leaks are more likely to go unnoticed.

5. How do I get the best petrol price?

Fuel prices can vary dramatically over time meaning there are substantial savings to be made for anyone who bulk buys fuel when prices are low. Price fluctuations occur for many reasons including demand, the exchange rate, natural disasters, and political unrest. Events in 2020 have highlighted how a diverse range of factors can affect fuel prices with an 'oil price war' between Saudi Arabia and Russia swiftly followed by the spread of COVID-19. The subsequent loss of demand for the fuel and surplus oil saw oil prices drop by almost one-third at the start of the year.

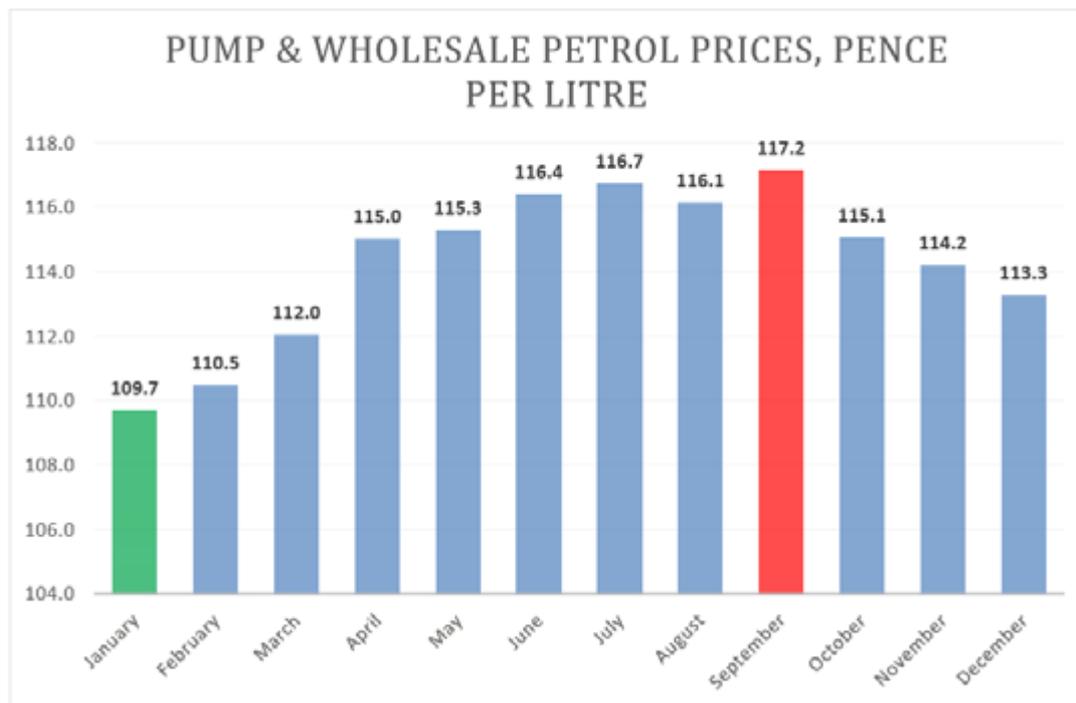
The Pump and wholesale petrol prices, pence per litre chart shows how significant these fluctuations can be with wholesale prices varying from 112.4 pence to as little as 66.65 pence in the past ten years. This gives companies with bulk petrol storage a huge economic advantage enabling them to bulk buy fuel when prices are low.



Source: [RAC Foundation](#) (May 2012 to October 2020)



Trying to predict the various factors which influence fuel prices isn't an option for the average business. However, one factor which remains fairly consistent is fuel demand by month which means that some months are typically cheaper than others. If you have the capacity to store petrol for a longer duration of time then you can fill your tank when prices are low (e.g. Jan) and top-up your tank during the more expensive summer months where necessary.



Source GOV UK: [Weekly Road Fuel Prices](#) (2005 – 2019)

6. Petrol storage regulations & standards

Petroleum is a highly flammable liquid with an extremely low flash point (-43°C) and petrol spills are very contaminant to water and soil. As such the manufacture of petrol tanks and storage of petrol is highly regulated. All of our petrol tanks are designed for the safe storage and dispensing of petrol as well as being fully compliant with UK regulations.

Petrol storage legislation

Metropolitan County > Fire Service > Petroleum / Fire Officer

Unitary Authorities (Non-Metropolitan County) > Trading Standards > Petroleum / Fire Officer

Help to locate your local petroleum officer can be found on the [APEA website](#).

If you are storing less than 275 litres then see DSEAR regulations for [storing petrol at home or a club/association](#).



Obtaining your petroleum certificate

It is advised before purchasing a Tuffa Petrol Tank that your local petroleum officer is contacted for advice on the step by step process of obtaining your petroleum certificate, this can vary from one district to another however we advise that:

- A 2D drawing be obtained of the desired Tuffa petrol tank (provided by Tuffa Tanks)
- A site drawing of the tank and its location and surroundings be produced (provided by the end user or installation company) this should contain any nearby boundaries, buildings, thoroughfares, additional tanks, fixed sources of ignition, additional hazards.
- A product specification be obtained and submitted with the site drawing to the petroleum / fire officer (provided by the end user or installation company)
- If requested by the petroleum / fire officer arrange a site visit at the desired tank location and await the petroleum officer's instruction.
- Upon receiving approval from the Petroleum / Fire Officer order and take delivery of the Tuffa petrol tank.
- When the tank is positioned in the notified location inform the petroleum officer, a further site visit and drop test may be requested after installation although is not always required. (Responsibility of the end user or installation company)
- At the petroleum / fire officer's discretion you will then obtain your Petroleum certificate and will be eligible to purchase the agreed amount of petrol set out by the petroleum / fire officer.
- Arrange for first delivery of petrol with the desired supplier.

Record keeping

After a petroleum certificate is obtained you must keep a log of every petrol delivery, this will detail the amount delivered, the date, the drivers and receivers signature, a maintenance log must also be kept detailing any works carried out on the Tuffa petrol tank both of which must be made available at the petroleum officers request and is the responsibility of the end user.

Our petrol storage tank manufacturing Standards

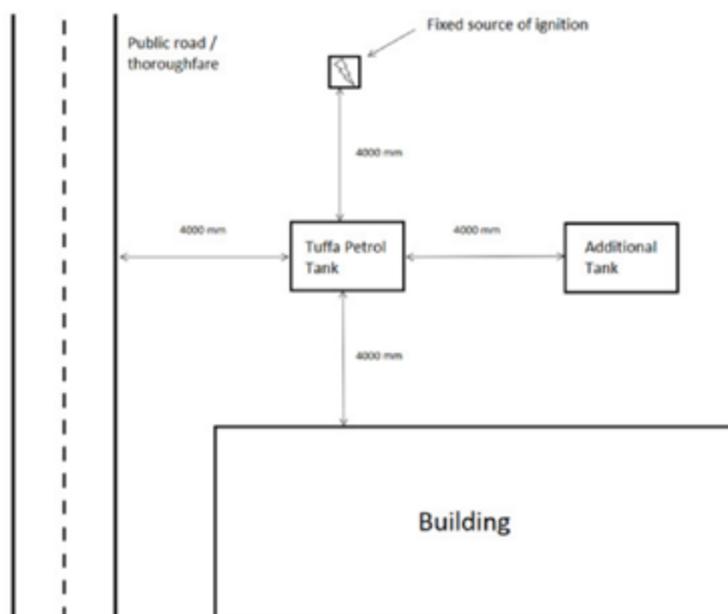
Our petrol tanks are manufactured in accordance with best practice and regulations including:

- Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations (the 'Blue book')
- Safety design features in accordance with DSEAR (Dangerous substances & Explosive Atmospheres Regulations 2002 Second Edition)
- Bunded in accordance with Oil Storage Regulations throughout the UK

7. Installing a petrol storage tank

Tanks above ground should be sited in a well-ventilated position separated from the site boundary, occupied buildings, additional tanks, sources of ignition and process areas. Tanks should be located at least 4 metres from site boundaries, adjacent buildings & building escape routes

including windows and doors, process areas, fixed sources of ignition and additional tanks. The layout of tanks should always consider the accessibility needed for petrol tankers as well as the emergency services.



Petrol tank installation – more installation advice can be found [here](#).

8. Petrol storage tank base

The petrol storage tank must be installed and fully supported on a smooth levelled concrete base built in accordance with good building standards and engineering principles. It is recommended that tanks be installed on a concrete base at least 100mm thick. Please refer to diagram below:

9. How long can petrol last in storage?

The typical shelf-life of petrol, when stored in a sealed container at 20 degrees, is around 6 months. Petrol stored for much longer than this can go 'stale', gather moisture and oxidate which reduces the fuel's effectiveness, eventually becoming unusable. Oxidised fuel can be identified from its sour odour and darker colour. Fuel stabilisers which extend the shelf-life of petrol are available on the market, however, we would recommend checking their compatibility with our tanks.