Spring 2020

ISSUE No.86

Insite

Insite is the official magazine of the Petroleum Equipment Installers and Maintenance Federation

In this issue :

Storage tanks | Tank services | Pipework

PLUS:
The Green Pages
New Fuels Guide

Keep safe...

As this issue of INSITE was passed for press in mid-March, the coronavirus outbreak was just really starting to get serious in the UK. This edition, therefore, has been collated in the absence of any knowledge of how the situation in the country may be as you receive this copy. I hope you're keeping safe.

EV HH LPG LNG HVO GTL

No this is not an opening hand at scrabble, or a snapshot of Rachel's dealing on 'countdown.'

I'm sure you'll be familiar with some of the initials above, relating to the range of new fuels out there. With our help, you should soon be a little clearer with the various options on new fuels for all transport.

With that in mind, I'm delighted to introduce a brand new addition to the pages of INSITE.

The Green Pages

'The Green Pages' is a series of special supplements, in which we will endeavour to cover many aspects of new alternative fuels.

Electric vehicle charging is obviously front and centre in the whole debate on carbon reduction, but there are a lot of considerations and possible alternatives for fuelling and the infrastructure that goes with it.

Our 3 pillars: Retail, commercial and new fuels

Following our very successful AGM and networking event in November, at the PEIMF we have taken a strategic decision to develop our role and influence.

Retail and commercial fuel equipment contractors and suppliers are our core members (and long may that continue). However, future technologies are rapidly gaining traction and it's very important that we help our members with knowledge and support.

Editorial features in this edition cover storage tanks & tank services and pipework. As always our front cover (courtesy of the legendary Brian Sage) reflects what's inside.

A couple of really interesting additions to this copy of INSITE are the very welcome contributions from Petroleum Officer, Andy Watson, giving his view from 'the other side of the fence' – well worth a read on page 8. And there's a very helpful piece on page 6 concerning the IR35 employment regulation, so please take a look!

Keep safe

David Honeyman
Editor

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Front cover illustration
Brian Sage

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Advertisers and the suppliers of contributed articles are asked to ensure that material submitted is fair and accurate at all times. The Editor reserves the right to amend or withdraw such material which may not comply with this request after consultation.

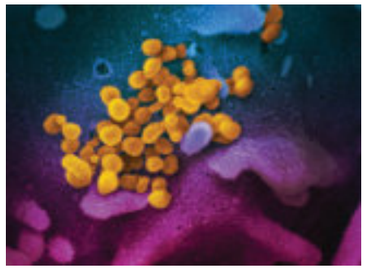
Fight coronavirus on your forecourt

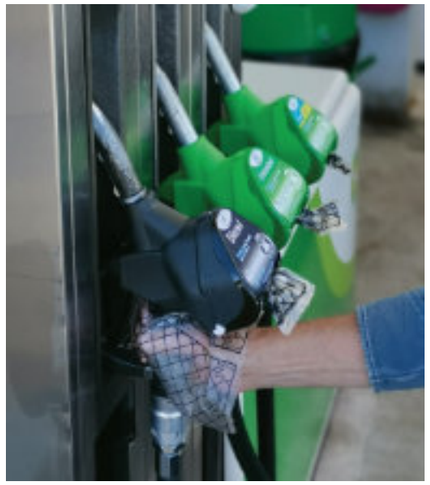
GripHero offers hand-protection dispensers free of charge in battle against coronavirus

With the worldwide spread of coronavirus, UK-based GripHero, maker of the world's only patented ATEX-certified hand protection dispensers for use in the fuel zone, is taking the bold step of offering its dispensers free of charge. The move enables forecourts to provide hand protection to customers on every refuelling bay, playing a vital role in the battle to stop the spread of COVID-19, which can last for over 24 hours on dispenser handles.

Oli Yeo, inventor and managing director of GripHero Ltd, commented:

"When drivers cough or sneeze, they spread small droplets of mucus onto the steering wheel and their hands, which can easily be passed on to thousands of other users via fuel pump handles. So the forecourt sector has a very real responsibility to protect its customers and minimise the potential for the contraction of coronavirus at the pump.





"Fitting GripHero's anti-static dispenser enables drivers to instantly find, withdraw and wear hand-protection without coming into contact with a surface touched by hundreds of other drivers. Our commitment is to provide our easily-installed dispensers free of charge for a limited time.
A non-profit exercise to aid forecourts with its implementation.

"We have seen a surge in international demand since the outbreak, as networks recognise their HSE responsibilities. Through this move we hope to become part of the international solution, encouraging best-practice that will help stop the spread of coronavirus via forecourts globally."

Independent research commissioned by GripHero, shows that over 80% of drivers regularly fill up without using hand protection because they can't find gloves, or because standard dispensers are empty. Fitting GripHero's high-efficiency dispensers on every pump bay prevents clumps of gloves being taken, increases capacity, prevents unnecessary waste and puts an end to hand-protection shortages.

Forecourts installing GripHero will need to purchase GripHero's multi-award winning, ATEX Certified antistatic hand-protection.

For more information about GripHero, visit www.griphero.com or call 01837 811035.

Craggs Environmental acquires LCM;

Doubling in size, coverage and capacity

Craggs Environmental Ltd, one of the UK's leading fuel and tank infrastructure servicing companies, is delighted to announce their acquisition in December of LCM Environmental, combining the two companies to double their size, coverage and operational capacity.

With various sites across the UK LCM has a rich history in the industry and provide a broad range of fuel management and environmental services, which include man entry tank cleaning, fuel sampling, polishing and tank decommissioning.

Chris Bingham, CEO at Craggs Environmental comments:

"This is really exciting news and I'm delighted to welcome the team from LCM Environmental into the business. This acquisition not only provides us with a wide range of new equipment and a new fleet of vehicles, such as vacuum tankers and fuel polishing rigs, but we are also joining our teams to over 40 members of staff; bringing together a vast range of skills and industry knowledge and increasing the services to our large combined customer base.

This also provides a high-quality service which puts us in the running to be the largest fuel service maintenance company in the UK.

The opportunities for the expanded business with such a broad range of skills and experience are simply huge."

For more information visit: **www.craggsenvironmental.co.uk**.

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Off-payroll working (IR35)

Are you ready for the changes?
This may affect your business – so act now!

The rules for off-payroll working (often called 'IR35') were reformed in 2017, following a series of disputes over whether workers were really self-employed or were taking advantage of a tax benefit. Initially rolled out in the public sector in 2017, the reforms are now to be extended to the private sector.

As of 6th April, you, as the hiring company or 'end user', will have to determine the employment status of anyone working for your business; whether a worker is 'inside' IR35 (effectively an employee) or 'outside' (operating as a genuine contractor).

Crucially, the rules also say that HMRC will be able to work 'up the chain' including to the end user, for any unpaid tax liabilities. Operators have already had their O-Licence removed by the Traffic Commissioner for mistakes in the way they engaged with self-employed drivers.

Companies that rely on short-term contractors need to act now to avoid problems in April. There is a 'small company' exemption (see below) but even if that applies, you still need to show that you have assessed your staffing arrangements and that this is correct for your business. Do nothing, and you could face skills shortages, additional costs and financial risks.

What you must do to be ready

1. Understand what is considered 'inside' of IR35 and what is not (visit **www.gov.uk** and search 'Check Employment Status' for a useful, fully upgraded tool)
2. Properly assess the extent to which these rules apply to your organisation
3. Carry out an audit. Do you know how many of your contractor workforce are 'outside' IR35? Don't make any assumptions about any of your PSC (limited company) workers – do the tests
4. Speak to any agencies you use for temporary recruitment, and ask how they are managing this change

Inside or outside? Some tips:
Consider the following questions. If you answer yes to ANY of these points, the chances are the candidate falls inside IR35:

1. The 'self-employed' worker only works for you
2. The worker is under your 'supervision, direction or control'
3. The worker doesn't have an accountant
4. The worker is not using a vehicle they own or operate
5. The worker cannot send another person in his place
6. You pay the worker on a monthly invoice at a fixed rate in line with your other drivers
7. The driver would not have to rectify incomplete or unsatisfactory work at their own cost

It is worth noting that the Traffic Commissioners' official view is that whilst not impossible, it will be "rare" for a driver to be genuinely self-employed unless they are an owner-driver. Can someone who is under the direction, and driving the vehicles of another O-Licence holder, and only providing their time and expertise really be described as self-employed?

Small company exemption
As mentioned above, end users that meet a specific set of conditions may be exempt from the requirement to determine the employment status of individuals working for them. These conditions are:

- Annual turnover of not more than £10.2 million
- A balance sheet total of not more than £5.1 million
- Not more than 50 employees

At least two of these conditions must be met. It is important to note that 'connected parties' are aggregated, so if you are part of a larger group of companies, the assessment would be made on this basis.

Even if you are a 'small company' according to these tests, you still need to be prepared. Firstly, you need to be able to prove to any supplier that this is the case. Secondly, for an agency to supply the same worker to different companies under different conditions is fairly complicated. Market intelligence shows that many recruiters are adopting a single PAYE based approach to all assignments.

To discuss any permanent or fixed term recruitment solutions call Jason Crispin on **07788 392251** or email **jason.crispin@dhappointments.co.uk**.

Being a Petroleum Officer in 2020

by Andy Watson

This is a personal take on the role of the Petroleum Enforcement Officer and some of the challenges we face. Nothing in it represents the views of either my employer or, quite possibly, my colleagues.

I work for a Petroleum Enforcement Authority, which took on the day to day responsibility of the role in 2007. Before that, the work was done on our behalf by the local fire service. My background in trading standards is that of a weights and measures inspector, which I specialised in back in 1994 after 11 years in trading standards, learning my craft as a general enforcement officer. I started in local government as a trainee trading standards officer in 1983 having studied chemical engineering at University, but decided it wasn't for me.

This combination of education and experience in the regulatory world means I understand much more about the construction, maintenance, operation etc. of a filling station than many.

Petrol is too dangerous!

Petrol is a product which, if it was being brought to the market today, would probably not get permission to be used by the general public; it is just too dangerous. We all know the hazards it represents but we, in the liquid fuel industry, hopefully appreciate that, and know what we are doing when handling it. This cannot be said of most of the general public.

One thing I recognise in relation to every single filling station, is that they are all different; no two ever seem to be quite the same. This means that there is rarely, if ever, a one size suits all solution for changes to an existing site, or a standard design that works for all new build developments.

EV charging

As a Petroleum Officer, it is my local knowledge that I bring to bear on plans to make additions to a site; for example; introducing Electric Vehicle (EV) charging, to a site. We recently had a countryside site next to a major 'A' road where there was a desire to install EV charging points. A look at the plans suggested there would be plenty of room to do this but, knowing the site as well as we do, we could see that the chosen spot was right alongside the site entrance. This would place charging vehicles in just the wrong place; considering other vehicles entering the site at speed. So not such a good idea after all.

Hopefully the owners will think again. They must place EV charging in a better spot, on what is really quite a big site. The forecourt is quite a small area, but those other locations might cost a little more to utilise.

Different owners & operators

This same site highlights another problem for Petroleum Officers; it is owned by one company but operated by another. When work needs doing, in order to keep it safe to store and operate, there's a little bit of buck passing goes on to get the work done. We get there in the end, but it is not ideal!

EV charging availability needs to expand if we are to encourage drivers to move from liquid fuel to electric. Filling stations would seem an obvious location to install these, especially those with small shops and/or cafes attached, so drivers can spend a little time browsing or eating/drinking whilst their vehicle charges. But safety must be paramount and high voltage electricity, petrol and motor vehicles are not a good mix. As the previous example illustrates, not all filling stations are actually suitable to have EV charging installed. Just because we need to expand the EV charging network, does not mean filling stations are the best place for them. Most forecourts were not designed with EV in mind.

Too often what I see is site operators taking their eye off the petroleum hazard and looking at how to make more money: the shop, the vacuum cleaner, the jet wash or EV charging, etc. But we all need to be very clear; if you operate a filling station where petrol is stored, the safe operation of this element of the site must override every other consideration.

For me though, the biggest problem is the Petroleum (Consolidation) Regulations 2014. After a very good consultation, the actual regulations were made in a hurry and contain flaws, just don't try to get the Health and Safety Executive (HSE) to admit that, because they won't!

As an example; consider the Prescribed Material Changes in Schedule 1 to the Regulations...

In order to obtain a Petroleum Storage Certificate (PSC) the applicant needs to provide copies of the 'as built' plans for:

- the layout of the dispensing premises;
- the containment system for petrol at the dispensing premises, including storage tanks and pipework;
- the drainage system for petrol at the dispensing premises.

Nowhere in Schedule 1 are changes to the drainage system mentioned. Why? If accurate plans are needed when the drainage is installed why do changes to it not matter?

The point I am making is that regulations, which were meant to simplify the legislative regime, have actually introduced uncertainties and confusion about what is, and what is not, controlled. We do our best; and, in conjunction with the Petroleum Enforcement Liaison Group (PELG) we do try to be consistent; but it's not always easy.

Our Editor says;

It's great to hear an enforcer speak his mind, and we thank Andy for his time in putting this article together. He stressed at the outset, that these are his personal views.

Anybody wish to take up the baton?

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'CUSTOMERS FOR LIFE'
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The UK's favourite forecourt vending machines
AIR-serv is the market leader in the supply of forecourt vending equipment with over 10,000 machines installed in the UK.
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Improved test measure/proving can range from Hytek

Since 2014, Hytek has seen great success with their range of affordable, high quality test measure cans. These cans have been popular with engineers, who appreciate their durable stainless steel construction and suitability for a range of fuels and AdBlue®.

The updated cans now feature a screen-printed scale that is resistant to petrol and diesel, ensuring that no matter what the conditions, an accurate measurement is possible. The improved scale is available on 5L, 10L, and 20L test cans.

The tweaked design comes as a result of direct customer feedback. Hytek Sales & Operations Director Andy Seal says;

"When we talk to our distributors about products, we take their feedback seriously. Thanks to those conversations we were able to upgrade this product range to perform better than ever."

All three sizes are made of tough and durable 304 stainless steel and can be used with various fuels such as diesel, biodiesel, petrol, kerosene as well as AdBlue®. Each model is available with a UK weights and measures certificate option, to verify their accuracy to test fuel dispensing equipment to the accepted levels. With a scale in millilitres, the test measuring cans are designed to be easy to use. They all feature separate lifting and emptying handles and include a clear and easy to read gauge.

Stainless-steel case

A protective stainless-steel carry case is available for each size, which both protects the can, and makes them easy to store. Another option is the stainless-steel anti-splash funnel (15" diameter) featuring an inward lip that prevents fuels from splashing the engineer when the can is being filled.

Hytek carries the UK weights & measures certified versions for same day dispatch, as a replacement can is often required as a matter of urgency. All Hytek products are available for same-day despatch and trade accounts can be opened within the hour.

N.B. If using with AdBlue® do not cross contaminate. AdBlue® is a registered trade mark of the Verband der Automobilindustrie e.V.

Hytek only supply the trade. For your copy of their new product catalogue please email newcat@hytekgb.com or call 01279 815 600

www.hytekgb.com

Save the date!

All PEIMF members

Our annual event

Working Together & AGM

28 -29 January 2021

Venue to be announced

DELIVERING INNOVATION TO THE FORECOURT INDUSTRY

STA'S PIPE AND TANK TEST RIG BRINGS TOGETHER STANDARDISED FORECOURT TESTING EQUIPMENT IN ONE EASY TO USE CASE:

- Tests five lines at once
- Sub-manifold enabling testing on each pipe island
- ATEX approved digital gauge
- For pipework testing -1 - 30 bar at 10 mbar increments
- For tank testing -1 to 3 bar at 100 mbar increments
- Peli waterproof casing to withstand the knocks of day-to-day use

"We have been looking for a robust, accurate test rig that can be easily transported but take the knocks and bumps of site use and STA has given us the perfect solution." - ***Westfield Services***

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In the frame...

John Brown is Sales Engineer at Merridale Ltd. After a long and varied career in the industry, he's on the last leg of his 'petroleum' journey.

John, tell us about your present role

I joined Merridale in 2007 initially covering the whole country, and as we expanded I've been covering the south of England and South Wales.

How long have you been in the industry?

I have been associated with the industry for 40 years (that's scary!)

So what's your career history?

I started as a service engineer with PM Services and did my initial training and other courses at the famous Retford training school (some brilliant memories there).

One of my clients asked me to join them and I became a forecourts manager running 3 garage forecourts.

After I left there, I joined Balvin as a sales/service engineer running the Bristol depot, selling fuel management systems and fuel pumps.

I went back to PM services as sales engineer south, initially selling Balvin kit, then later on we changed to sell Merridale systems and pumps.

I joined D Berry & Co, working for my old boss Tom Hocking, then moved to Tokheim Ltd as Commercial Sales Manager selling the good old 93 XA.

I then went to work for Data Track in Bristol for a while, before leaving the industry for a couple of years.

Yes, I have been around a bit, but variety is the spice of life and I have met some good characters along the way.

Be honest – which role have you enjoyed the most?

I am enjoying my current role and the only one that matched it was working for PM Services.

What do you feel have been your biggest achievements?

My best achievements have been working with Stephen Hannan at Merridale; doubling the company's turnover in a fairly short period of time and maintaining and improving that level.

And in your spare time?

In my spare time I enjoy trying to play golf, fishing and caravanning.

What have been the most significant changes you've seen in the industry?

From the initial DOS based fuel management systems, the industry has moved on leaps and bounds. Everything is faster with better electronics and reporting software.

And what does the future hold?

The future will obviously be alternative fuels; as fossil fuels will go in the next couple of decades. Merridale have developed some prototypes ready for whichever route is taken by the industry. We await the future.

For me personally; alas, I am retiring at the end of March, so I hope in 10 years' time to be somewhere warm with a nice cold beer and my feet up after a nice round of golf. *(Sounds ok! Ed)*

And a final word?

My epitaph: "Just to be there".

Finally, thank you to all the people I have met in my working life and good luck for the future.

B.SMART cloud based fuel management

A first from Piusi

Commercial fuel management systems are not new. The process of being able to monitor and report on who has taken what amount of fuel, for which vehicle and on which date is something that fleet managers have been able to do for the last two decades.

Fuel management systems were traditionally a method of security; to lock out unauthorised users from being able to dispense fuel, and to spot any “refuelling anomalies” from authorised users.

However, advancements in technology mean that it’s becoming easier to record, access and report on the transactional information. Such features have meant that the data is now not only of interest to the transport manager, but also to the finance manager; for forecasting and budgeting fuel costs and allocating them to different sites/cost centres.

As the market matures, sophisticated systems are becoming more and more affordable for even the smaller fleet operator. This is where the new Piusi B.SMART comes in...

For small and large companies

B.SMART is the first cloud based fuel management system from Piusi, providing the fleet manager with remote and real time data on their fuel use. Using a mobile app for driver authorisation and for the network to send the data to the cloud; it enables the monitoring of a single pump on a single site to multiple dispensers across unlimited geographical sites in a single portal. This allows both the smallest and largest of companies to track, view and compare all subsidiary sites’ fuel use.

With all data and reports accessible remotely via the user-friendly online portal, real time data on fuel use is available at the click of a button on a PC, tablet or smart phone, to save the fleet manager from having to attend each site to obtain the information. The manager is also able to remotely enable driver access to the pump, to control who can dispense fuel, preventing unauthorised users from being able to pull up and fill their vehicle.

And best of all...unlike almost all other cloud-based fuel management systems on the market, there are NO ongoing or annual hosting fees for storing the data or using the portal.

If you are interested in offering the B.SMART, contact the UK exclusive Piusi distributor, Centre Tank Services. Demonstrations of the system are available.

www.centretank.com

www.pumpislands.com

B.SMART

REMOTE
REAL TIME

CLOUD BASED FUEL MANAGEMENT SYSTEM

A CLOUD SYSTEM WITH NO ANNUAL HOSTING FEES

Monitor and manage fleet fuel use in REAL time. Set up which drivers are authorised to dispense fuel, and view refuelling transaction data from multiple pumps across unlimited geographical sites, in a single portal from any PC, tablet or smart phone with internet access.

- Mobile phone driver authorisation
- Data sent in real time via network
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- No local PC software installs
- Industry-known Piusi systems
- On-hand technical support

*Real time only in areas where Wi-Fi or mobile network is available. Otherwise, data will sync when network is accessible

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The official UK distributor of PIUSI

Gemini: Revolutionising secondary containment

Franklin Fueling Systems' Gemini secondary contained fittings re-write the rule book by splitting the secondary fitting into two pieces.

This revolutionary feature allows installers to slide the secondary fitting away; so that the primary joint can be fully welded, pressure tested, and inspected before welding the secondary fittings, for the utmost in system integrity.

With Gemini, three secondary fittings are specifically designed to enclose standard one-piece primary fittings, reducing the number of necessary parts, welds, time and overall cost. Gemini provides up to a 50% reduction in primary and secondary fittings and up to a 50% reduction in electrofusion weld operations.

Completely independent

Before Gemini, installing secondary contained pipework was complicated; it required many different types of fittings to be welded together in sequence, piece-by-piece, over primary fittings at each bend. Gemini secondary contained fittings are completely independent of primary fittings delivering a full 360° interstitial space between the two systems.

As a result, a new level of integrity testing is achieved, giving complete peace of mind that both the primary and secondary systems are performing at the highest level.

Additionally, integrated tabs allow the fitting to constrain itself in place for ease of installation without the need for specific clamps.

www.franklinfueling.com

Change of dates

The Scottish Forecourt & Fuel Show has now moved from May to Thursday October 8th

The Belfast Forecourt Roadshow has now moved from October to March 2021

Farewell old mate

I know it's a tad unusual to mention the passing of your dog, but Teddy was a well known figure in the industry, with numerous (well behaved) guest appearances at functions around the country, and many of you have met him over the years.

We lost him recently and have received many kind and comforting words, for which we're very thankful. He was a smashing little character and will continue to grace the front cover of INSITE.

Thanks

David

You're only as strong as your weakest weld!

The 'Smartflex' piping system gives you control on every welded joint

Lots of preparation and thought goes into making an installation that carries fuel or hazardous fluids, and many safety and installation standards have to be respected.

Electrofusion – quick and durable

HDPE pipework has been globally accepted as the best solution for its durability and ease of installation. The process of joining HDPE pipes and fittings is called electrofusion and it is done in a matter of seconds.

But considering the ease of fitting & installation, the joint carries a great responsibility to last many years; leak free and maintaining the tension between the pipes and ground movement. No small endeavour indeed!

So, no wonder that every joint counts; and that the installation is only as strong as its weakest weld.

The award winning 'Smartflex Multifunctional Welding Unit' has been developed by Nupi, and it is unique in the market for offering a **full report on every single weld performed.**

It can be downloaded onto your laptop or uploaded onto the cloud, giving a full list of every installed joint; time and place, including all other relevai data to that particular fitting and installation.

By using bar code technology to weld the fittings, the installation is simple and automated and potential installation errors are reduced.

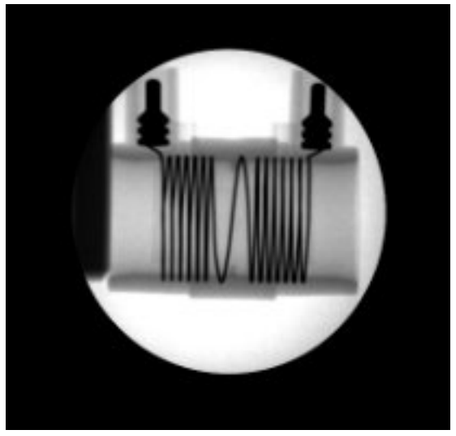
Automatic adjustment

Many important factors; like adjusting the welding time according to the outside temperature, are done automatically by the machine. This makes sure that every fitting is welded to perfection, regardless of changes to the outside temperature. There can be a wide range from morning to afternoon, not to mention in different seasons and climates.

In addition to the welding report, **the unit provides a comprehensive report of the installation.**

The installer can now breathe a sigh of relief! They can be sure that every weld has been installed properly and has possession of a full record of the installation; together with a **30 year product warranty**.

www.nupiindustrieitaliane.com



KPS double wall piping solves fuel egress issues

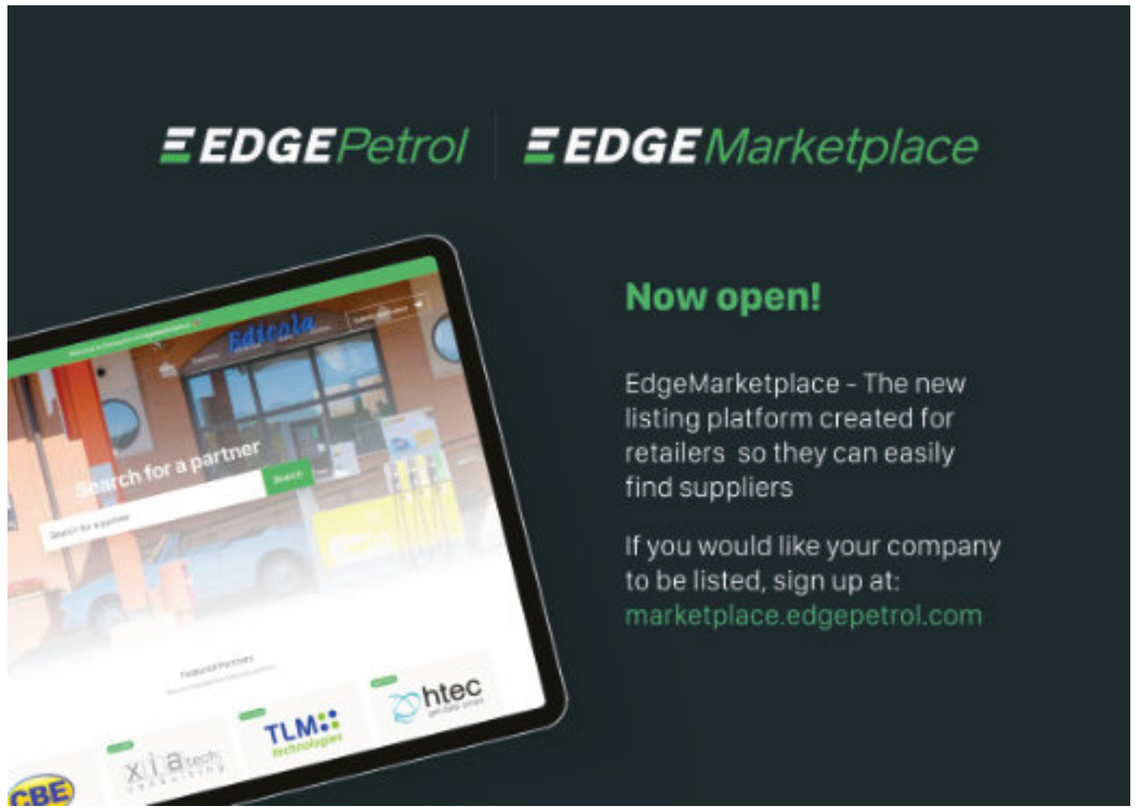
PROJECT OVERVIEW

BP-Aral approached the KPS team for a quick, below ground replacement for their corroding steel pipes on a site in Leipzig Germany; which had begun to break down and leak. The original piping had been installed over twenty years ago.

Problem
The previously installed flexible corrugated steel and copper piping had become damaged through corrosion over time, causing pipes to leak. The angle at which the concrete tank sumps had been installed required a flexible pipe replacement. Despite the challenging installation requirements, a short downtime was key to this project.

Solution
KPS plastic piping was installed in long curves to fit the layout of the concrete tank sumps, and a hole was cut in the corner of each sump to allow KPS termination fittings to enter, and to be connected to the tanks. KPS' double wall piping prevents leakage, while onsite training (provided by OPW) enabled a fast installation with minimal downtime.

www.opwglobal.com



PLX electrical cable conduit launched

Durapipe PLX has added a new range external barrier conduit into their fuel systems offering.

A true external barrier pipe, PLX electrical conduit offers a unique solution for protecting conveyed cables from potential fuel spillages and leaks within forecourt applications. Unlike existing options, which comprise an internal barrier, the new PLX conduit is specifically designed to prevent any fuel from entering the pipework from the external environment.

The new conduit has been designed with a unique double bonded five-layer construction. This comprises an internal black polyethylene (PE) host pipe, an impermeable aluminium barrier layer, which stops the ingress of any contaminants in the ground, and an outer orange PE protection layer, along with two adhesive tie layers.

Offering complete flexibility to the contractor and installer, the conduit can be jointed using both compression fittings and electrofusion fittings. The rigid nature helps aid installation when utilising pipe coils; ensuring that pipe runs have minimal movement once unrolled on site, when compared with alternative conduit options available.

100% recycled material

Always considering our environmental impact, we have ensured the internal host pipe is produced from 100% recycled material.

Commenting on the launch of the new system, PLX Product Manager, Rich Pedley, said:

'We are continually looking to bring innovation to the fuel industry. We believe our unique offering of an external barrier conduit is a more robust, safe and high-performance solution for this application.

"By installing a true external barrier conduit, clients can be confident they are future proofing their forecourt operations by ensuring cables are protected from any fuel spillages or leaks. We are very excited about our latest product introduction, and have already had requests for the product before it was launched."

Available in size 32mm, in coiled lengths of 100m, PLX electrical conduit is approved to mechanical requirements of AS/NZS 61386.1 2015

For further information please call: 01543 471680 or email: enquiries@durapipe.co.uk

Cable protection case study

Product: PLX electrical conduit solution: external barrier protection

Project: Rosebud, Victoria service station

Installer: Shipman King/HAZPRO electrical

A service station in Victoria required a reliable solution to carry electrical cables around the forecourt. Contractors, Shipman King, are leading equipment suppliers in Australia.

They specified PLX electrical conduit, because it is a true external barrier pipe, offering a unique solution for protecting conveyed cables from potential fuel spillages and leaks. Unlike existing options, which comprise an internal barrier, PLX conduit is specifically designed to prevent any fuel from entering the pipework from the external environment.

Commenting on the project, Peter Saxon, Operations Manager said:

"The PLX conduit was the ideal product for this project. It was the first time we have supplied it and we have had fantastic feedback from the installers, who have praised the rigidity of this pipe as it doesn't roll back once unrolled.

Coils could be unrolled, easily lay in straight lines and all stayed in position; which is a major advantage and speeds up the installation process.

"We have other customers now asking for this product and we are expecting to switch supply of all of our cable conduit to the PLX product."

www.durapipe.co.uk

Smartflex piping system installed in 147 countries worldwide

SMARTFLEX is a complete HDPE multi-layer piping system; manufactured by Nupi Industrie Italiane S.p.A. for the transport of automotive and aviation fuels, biofuels and hazardous fluids

The system has over 100 world approvals including EN, UL, IP, Kiwa etc. It is already used and approved by major international petroleum companies, who were the drivers for the product's launch. It was originally conceived, developed and successfully launched into the market in 1995.

30 year warranty

Smartflex is a top of the range piping system, which comes with a 30 year warranty. It has been a preferred product for customers who value quality, innovation, reliability, easy installation and the confidence of a job done well.

The product is available in a range of sizes; from 32mm to 250mm in single and double wall versions, both in coils and straight lengths. Its fittings are known for their compact design and the strength of the welding joint.

Smartflex is available in customisable lengths up to 11.6m per pipe and variety of coil lengths, reducing the number of fittings needed and time of the installation.

Our UK warehouse has considerable stock levels, in order to supply customers quickly and cost effectively.

For further information on SMARTFLEX piping system please contact our sales manager for UK and Ireland: maja.stirrat@nupinet.com or visit: www.nupiindustrieitaliane.com to download our reference book

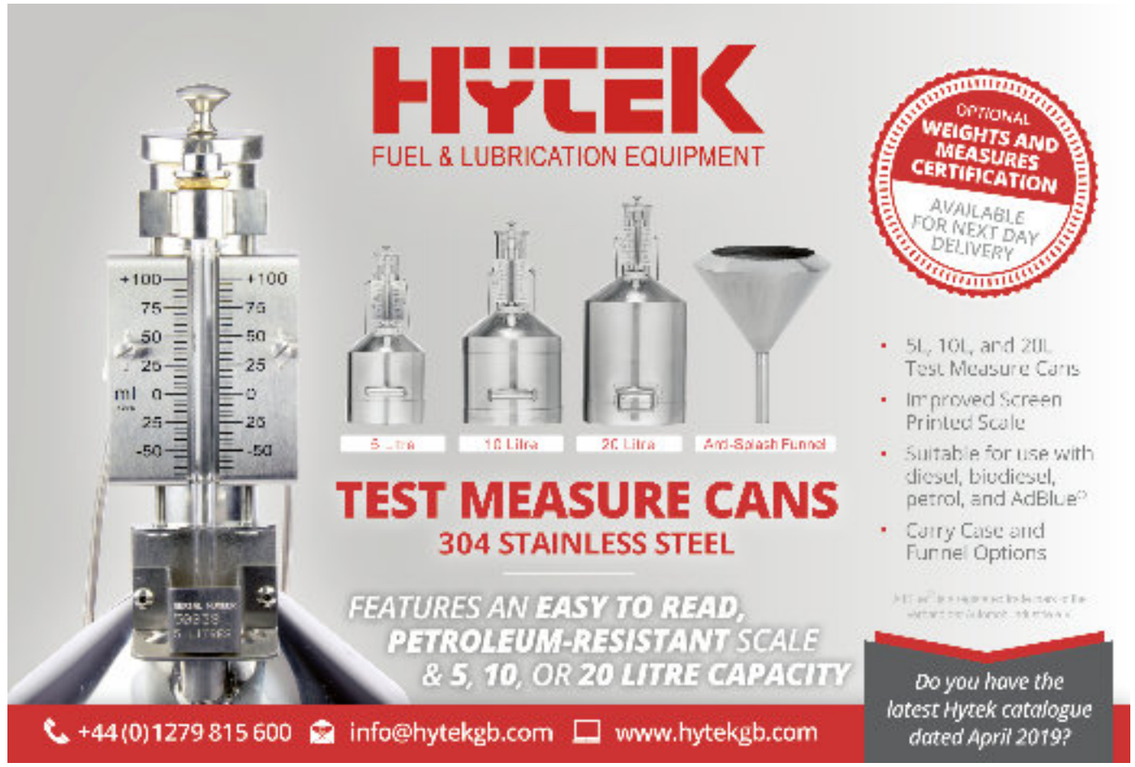
New Nupi factory

Nupi Industrie Italiane S.p.A. to add another production facility to its growing portfolio.

NUPI, the manufacturer of SMARTFLEX piping system has been granted a licence to construct another production and warehouse facility near its existing factory, close to Bologna, Italy.

The new facility will not only help the growing demand for SMARTFLEX, but will also greatly benefit the local economy, by employing more local people.

Nupi already has 2 production plants; Bologna and one near Milan, as well as two factories in the USA. With a total of 30 extrusion lines for the production of its piping system, Nupi is one of the biggest manufactures of fuel piping systems in the world.



Emergency cabinet design and drip tray development

This emergency cabinet design and drip tray development have been keeping STA busy

Whilst still only just spring, this year has seen PEIMF member STA Technical bring two prototypes to fruition. They are rightly proud and wish to share their good news.

Warren Peters says:

"As with all these projects, there's a lot of time spent in the development phase, with no guarantee that it's coming off the drawing board. So, we're delighted that our re-engineered forecourt emergency cabinets and pump drip trays have made the grade."

After working on a redefined emergency cabinet for a supermarket chain over the last six months, Warren continues:

"We presented the prototype cabinet to the client at the start of January and it ticked all their boxes. The new design is being trialled during the spring and our hope is to then go into full scale production."

Citing a range of problems with the standard emergency cabinet, Gilbarco Veeder Root asked STA to look at what improvements could be made to this vital piece of forecourt hardware.

Terry Everitt, project manager for the pump manufacturer explains:

"There's always been a host of rust and leak problems with the conventional cabinet. They're cumbersome and heavy to move, which brings into play manual handling issues. Having just evolved over time, no consideration has been given regarding long term durability or improvement.

"Knowing the STA team enjoy a challenge; we were delighted with the design they presented. We were particularly impressed they had consulted with experts to ensure the new design reflects guidelines set out in the Highway Agency's TR1000 build code for motorway communications equipment."

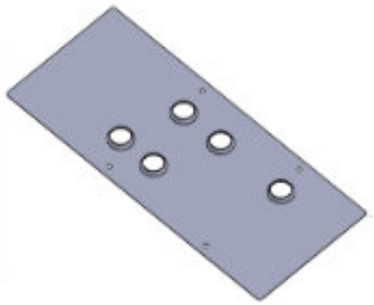
The STA designed cabinets are fabricated from Nirosta 4003/3CR12; a utility ferritic stainless steel that is often used in place of mild steel. This provides a host of benefits including strength, durability and 250 times greater corrosion resistance than mild steel. Warren adds;

"The good news is that Nirosta is economical, with low initial cost and low maintenance, as well as being easy to form and weld using conventional methods."

The newly designed cabinet has been manufactured in two pieces that are easily assembled into a single unit. Warren explains;

"Terry provided feedback about how difficult the current units are to transport and install. Overcoming this issue provides an instant benefit. We've also updated the cabinet's comms capabilities with a weather and vandal resistant networkable audio-visual system."

The cabinet's other components include a push button direct dial phone system, LED low energy lighting, two mandatory fire extinguishers and a flush mounted emergency stop button.



Terry adds;

"The product exceeds our expectations. If the spring trials go as we all hope, the plan is for them to become our go-to cabinet on those sites that require them."

Drip Trays

Having been first approached back in 2018 about supplying drip trays, STA has developed a tray fabrication process that meets the unique requirements of each pump and can be produced for pumps no longer in production.

Warren explains;

"When we first started looking at drip trays two years ago, we investigated a range of tooling options that enabled us to form the radiused upstand, but everything was coming out too expensive. It all went quiet for six months or so, but then momentum returned to the project as we were approached by another company asking for the same thing.

"Initially we were trying to over automate things, so we stripped everything right back and have now found a competitively-priced way forward. We're in full manufacture, with positive feedback from clients and can produce small batch numbers at very competitive rates.

"Whilst most of the pump manufacturers make drip trays, fabrication is mostly in Europe, We're now able to offer shorter lead times and as our trays and manufacturing are here in the UK it means there's no chance of product being delayed due to Brexit or any disruption at the ports."

www.statechnical.com

The Green Pages
NEW FUELS GUIDE
SPRING 2020 • ISSUE 1

Welcome to the first edition of a brand new supplement in INSITE magazine

At the PEIMF, we have always supported our members, and the industry in general, with education and help on traditional petroleum products and services. The pages of INSITE are packed with information, largely provided by PEIMF members.

Now, with the massive onset of change and developments in new fuels, we have a brand new addition to our publication;

The Green Pages

'The Green Pages' is a series of regular special supplements, in which we will endeavour to cover many aspects of new alternative fuels in each addition.

Electric vehicle charging is obviously front and centre of the whole debate on carbon reduction, but there are a lot of considerations and possible alternatives ('alternative' alternatives if you like) for both fuelling and the infrastructure that goes with it.

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All of these areas, and more, will be covered on a regular basis, and we are keen to engage with all organisations involved.

We're open to your contributions, thoughts and comments; and as a not-for-profit organisation, we welcome sponsorship and advertising support.

Contact our editor on: david@peimf.com
tel: 01474 321999

Car registrations February 2020

Registrations for both diesel and petrol cars fell in February, (27.1% and 7.3% respectively).

Hybrids (HEVs) increased almost 72% to 4,154. Battery electric vehicles (BEVs) rose more than three-fold to 2,508 and plug-in hybrids (PHEVs) increased by nearly 50% to 2,058.

February

	2020	2019	% change	Mkt share -20	Mkt share -19
Diesel	17,457	23,941	-27.1%	21.9%	29.2%
Petrol	48,247	52,035	-7.3%	60.6%	63.5%
BEV	2,508	731	243.1%	3.2%	0.9%
PHEV	2,058	1,373	49.9%	2.6%	1.7%
HEV	4,154	2,417	71.9%	5.2%	2.9%
MHEV diesel	1,890	333	467.6%	2.4%	0.4%
MHEV petrol	3,280	1,139	188.0%	4.1%	1.4%
TOTAL	79,594	81,969	-2.9%		

Year to date

	YTD 2020	YTD 2019	% change	Mkt share -20	Mkt share -19
Diesel	48,825	70,205	-33.3%	20.5%	28.9%
Petrol	139,303	152,835	-8.9%	60.9%	62.9%
BEV	6,562	2,065	217.8%	2.9%	0.8%
PHEV	6,844	3,641	88.0%	3.0%	1.5%
HEV	13,125	9,829	33.5%	5.7%	4.0%
MHEV diesel	6,718	852	653.1%	2.9%	0.4%
MHEV petrol	9,496	3,515	170.2%	4.1%	1.4%
TOTAL	228,873	242,982	-5.8%		

These figures are courtesy of the society of motor manufacturers and traders. www.smmt.co.uk

Electric vehicles : addressing the myths

New petrol and diesel cars will no longer be sold in the UK from 2035, so before long, far more of us are going to be behind the wheel of electric vehicles (EVs). Here Graeme Cooper, National Grid's Project Director - Electric Vehicles, offers his perspective by addressing some of the myths about them.

Can the UK energy grid really cope with a huge increase in the number of electric vehicles being plugged in for charging?

There are two aspects to whether we have the capacity to manage lots of EVs being plugged in at once:

1. Whether we have enough energy
2. Whether we have sufficient capacity on the wires that carry that energy to where it's needed.

With the first of these; the energy element, the most demand for electricity we've had in recent years in the UK was for 62GW in 2002. Since then, due to improved energy efficiency such as the installation of solar panels, the nation's peak demand has fallen by roughly 16 per cent. Even if the impossible happened and we all switched to EVs overnight, we think demand would only increase by around 10 per cent; so we'd still be using less power as a nation than we did in 2002 and this is well within the range of manageable load fluctuation.

More complicated though is the issue of when that power demand actually happens; is it all at once or spread through the day and week?

The traditional evening peak of electricity demand is between 6 and 8pm, and this might well coincide with people returning from their commute and plugging in their cars.

If we want to provide sufficient infrastructure and energy for EVs as cheaply as possible for consumers, we ideally don't want to add to that evening peak and need to spread that demand better.

With this in mind, recently the Government's *EV Energy Taskforce* recommended that all future car chargers should be 'smart by design'. This means that no matter what time you come home and plug your car in at, it will charge when you need it; but will pause during that evening peak when energy is most expensive and demand on the grid is highest.

When it comes to the capacity of the wires required to deliver that power to the nation's EV charging points, National Grid's transmission system is ever-evolving and suitably robust to cope with the forecast uptake in EVs. That said, some targeted investment is likely to be needed to ensure there are appropriate places where drivers can access sufficient high-power charging away from home. This particularly needs to be on the motorway network to give confidence to those travelling longer distances, to ensure charging does not interrupt those journeys. Fortunately, there is already a lot of electricity infrastructure right next to our motorways, as power lines are often run beside them for practical reasons.

The other point to bear in mind here is that the switch to EVs won't happen overnight and will occur gradually over the coming years.

Surely all you're doing is moving harmful emissions from car tailpipes to power stations?

From the start of the Industrial Revolution up until 2017, the 'dirtiest' thing we did as a country was make electricity. However, the way we generate power has evolved and our energy system is getting greener all the time. Last year, 2019, was a record breaking year and more electricity was generated by clean sources than fossil fuels. With the growth in onshore and offshore wind farms and the closure of a number of coal plants, transport is in fact now the most polluting thing we do as a nation.

EVs are much more expensive than petrol and diesel equivalents

It's true that products based on new technology do tend to be more expensive for early adopters, but as they become more mainstream and volumes increase, prices typically come down. EV battery prices are already falling, which helps with this. So, we absolutely expect the upfront cost of new EVs to reduce over the next few years.

For those looking to buy used rather than new, the current uptake of supply in new EVs will hit the second hand EV market in three or so years' time.

It's important to look not just at the initial outlay for your car but the 'whole life cost', which means considering how well it retains its value and its running costs. It seems that EVs are depreciating less than petrol and diesel cars, so you might well get more payback when the time comes for you to trade in or sell on.

Even though EVs currently have higher purchase prices, they're cheaper to run; costing much less than petrol or diesel, at as little as 2p per mile if you charge at the right time of day or night. EVs have fewer moving parts too, meaning they should also have lower servicing costs.

My mobile phone battery is ruined after two years, so aren't we going to end up with car batteries littering the landscape?

The lithium ion technology in our mobile phones is not dissimilar to those in an EV, but what is different is that these cars have effective power management systems that guard the long-term health of their batteries. Most manufacturers are offering battery warranties of seven or eight years, or around 100,000 miles; but there's a reasonable expectation that they will actually last longer than that and indeed outlive the car itself.

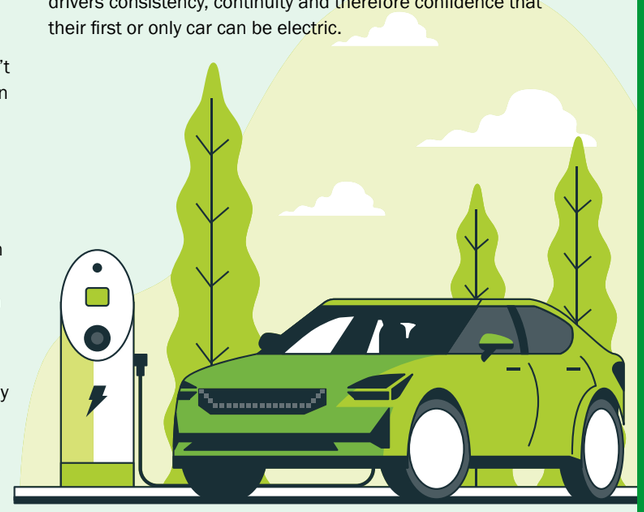
Even if a battery became no longer fit for use in the car it won't end up in that landfill site, as it can either be recycled, or given a second life as an energy storage unit for homes or businesses.

Electric vehicles don't go far enough on one charge, aren't they annoying and inconvenient?

Really simply the sweet-spot for the range of an EV is between 200 and 300 miles, this gives the optimal balance between cost and range. Most people don't need a range of more than this; after the time it takes to drive this distance most of us need a pit stop anyway.

Statistically the first car in a family does around 37 miles a day on average and any second car covers around 11 miles daily. Understandably, people don't buy for their average journeys; they buy for the longest ones they do. In reality, when we take longer trips, most of us already do stop for 15 to 20 minutes at a service station to grab a drink and perhaps head to the loo or fill up on petrol or diesel.

That would be all the time it takes to power up your EV, via the new range of ultra-rapid chargers that are already available. This is why National Grid has proposed the optimum locations for adequate grid capacity; to enable others to provide ultra-fast chargers, ensuring that nobody on the strategic road network (motorways and principle dual carriageways) is further than 50 driven miles from ultra-rapid charging. This will give drivers consistency, continuity and therefore confidence that their first or only car can be electric.



Government funding EV charging

The Transport Secretary recently announced that government funding will be doubled to £10 million for the installation of chargepoints on residential streets. This could fund up to another 3,600 chargepoints across the country and make charging at home and overnight easier for those without an off-street parking space.

The government is also looking at how to make information about all public chargepoints including locations and power ratings openly available in a standard format for the first time.

Ensuring that charging an electric vehicle is a convenient and simple process is crucial to meeting the government's ambitions of phasing out petrol and diesel cars.

Transport Secretary Grant Shapps said:

"We want to make electric cars the new normal, and ensuring drivers have convenient places to charge is key to that.

By doubling funding again for chargepoints on streets where people live and opening up data we are helping drivers easily locate and use affordable, reliable chargepoints whether at home or on the road."

The UK now has one of the largest charging networks in Europe with more locations where you can charge your car than there are petrol stations.

The government has already challenged industry to provide debit and credit card payment at all newly installed rapid chargepoints and develop a roaming solution across the charging network, allowing electric vehicle drivers to use any public chargepoint through a single app or payment method.

E10 consultation

The government has recently published a consultation on proposals to introduce E10 petrol as the standard fuel across the UK.

The lead proposal would introduce a minimum ethanol content of 5.5% for standard 'premium' fuels in 2021, whilst maintaining the current E5 blend in the 'super' grade. The consultation seeks views on the proposed mechanism, definitions and derogations. It also includes a call for evidence on potential changes required to existing policy mechanisms (including targets under the Renewable Transport Fuel Obligation) following an introduction of E10.

The consultation will close on 19th April.

Alongside the new consultation, is also published the government response to the 2018 call for evidence on E10.

Should you be interested in responding to the consultation or have any questions, please contact LowCarbonFuel.Consultation@dft.gov.uk

SPRING 2020 • ISSUE 1 • THE GREEN PAGES - NEW FUELS GUIDE

Hydrogen: The facts

Hydrogen is one of the most abundant elements in the universe and could play a significant role in the transition to a clean and low-carbon energy system. Hydrogen is a clean and versatile energy carrier that can be used as a fuel for power, transport, and in industry as feedstock and Shell has a growing network of hydrogen stations in Europe and in North America, where it is part of several initiatives to encourage the adoption of hydrogen in transport.

HOW IS HYDROGEN PRODUCED?

Hydrogen is abundant but is rarely found in its pure form. It has to be produced through chemical reactions. Around 99% of hydrogen today is produced through fossil-fuel reforming, a process that produces a reaction between natural gas and steam. Hydrogen can also be produced from renewable sources, using biogas, a gaseous form of methane obtained from biomass, or through electrolysis using electricity generated by renewable sources.

Here's how each of these processes work:

ELECTRIC MOTORS!

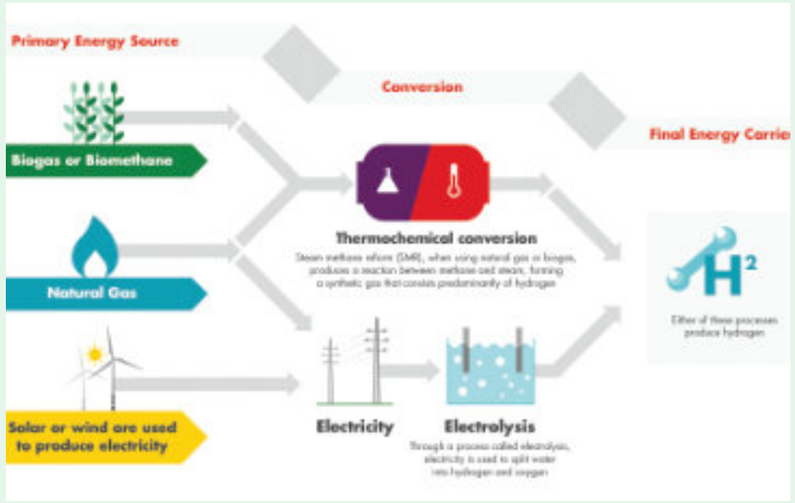
Hydrogen Fuel cell electric vehicles (FCEVs) can play an important role in decarbonising the transport sector. FCEVs convert compressed hydrogen from the fuel tank into electricity that powers the electric motor of a vehicle. When driven, such cars do not produce carbon dioxide (CO2) from their tailpipe; the only emission is water vapour. When renewable electricity is used to make the hydrogen, the vehicle can effectively be powered without generating any emissions.

FCEVs are also quick to refuel. They can drive up to 700 kilometres without refuelling.

The high energy density of hydrogen makes it particularly suitable for trucks, trains and potentially ships, which carry heavy goods over long distances.

WORLDWIDE PARTNERS

Shell is part of several initiatives to encourage the adoption of hydrogen in transport. In Germany, Shell is working with private-sector partners and the German government in the H2 Mobility joint-venture to develop a nationwide network of hydrogen fuelling stations for passenger cars. Shell also have hydrogen stations in California, USA and in the UK. In 2018, Shell opened its first hydrogen station in Canada, in Vancouver; and announced plans to open three new stations in the Netherlands. Shell is also developing refuelling capability for hydrogen trucks, working closely with Toyota, Kenworth and the Port of Los Angeles.



In the UK, Shell has partnered with ITM Power, a company specialising in electrolysers, to make hydrogen fuel available at three Shell retail sites in central and south-east England. At these stations the hydrogen is produced on site using electricity from certified renewable sources.

HVO – A sustainable alternative to diesel

Harvest Energy invests in Hydrotreated Vegetable Oil (HVO)

Hydrotreated Vegetable Oil (HVO) is a renewable energy source, made from organic matter or wastes, that can play a valuable role in reducing carbon dioxide emissions; and are one of the largest sources of renewable energy in use today.

Most biofuels are produced from agricultural crops and are called conventional biofuels. New technologies and processes that produce fuels from waste, inedible crops or forestry products are being developed. These fuels are known as **advanced, or second-generation biofuels**. Advanced biofuels are likely to become the primary form of biofuels in the future as they can improve their sustainability.

With the UK Government's 2050 net zero target, environmental awareness, and Corporate Social Responsibility (CSR) playing an increasingly important part of business, now is the perfect time to look at ways to reduce the carbon footprint of businesses.

REDUCE GREENHOUSE GASES BY 90%

HVO is a second-generation premium biofuel made from renewable and sustainable sources. It reduces greenhouse gas emissions by up to 90% when compared to regular diesel. HVO can be used as a drop-in replacement for regular diesel and gas oil, with the approval of several major Original Equipment Manufacturers (OEMs).

Harvest Energy is a member of the Prax Group of companies; a leading independent trading, storage, distribution and retail conglomerate dealing in petroleum products and biofuels. Harvest is well placed to support consumers in tackling the fundamental requirement to reduce harmful emissions. It has invested in a stock of low emission HVO in a bid to shift demand in a wide range of different sectors in the UK including; transport, construction and industrial power systems from diesel and gas oil, to an environmentally friendly alternative.

As we progress towards a low carbon economy in the UK, demand is expected to increase for greener fuels as British businesses become more environmentally conscious. Harvest Energy wants to be able to cater to that demand, as well as encouraging businesses to switch to low emission products, such as HVO as a drop-in alternative to diesel or gas oil.

By teaming up with Harvest, customers can be assured of a leading supplier; who is not only responsive to market developments and new opportunities as they arise, but can also deliver bulk supplies of this newer, cleaner and innovative product to any site across the UK within 48 hours.

Key benefits of Harvest Energy's HVO Biofuel:

- Cleaner, greener drop-in alternative to regular diesel, made entirely from 100% renewable, sustainable raw materials.
- Reduces greenhouse emissions by as much as 90%, enabling customers to meet Corporate Social Responsibility (CSR) targets, and significantly reduce their operational carbon footprint.

- Excellent cold weather performance, clean burning and provides a better starting performance.
- Has a much longer shelf life than regular diesel, due to the stability of the product and the lack of fuel degradation.
- As a renewable biofuel, HVO is a drop-in alternative to regular diesel so there is no need to change or update existing infrastructure.
- Suitable to work in a wide range of different sectors, including road vehicles, construction equipment, generators and power systems.

www.harvestenergy.com

SPRING 2020 • ISSUE 1 • THE GREEN PAGES - NEW FUELS GUIDE

Shell GTL Fuel:

Cleaner fuel for cleaner air

Katrina McDonnell, Head of Speciality Fuels and Services at Certas Energy, clears the air around some of the most commonly asked questions about this readily-available fuel of the future.

Alternative fuels are key to supporting the transition to a low-emission future. Shell GTL Fuel, a cleaner burning drop-in fuel, is one of a number of alternative solutions helping businesses to immediately reduce emissions from heavy duty diesel engines.

WHAT IS SHELL GTL FUEL?

Shell GTL is a cleaner burning alternative to conventional diesel. It is a member of the paraffinic family of fuels and falls under the EN15940 specification.

Paraffinic fuels are liquid fuels that can be synthetically created from feedstocks such as natural gas (GTL), biomass (BTL) or coal (CTL); or through hydro-treatment of vegetable oils or animal fats (HVO).

These high-quality fuels burn cleaner than conventional crude-oil based diesel fuels and can therefore help to reduce local harmful emissions such as nitrogen oxides (NOx) and particulate matter (PM) without having to change existing fuel infrastructure.

HOW DOES IT DIFFER FROM DIESEL?

Rather than being derived from crude oil, Shell GTL Fuel is created from natural gas, using the Fischer-Tropsch process. This produces more consistent and uniform molecules compared to conventional crude oil refining.

The Fischer-Tropsch manufacturing process creates a fuel that is almost purely paraffinic, with hydrocarbon molecules of only normal-paraffins and iso-paraffins. This results in a higher calorific, value which delivers more energy per unit mass of fuel.

Shell GTL's higher purity gives it a higher cetane number and lower density than conventional diesel, as well as unique colourless and odourless characteristics.

WHAT ARE THE BENEFITS OF SHELL GTL?

This Fuel has improved and more efficient combustion properties inside standard diesel engines, resulting in lower emissions of air pollutants, such as NOx and PM, by up to 37% and 50% respectively.

As a direct, drop-in replacement for diesel, no modifications are required to engines, storage or infrastructure when switching from diesel to Shell GTL Fuel. This means there is no requirement to invest in any expensive equipment upgrades and no interruptions to productivity when onboarding. Furthermore, as a paraffinic fuel, Shell GTL can be used as a blend component in conventional diesel or as a 100% finished fuel.

In addition to emissions reduction, this fuel offers a number of added-value performance benefits.

More uniform combustion helps to reduce engine noise, with reductions of between 3-5dB reported by some customers; a significant benefit in noisy city centres. For vehicles equipped with diesel particulate filters (DPF), the reduced particulate formulation of Shell GTL Fuel can also significantly elongate the regeneration cycle of DPFs compared with regular diesel, in some cases by up to 70%. In cold conditions, it will maintain a high cetane number and have better starting performance compared to running on conventional diesel.

This fuel also offers additional environmental benefits. It is classified as 'readily biodegradable', and tests show the fuel is not detectable in soil 51 days after being introduced.

To address longer-term climate objectives, Shell GTL Fuel is available with Carbon Offsets from Certas Energy. The scheme offsets carbon dioxide (CO_2) emissions by purchasing carbon credits from activities related to the protection, creation or redevelopment of natural ecosystems. These nature-based activities remove CO_2 from the atmosphere, equivalent to those created by the production, delivery and use of the product.

HOW IS SHELL GTL USED?

As a cleaner burning diesel alternative, Shell GTL can be used as a drop-in replacement for diesel in heavy duty engines. The fuel is available in on-road, off-road and marine grades, and is well suited to heavy duty markets with limited alternatives to diesel; including construction, rail, public transport, haulage, power generation, marine and agriculture.

DAF, Scania, MAN, Bosch, JCB, Wärtsilä, Caterpillar, Cummins and John Deere are amongst the growing list of manufacturers who have issued approvals for its use.

WHO IS USING SHELL GTL FUEL?

The product has been onboarded by businesses across sectors looking to reduce their impact on air quality and the environment. Early adopters in the UK include Brakes Group, Morgan Sindall, Harwich Haven Port Authority, Go Plant Fleet Service, Bedford Borough Council and many more.

WHAT SUPPLY CHAIN OPTIONS ARE THERE?

Certas Energy is the exclusive UK supplier of Shell GTL Fuel. We supply the fuel from a growing number of depots across the UK, including Ellesmere Port, Ashford, Horsham, Thames, Harefield, Kings Lynn, Letchworth and Midlands.

For cleaner refuelling on the go, the fuel is also available from our specialist HGV bunker sites at Liverpool Port and Tyseley Energy Park. As the demand for alternative fuels continues to grow, the supply chain will expand accordingly.

Brakes Head of Indirect Goods and Services Procurement:

"Running Shell GTL Fuel in a city centre has a big impact on NOx emissions. We have not waited for future technology as there is no requirement to convert the vehicle.

"The feedback from the drivers has been overwhelmingly positive. The vehicles are running more quietly and we've seen a substantial reduction in the need to clean the particulate filters."

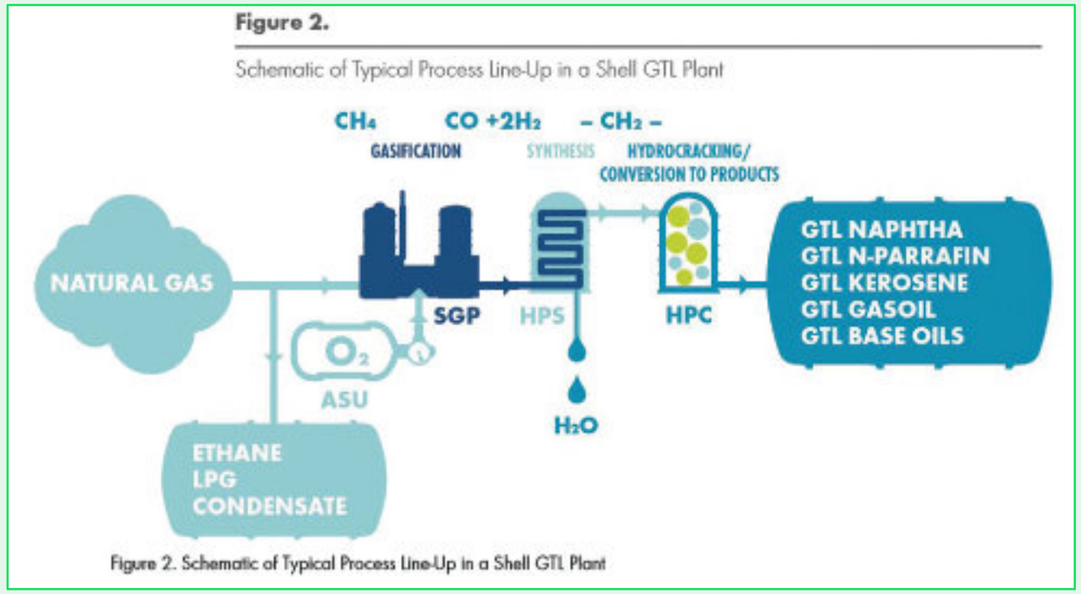


Figure 2. Schematic of Typical Process Line-Up in a Shell GTL Plant

Brian Hill, Marine Engineering Manager at Harwich Haven:

"As overseers of one of the UK's largest commercial ports, we have a responsibility to protect and conserve the marine environment. Shell GTL Fuel has helped us to lessen our environmental impact.

We worked closely with Certas Energy to ensure a smooth transition, and the team has supported us every step of the way. We're very pleased with the switch to Shell GTL Fuel so far and are looking forward to seeing the long-term efficiency and emissions impacts of the trial."

Mayor Dave Hodgson, Bedford Borough Council:

"The Council is committed to working in a greener way. We have led the way locally reducing carbon emissions from our estate by over half in recent years. Now this switch to more environmentally friendly fuel will help our fleet to run more efficiently and produce fewer emissions, and so have a positive impact on our local environment."

For more information, and customer case studies, please visit: certasenergy.co.uk/my-business/shell-gtl-fuel or call 0345 600 4040.

Tackling carbon emissions

Liquid biofuel supply chain strategy & taskforce set up

Trade associations; OFTEC, the Tank Storage Association and the UK and Ireland Fuel Distributors Association have launched a future vision for liquid fuels. 'Supply Chain Strategy for Liquid Fuels' details the steps to be taken toward a transition to 100% biofuel to replace heating oil in 1.5m homes across the UK and 686,000 homes across Ireland.

The group will be joined by other industry representatives in a new 'Taskforce for liquid biofuels', which will use the policy proposals contained in this future vision document to support a transformational effect on the UK's off grid heating market.

Guy Pulham CEO of UKIFDA said:

"Liquid fuel, more specifically a bio product, can be part of the solution to achieve net zero. Government talk about large scale electrification through the use of heat pumps, but we believe they need to look at alternatives as this is not feasible due to high installation and running costs of installing heat pumps for off grid homeowners, the requirement for additional National Grid generation and infrastructure costs."

The *'Supply Chain Strategy for Liquid Fuels'* pathway sets five key challenges to the Government to:

1. **Encourage and support energy efficiency measures**
2. **Support supply chain preparations to accept a 30% FAME/70% kerosene blend fuel into existing installations by 2027 including an industry-led field trial.**
3. **Support supply chain preparations to accept a supply low carbon (0% fossil) liquid fuel by 2035**
4. **Be actively involved in transitional communication work with consumers**
5. **Encourage all interested suppliers (UK and Europe)**

UKIFDA TSA OFTEC

SPRING 2020 • ISSUE 1 • THE GREEN PAGES - NEW FUELS GUIDE

Cleaner transport solutions from Shell

ELECTRIC VEHICLE CHARGING:

Electric mobility is one of the solutions that will help meet growing demand for transport in a lower-carbon world. Shell is exploring how best to serve an increasing number of electric vehicle drivers, on and beyond their forecourts, to ensure that customers can choose from a range of refuelling options over the coming decades.

As the number of electric vehicles on our roads increases, a suitable network of recharging infrastructure has to be developed to ensure customers have access to a wide choice of charging options. This includes regular charging options for homes and businesses and the provision of faster, high-powered charging options at forecourts and other publicly accessible locations.

Collaborative and coordinated action from industry players such as power suppliers, charging providers and vehicle manufacturers, will be essential to develop an adequate charging network that meets the needs of electric vehicle drivers, while helping to manage power-supply systems more efficiently. Similarly, considered and consistent support from government will help create the right environment that encourages the use of electric vehicles.

A RANGE OF CHARGING OPTIONS

In 2017, Shell bought one of Europe's largest charging providers and a leading expert in smart charging solution; NewMotion. Together they are installing workplace chargers; for example by partnering with brands such as Jaguar Land Rover who have installed over 150 charging points for employees at their Gaydon centre in the UK. Through NewMotion, Shell also provides customers with the option of charging their EV at home. In the UK, Shell Energy Retail customers can now get a home charge point installed for a discounted price. Following an agreement with IONITY, Shell will also offer super-fast 350kW charging points across ten European countries, starting with 80 of Shell's biggest highway stations, allowing drivers to travel long distances with confidence.

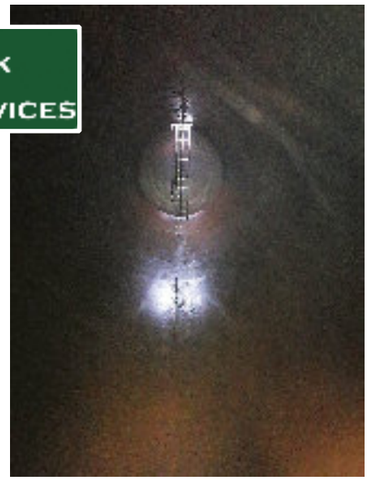
Another leading European provider of charging solutions, PEIMF member, Allego, is providing Shell Recharge EV charging points on Shell forecourts. In the UK, Allego recently installed Shell's 70th EV charger, and late last year they installed the UK's first 150kW charger on a forecourt at Shell's station in Battersea. Allego will continue to install such chargers on Shell forecourts across the UK in the coming year, in line with consumer demand, with the aim of installing 200 EV charge points on Shell forecourts by the end of 2020. Allego also manages the operation and maintenance of Shell's EV chargers on forecourts in the Netherlands.

GILBARCO VEEDER-ROOT TRITIUM

Fuelling the future, today.

Tank Services

Tank Services are a relatively new member of the PEIMF and would like to share their services with us.



With something environmentally sensitive like oil storage, you need a trusted and qualified company. Tank Services work with organisations such as The National Trust, The Met Office and Salisbury District Council and are recommended by leading oil companies including Watson Petroleum and Total Butler Fuels. This has resulted in hundreds of happy domestic & commercial clients.

Bunded and underground tanks

Our services include the supply of both bunded tanks and underground tanks. We cover all aspects of tank installation, redundant tank removal and recycling, oil pipe pressure testing, water in fuel detection and most associated services. We have now expanded our range into fuel polishing & tank cleaning; ensuring the quality of fuel provided for the efficient running of high tolerance machinery and equipment.

With growing expansion at Tank Services, we are providing commercial services to big businesses such as Grundon Waste Management. With a recent tank clean performed on one of their large 20,000 litre fuel tanks, they couldn't be happier. We've got more great images of the clean inside of the tank on Social Media @southern_tank_services on Instagram.

Fuel polishing

Fuel polishing is one of the more interesting investments we've undertaken. With the ability to filter down to 0.5 microns, we are capable of eliminating diesel bugs from fuel. This process protects the fuel from microbial growth for the foreseeable future; keeping tanks healthy and filters clean!

To complement these new services, we've also got an advanced fuel analyser that we use to test your fuel after a site visit. This device is a market-leading laser particle counter from FilterTechnics. We take samples and run a series of tests before and after the fuel polishing process to ascertain whether the quality of the fuel is to ISO4406 standards.

We can arrange a free site visit to assess your needs, explain the relevant regulations and present a solution with a quotation in writing.

www.tankservices.co.uk

Flat Pack Containers from Kovobel UK

Available from Tank Services

With previous experience of supplying flat pack storage containers, Kovobel UK have agreed with the manufacturers in the Czech Republic to import the space-saving containers exclusively.

Kovobel Flat Pack Stores are fully constructed from galvanised steel; giving a corrosion-resistant and strong build quality from a company dedicated to unfaltering customer service. Using exterior supports, Kovobel Containers save on interior space and provide clean flat walls for shelving, cabinets and desks; making them effective as garden sheds, garages or cabins.

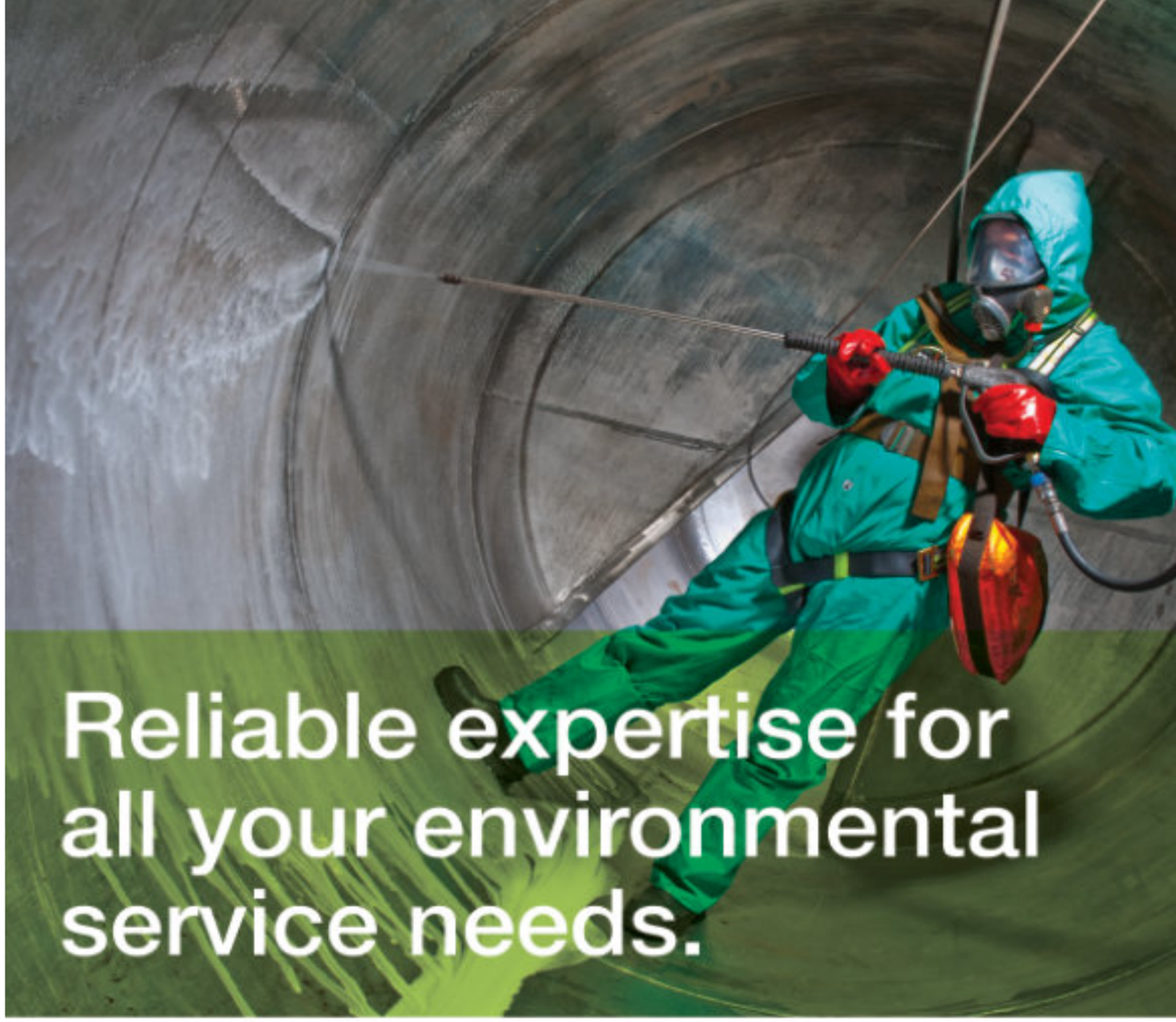
With a great range of optional extras available to customise your container, there is a configuration for everyone. Windows, doors, shelves & integral bunds are just a small portion of the options available. All these add-ons make it possible to build a site hut or work shed; PLUS you can pack up and fold it away. Transporting your container couldn't be easier, take it to any site, pop it up and away you go!

Light to carry

Collapsible containers offer a flexibility that other storage containers just can't compete with. Taking only 2 men a matter of minutes to put together, they effortlessly provide functionality & convenience. Each wall of the containers is light enough that it can be carried by hand.

They also provide cost-effective chemical stores in the form of bunded containers with a grid floor. Ideal for storing COSHH products and hazardous liquids, the bund built into the container catches spillages before they cause harm. Kovobel UK also supplies an open-sided container or universal shed. Perfect for storage bins or for use as a bin store!

The new website is live at **www.kovobel.uk** and there is a brand new stock near Salisbury. They're ready to go! Please contact their sales team on 01722 548223.



- Tank and vessel cleaning
- Interceptor cleaning
- 24 hour emergency spill response
- Fuel uplift & transfers
- Grade changes
- Fuel recycling
- High pressure jetting
- Foam filling
- Tank decommissioning and removal
- Water filling and dewatering
- Waste management
- Forecourt maintenance

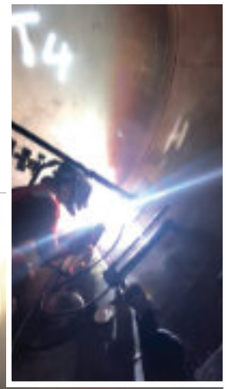
For more information about Ancorra Environmental Services

ancorra environmental services

apea

ancorraenvironmental.co.uk 0151 546 3012

Arnold Diggle & Co Ltd
Comprehensive & Competitive



Arnold Diggle & Co Ltd have been a well-established company since 1974. Based in Cumbria, they initially focused on the servicing of petrol pumps for:

Many local independent garages • Local authority sites

Approved contractors for high security clearance sites, such as Sellafield Ltd and BAE systems.

The company has evolved over the years into a comprehensive service and construction-based company, carrying out a wide range of projects on a variety of oil depots throughout the UK.

The range of tank services we can provide are:

- Tank & vessel cleaning/degassing on above and below ground tanks
- Internal/external tank blasting for inspection
- Ultra-high pressure water jetting works
- Independent tank inspection to EEMUA 159 by a qualified inspector.
- Comprehensive repair works undertaken on storage tanks following inspection report
- Tank jacking and rotation for Installation of compensation plates
- Site decommissioning and removal of oil tanks
- OFTEC registered for domestic and commercial tank Installations

Arnold Diggle & Co Ltd have been involved in many projects over the years on different aspects of tank work; this ranges from minor repair works, entire floor plating, to tank removal works and installation of new replacement tanks with offloading header cabinets and the fabrication and installation of all associated pipework.

We offer a highly competitive service, which has seen us being awarded many projects in an increasingly competitive market.

Please get in touch for more information.
www.arnolddiggleandco.co.uk

Triscan build new fuelling facility

Kent Fire and Rescue Service is the statutory fire and rescue service for the administrative county of Kent and the unitary authority area of Medway. This covers a geographical area south of London, to the coast and including major shipping routes via the Thames and Medway rivers.

Together, The Triscan Group successfully provide fuel management and support to 19 Kent Fire sites.

When Kent Fire opened a new site in Ramsgate, they reached out to Triscan to provide their new fuelling facility. As this was a new site, it was essential to work with Kent Fire to reduce time on-site and organise appropriate delivery dates.

Pre-installed equipment

To help with the process and to meet various health and safety protocols, all equipment was pre-installed off-site prior to the 10,000-litre cylindrical diesel tank being delivered. Our engineer worked to install the 56 LPM dispensing pump and Sigma 750 fuel management system inside the lockable cabinet. This cabinet ensures the equipment is tidy, in one place and is further protected by roller shutter doors to for extra security against damage and fuel theft. On top of this, a specialist lockable manway cover was installed to the top of the tank, as the customer had directly had a problem with fuel theft direct from the tank prior to this installation.

The project management team then worked together to organise the tank delivery followed by a fuel delivery. Lining up fuel deliveries like this enables our team to 'wet test' the tank and ancillaries. This ensures there are no leaks or damage and everything is working correctly. On this occasion, electrics hadn't yet been turned on on-site, so our engineer revisited a few days later to complete the commissioning of fuel management and check the pulse rates.

The customer was then provided with a calibration certificate and warranty.

For further information please contact
kerry.whittaker@triscansystems.com
www.triscansystems.com

Tank management from TSG

TSG's exclusive partnerships with Fenotec and ProGauge provides the UK fuel retail industry with safe, fast, cost-effective solutions, with minimal disruption to your site:

Tank lining

TSG's strategic partnership with Fenotec introduces a pioneering tank solution for the UK. Using a patented mounting system, the durable leak protection lining solution can be installed in just a few days, providing years of protection to underground tank units. Unlike traditional GRP lining, the bladder lining can be removed and reinstalled with the least amount of downtime and impact on your business, throughout its lifespan.

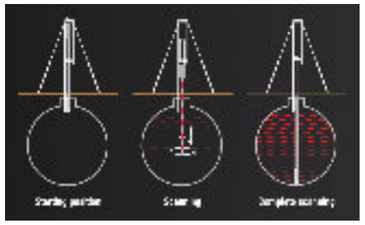
It is suited to situations where a tank leak has occurred, if an alternative fuel is to be loaded, or if tank coating is not an option due to high levels of internal corrosion. The solution reduces costs, increases safety and provides long-term environmental protection for your forecourt.

Key benefits

- Cost savings: the tank lining solution reduces labour and material costs by up to 75% compared to tank replacement, and by up to 35% compared to an epoxy liner system.
- Reduced site downtime: the tank lining solution takes just a few days.
- Future proof: the liner gives old tanks new capabilities, equipping them to handle a variety of fuel types and biofuels in the future.
- Environmental compliance: the tank liner is made of high-quality materials that comply with current regulations for a long-lasting life.
- Improved safety: the process is unmanned with no need for personnel to enter the tank, reducing the health and safety implications.
- Class 1 Vacuum Monitoring System
- EU quality certified EN 13160-7

Tank calibration

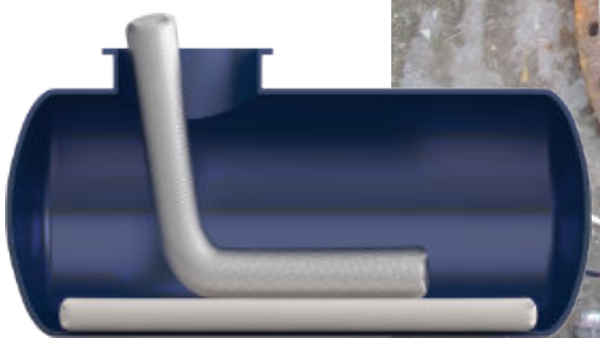
TSG's 3D Laser Scan Automatic Tank Calibration service, from ProGauge, produces a detailed representation of the inside of any tanks, for perfect calibration and accurate reconciliation. An industry leading solution, using state-of-the-art technology to accurately and quickly determine the exact volume of liquid in fuel tanks, producing a detailed representation of the inside of any underground tank.

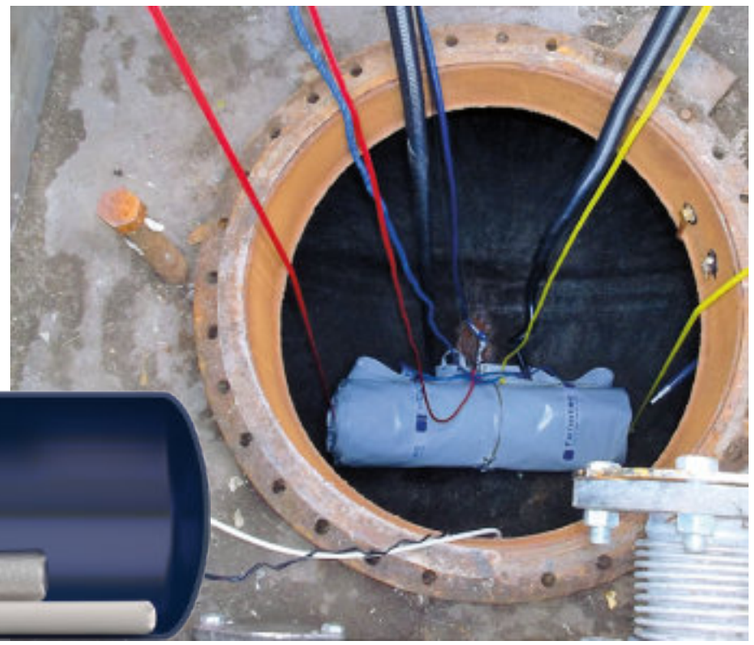


Advantages

- Automatic accurate metrological strapping table creation
- Laser points cloud technology
- High-speed scanning
- Safe ATEX – no need to de-gas the tank
- Easy to manage and set up
- Environmentally friendly; no fuels or other liquids liquids needed to perform calibration
- Suitable for any underground tank
- OIML R71 approved

To find out more about TSG's Tank Management services and products call **01162 437 476** or visit **www.tsg-solutions.com/uk**

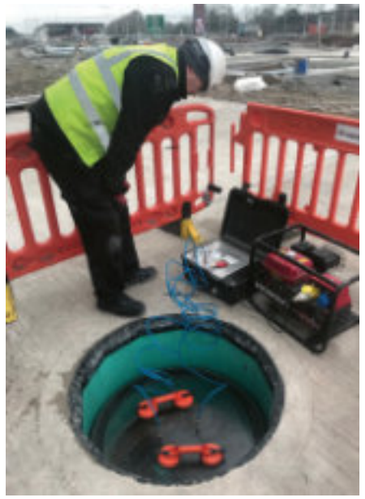




The 'ATLAS' modular chamber system
from Berrys Technologies

Berrys Technologies' ATLAS (Advance Tank Lid Assembly System) MONO will soon be installed on its 3,500th tank compartment! Since its inception in 2006, the Chamber (now in its 2nd generation) has been by far and away, the most popular chamber system installed in the UK.

The product is installed on around 80% of new tank installations in the UK. Supermarkets, oil companies and independent dealers, enjoy the benefits that the ATLAS MONO system delivers!

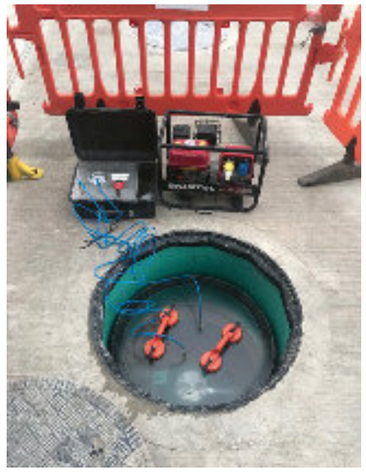


The chamber is welded directly to the tank during its manufacture. Coated in the same endoprene, it becomes an extension of the tank; benefiting from the same constructional life expectancy of 30 years. Once welded, it also eliminates the potentially troublesome leak path that comes with an upstand and bolted chamber system. With all the tank lid fittings, pipework transitions and pipe entry boots also installed at the factory, the savings on site installation time and, ultimately cost, can be considerable.

Our specialist in house team work closely with architects, contractors, and the tank manufacturer Wefco, to ensure each chamber is fitted out to match the site layout. You send us the drawing and an order, and we take care of the rest!

Suction system, pressure system, offset fill or direct fill, the ATLAS system covers all bases!

Once installed, Wefco vacuum test the system to ensure it arrives on site sealed; and our field engineers carry out a final vacuum test at the end of the project, once all gauging and monitoring works are complete. Unlike other chamber systems, all MONO components can be rectified at any point from within the chamber, giving the contractor peace of mind and freedom (and another cost saving) to backfill the



pipework from the chambers at any point, to their construction programme.

The ATLAS Mono is also available to retro fit on site to existing tanks. The Gen 2 Retro system is welded directly to the existing tank lid flange; so not only does it become an extension of the tank, it eliminates the need for a buried, future inaccessible, gasket between tank flange and new chamber/adaptor plate.

Existing sites can present many different obstacles. Our team can survey your site and existing chamber set up, and ensure a seamless installation process. The Gen 2 Retro Mono can be installed on existing tanks chambers as shallow as 500mm.

www.berrys.com

Growth in NDT testing
Adler and Allan expands NDT Testing team

Environmental risk reduction specialists Adler and Allan expands its fuel and energy offering; growing its non-destructive testing (NDT) team, offering customers a high level of experience and technical knowledge of tank inspection and assessment.

Adler and Allan's market-leading NDT testing and analysis methods will be used for storage tanks, pipeline and well inspection, offering customers the most accurate and precise inspection available.

The team are British NDT Institute PCN Level 2 qualified and have full EEMUA and API recognition. They boast a wealth of international experience in all sectors, working with some of the world's biggest organisations.

The service quickly identifies degradation, corrosion, weakness, cracking and welding defects, before damage occurs.

This includes leading edge magnetic flux leakage techniques and innovations for remote access to difficult reach areas.

Justin Burton, NDT Manager, said;

"Adler and Allan's inspection department provides an integrated approach to cost-effective, optimised inspection solutions that improve the safety, environmental and operating performance of storage vessels and piping assets, while ensuring they meet

regulatory requirements. We are proud to offer the whole package including cleaning, inspection, maintenance and servicing.

We operate a specialist inspection team that concentrates on corrosion detection, sizing and servicing the storage tank and pipeline market within the petro-chemical and tank storage industries."

Andrew Clarke, Director, Forecourt Division, said;

"The appointments support the growth of our fuel and energy business allowing us to deliver a full turnkey solution to clients. We can perform the testing on customers tanks as well as suggest and undertake any remediation work required. We provide solutions to fuel problems, keeping systems safe, functional, compliant, resilient and sustainable."

www.adlerandallan.co.uk

Biocides: Best practice & use when tank cleaning

Fuelcare

Readers will be well aware of microbial growth in fuel tanks; the sludges and slimes found on tank bottoms and walls that often block filters or corrode tanks, but awareness of treatment options is often less well known. The subject is complicated by differing advice from different bodies as well as procedures, fuel test methods and specifications changing regularly.

New PEIMF member, Fuelcare, have vast experience in this field and share their knowledge with us here.

Fuel microbiology sits at the intersection of engineering, chemistry and biology. Industry knowledge varies, and specialists such as ourselves have been providing advice for over thirty years. The issue affects any hydrocarbon in storage where, under optimal conditions, microbes can replicate exponentially, leading to rapid growth of sludges and slimes on tank bottoms and walls which lead to filter blinding, fuel starvation as well as microbial induced corrosion (M.I.C.).

Snake oil?

Whilst sampling & testing are straightforward, the use of biocides can be unclear. Over many years, we have heard industry professionals decry their use completely; often described as 'snake oil'. Others believe they cure a huge range of issues and are used too frequently, but most industry leaders maintain biocide procedures.

The simple equation for microbial growth is;

'No Water' = 'No Bug'

If water can be completely removed from the fuel supply chain storage, microbes have no medium on which to live and breed. However, even the best fuel housekeeping procedures and storage systems cannot completely prevent the buildup of water.

If supply chain partners cannot prevent the growth of microbes in their fuel, how can end users maintain their fuel storage if it is potentially being contaminated every fuel delivery? This is where fuel biocides come in; as a curative or preventative maintenance solution.

What are fuel biocides?

Fuel biocides are chemical fuel additives that are designed with chemical mechanisms to partition between the fuel and water phases of a fuel tank (and microbes may reside in both parts of the tank). Good biocides are often described as 'broad spectrum' i.e. they eradicate as many species of microbes as possible and neutralise a tank of live, microbial growth in 6-7 hours.

Where end users have discovered microbial growth, biocides can be used in less severe cases as a complete solution. However, their use must not replace tank cleaning, because other contaminants may continue to reside in fuel storage that requires physical removal. Conversely, in some instances, microbial growth is so severe that biocides may not penetrate a large buildup of sludges without physical agitation.

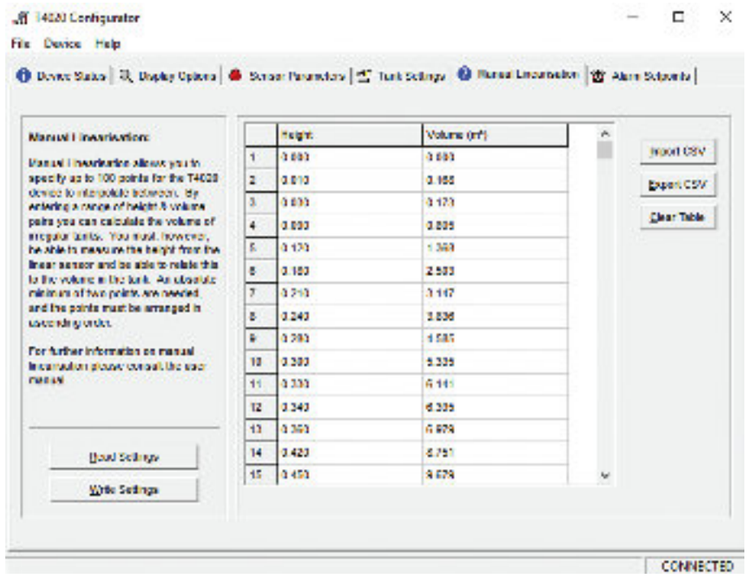
On-going maintenance

In all cases, biocides should be used as part of an ongoing maintenance regime: with bottom sampling, testing and tank cleaning. However, where microbial growth has been detected and biocides then used, it is important to remember that the biocide does not remove the dead matter, the microbial biomass, even though 'dead', will continue to reside in the tank without some form of physical interaction. In less severe or moderate cases, a biocide can be employed quickly and cost effectively to solve the contamination issue and, in most cases, can be caught by bulk filtration after being broken up.

Finally, when tank cleaning has been employed, biocides can help break up the contaminants prior to man entry, reducing the time spent within a dangerous environment, but also used when tank cleaning has been completed. Tank storage systems are only as clean as the fuel delivered. If your tanks have been cleaned at great expense, using a biocide with the first refill, or thereafter on a preventative basis, can prevent the reoccurrence of microbial issues.

www.fuelcare.com

Monitor content *and* bund levels



Kevin Attrill (Technical support at OLE) explains the importance of monitoring high level as well as bund levels.

"The idea of a bund / outer tank level probe is to provide a warning if the inner tank has a weep or a split. However, as most inner tanks have an overfill pipe venting into the bund, any significant overfill can put liquid into the bund as well.

We frequently see tanks that have liquid in the bund that has been left there for years. This liquid in the bund / outer tank is likely to suffer from SRB's (sulphur reducing bacteria) corrosion more than the inner main tank, as there is almost certainly some water moisture, fuel, and very little fluid movement. This in theory could mean the outer tank corrodes sooner than the inner tank.

On the OLE Gauge systems; if the bund alarm activates, a local siren sounds and a "B" is shown on the display. When the alarm is acknowledged a set of crossed hairs are shown on the gauge, so you can always tell if the bund has liquid in it. If it isn't already, this should be part of the tank inspection process.

Tina Clarke (Sales Manager at OLE) points out that the new T6100-2 Blind Tank monitor range also has the capability of monitoring bund condition, along with tank contents, and reports this to the www.yourgauge.com web site. This can then generate e-mail alerts to multiple users, and they are under £400 to trade customers. Battery powered / Solar powered / 24vdc powered options.

OLE have also developed a 4G modem system for use in Australia now, and other places around the world as the 4G demand increases.

Marinas

Tank Gauges for marinas and boats have been notoriously vague, often just showing ¼, ½, ¾ and full. The OLE 5020 series has the option to enter strapping tables which basically is a table of the dip expected values in litres against height. This can be entered manually or pulled in as a .csv file format. So, we can provide accurate readings for any shape of tank.

These gauges can be supplied as ATEX or IECEx versions depending upon products in the tanks.

www.oleuk.com

Introducing 'VESTA'

The Vehicle Energy Station of the future, from Ledbury Welding

Ledbury Welding & Engineering Ltd (LWE) are leading manufacturers of high quality above ground bunded fuel storage tanks for diesel, petrol, oil and other highly inflammable products.

Since pioneering the Totally Enclosed concept for above ground diesel storage, their services have expanded year-on-year. They have developed a team of experienced engineers, and can now provide a full turnkey package including: Installation works, tank decommissioning & refurbishment, environmental site audits (PPG2) plus a wide range of bunded tanks for hire.

Our industry is facing many challenges and the creation of alternative fuels, as well as the development of new methods of vehicle propulsion, has dictated that to survive and prosper; the car industry must follow government policy, by delivering new production models for the mass market.

VESTA – for the future

Looking at the future of the industry, are we able to confidently predict that the current blueprint for PFS design will meet the needs of the customers in the medium to long term? Continuing to follow this model may result in fixed, inflexible installations where the cost of change or decommissioning may not be 30 years + but in the region of 15 years.

Should this be the case, then the solution, is a design that not only meets the need of today's marketplace, but also has the flexibility to change, adapt and incorporate the need of vehicle propulsion and energy for the future. Having considered this, the PFS of the future may change significantly, and there will be a need to provide flexible, adaptable and cost-effective solutions.

At LWE they believe that their Modular Above Ground Units do this, by meeting the needs of the motorist and the developing needs for petrol, diesel, EV and alternative fuels by giving the customer a Vehicle Energy Hub. Hence they have developed, with their strategic partners, VESTA Vehicle Energy Station.

VESTA delivers on the following

- Flexible for future vehicle energy needs, driven by environmental change
- Proven design that delivers the requirements for a modern fuelling station
- Ability to integrate future alternative fuels and technology, cost effectively
- The alternative solution that maintains asset value through whole life cycle

www.lweltd.co.uk/tanks/tank/vesta

Tank supply – taken care of

Whether you are installing a new forecourt or general fuel storage project, then partnering with Cookson & Zinn is the easy solution. Ensure that the tank supply is taken care of, so you can focus on progressing the remainder of your project.

Cookson & Zinn (PTL) Ltd is a UK based tank manufacturer with nearly 60 years' experience; designing, manufacturing and supplying tanks and vessels to the highest standards. The company is part of the international Franklin Fueling Systems Group, giving the back-up of a robust corporate organisation, experienced in working with all the main players in the fuelling industry.

Cylinder and rectangle

The company's capabilities cover cylindrical section and rectangular tanks in both carbon steel and stainless steel; in capacities up to 125,000 litres for underground tanks and up to 250,000 litres for above ground tanks. In addition, CZ have the engineering experience to design specialist tanks and more complex pressure vessels.

The tanks and vessels can cover a wide range of storage requirements; from petrol and diesel to specialist designs for biofuels, AdBlue, and even LPG. CZ supply both upstream and downstream process tanks, as well as fuel storage for airports and individual fleet operators. Other sectors include specialist fuel storage for back-up power generators at data centres or server farms, plus general liquid storage for chemical process, food and beverage process and many other areas.

To achieve its position in the marketplace, Cookson and Zinn have been leading innovation to support both contractors and operators with evolving solutions including;

BaseFrame:

A system that simplifies the installation of underground tanks, reducing health and safety risk for the installer. Combined with a saving of time and money during installation, for a fast and safe project implementation.

BioBase:

A development in the design of tanks for biofuels, which helps control the water ingress problem inherent with biofuels. Not only does this make the operator's job easier, but it also extends the tank life for the site owners.

Fuel Bank:

CZ have successfully provided this system of tanks, complete with integral dispensing, to give cost effective and easy to implement solutions for smaller fuelling operations; such as for fleet operators.

In supporting its customers, Cookson and Zinn's one-stop tank supply starts with its sales team, who work with customers and their designers or contractors, in optimising the best tank solution to fit in the project. This can be based on cost, ease of integration into the rest of the project and consideration of the most versatile solutions.

3D modelling

After order, the process starts with engineering design based on 3D modelling software to give optimal product concepts. These are then built utilising the factory's semi-automated manufacturing processes in accordance with the ISO9001 accredited quality standards. This ensures consistently structurally integral tank solutions. In-house shot-blasting, external, and any internal surface coatings are applied at the time of manufacture to ensure the highest degree of protection.

The factory can also supply and fit related ancillaries, as well as insulation and cladding, to enhance thermal efficiency. To complete the package, Cookson & Zinn are also experienced in shipping the finished tanks to site ready in the UK or abroad for the contractor to install quickly and safely.

So, if you are installing a new forecourt or fuel storage project, then partner with Cookson & Zinn to benefit from their experience in supplying high quality and cost-effective tank solutions.

To contact Cookson & Zinn to assist with your tank and vessel requirements, contact: **info@czltd.com**
or visit: **www.czltd.com**

Remote tank inspection

Adler and Allan exclusively introduce non-man entry, ATEX Zone 1 AdlerView™ device

Adler and Allan are market leading environmental risk reduction specialists. They are understandably proud to have exclusively introduced AdlerView™, a non-man entry, ATEX Zone 1 device for tank cleaning and visual inspections.

They share the news with us here.

The market leading ATEX Zone 1 camera can be used to remotely inspect fuel tanks both above and below ground, from a van positioned up to 50 metres away.

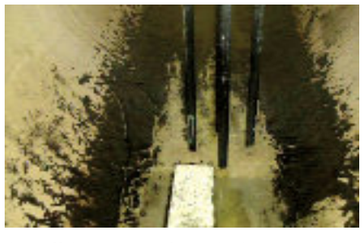
This device vastly reduces the costs associated with removing tank lids and improves health and safety of traditional man-entry tank inspections.

As well as being ATEX Zone 1 registered, the AdlerView™ has improved lighting, control & movement and is waterproof. A full report and video of the inside of the tank will be produced on behalf of the client.

Fast accurate diagnosis

Andrew Clarke, Forecourt Services Managing Director, Adler and Allan, said:

"The AdlerView™ means that clients can get faster, more accurate diagnosis of issues, with video evidence, meaning less downtime for their customers. The device also reduces the health and safety risks of man-entry tank inspections, as well as significantly reducing the associated costs."



A scaffolding board found inside a tank. Apparently the plank was left inside by mistake when undertaking a tank lining job. This was on or very close to the gauge floats and obstructed the clean.

This follows the news that Adler and Allan recently acquired LCM's Fuel FM division, making it Britain's biggest fuel management and quality provider. The AdlerView™ will be used on forecourts and defence sites across the UK.

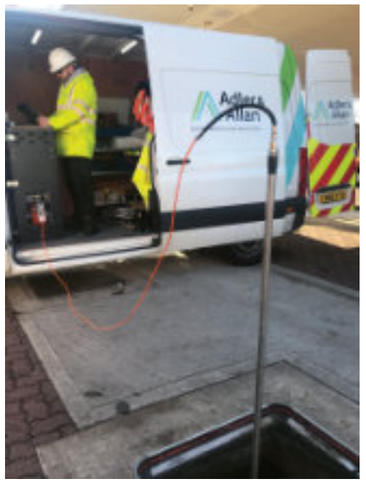
Adler and Allan provide market leading environmental risk reduction through preventative and responsive solutions, offering an expert 24-7 service to its customers. They give their customers peace of mind in detecting and identifying the environmental risks posed to their business. Its broad range of risk mitigation products and services keep businesses strong, reducing the prospect of litigation, costly fines and bad publicity, as well as reducing the threat to the environment.

In a world where the environment and legislation are in constant flux, Adler and Allan also provides emergency response in a variety of settings. Customers include multinational blue-chip organisations across a wide range of sectors both private and public including defence, utility, marine, fuel, forecourt and facilities management.

A&A by numbers

- Over 20 depots across the UK
- UK's largest response group with over 500 trained operating staff
- Over 10,000 emergency pollution callouts each year for the last five
- 250+ UK organisations have emergency response contracts with Adler and Allan
- A & A maintain over 100 million litres of fuel at client facilities annually
- Completed 32,500 on-site tasks for clients during the last 5-years

www.adlerandallan.co.uk



Merkland Tank: A long and distinguished history

As a provider of specialist industrial tank services, Merkland Tank has long been recognised as a leader in their field. Clients include the Oil and Pipelines Agency, Nynas UK AB, Babcock, Amey, Balfour Beatty and Scottish Power.

Offering a comprehensive range of services that includes tank cleaning, supply, installation, removal and inspection, the company provides a full 360 turnkey solution for tank cleaning and maintenance throughout the UK across a wide range of sectors.

Managing Director, Robert Gibson said;
"Merkland Tank have a long and distinguished history with a first class reputation for quality and customer service. Over the years this, reputation has allowed us to advance into new sectors and make significant investment in our modern vacuum tanker fleet and advanced jetting equipment, up to 40,000 psi.

"Not only that, our extensive scope of services and ability to undertake the bulk of works in-house, means we can manage projects end-to-end and ensure all work is always carried out to the highest standards.

"Merkland Tank have a trusted team of long serving employees; some of whom have maintained the same customers' tanks for over 20 years. Following key contract wins, we continue to grow with a number of recent appointments across our Estimating and Maintenance departments."

Ewan Lindsay, UK Operations Manager at Nynas UK AB stated;

"Having worked with Merkland for over 15 years, they have consistently proved to be a reliable contractor for Nynas. They continually work to high standards and take a flexible, professional approach, whether proactive or reactive, and remain safety focussed throughout."

www.merklandtank.co.uk

Proactive tank protection

Abfad recommend proactive protection of storage tanks in the biofuel generation

Over the years, biofuels have been gaining increased public and scientific attention; driven by factors such as oil prices, the need for increased energy security and the concern around fossil fuels and global warming. But they also come with increased problems, particularly in the way they are stored.

Biofuels create a nutrient-rich breeding ground for bacteria, which in turn causes major problems for storage tanks. Biofuel is produced from biodegradable material, giving it the characteristics that make it attractive to biodegrading organisms.

Bacteria corrosion, also referred to as microbial induced corrosion (MIC), is a form of corrosion caused by the presence of microorganisms. These microbes can cause product deterioration, sludge and serious corrosion in tanks and pipework. Biofuels are particularly prevalent to bacteria corrosion. Diesel fuel, for example, provides ideal conditions for rapid growth of microbes even in the best maintained tanks.

Pitting corrosion

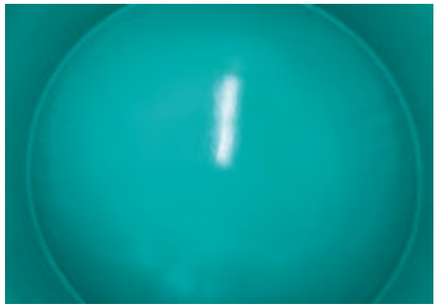
Pitting corrosion is a localised form of metal deterioration which displays as small pits or holes on the surface of the steel. It is probably one of the most common types of corrosion found in storage tanks and can lead to some very serious problems as the thickness of the metal is lost. If left untreated, eventually these pits will cause a breach and any stored product in the tank will enter the surrounding environment. Microbial bacteria can seriously increase the rate of pitting corrosion within a storage tank.

When looking at ways we can prevent a breach and damage to storage tanks from this serious form of corrosion, the most critical action we can take is proactive protection of the internal steel. Solving the problem before it begins.

The best solution to this is the application of a solvent-free resin coating, which is resistant to the stored fuel, either as a single skin or a monitored double skin system. This will stop any bacteria being able to attack the steel, preventing corrosion. The solvent free coating acts as an internal 'skin' within the tank, providing a barrier between the steel and the stored product and any bacteria which may exist within that product.

A solvent free coating is a coating that doesn't contain, or contains very little, solvents and volatile organic compounds (VOC's) which are harmful to people and the environment. Solvent free coatings also have a high solid content which means they are fast curing, resulting in minimum tank downtime. A coating can also be found to protect against most petroleum products as well as many chemicals.

Using a solvent free coating to proactively protect the internal tank steel has many benefits; importantly a greater level of thickness can be achieved when applying the coating, making solvent-free epoxy's typically one coat systems. The ability to achieve the required film thickness in a single coat along with the fast curing ability of most solvent free resins is a massive time saver and allows for a quicker return to service of the storage tank.



Adhesion to steel

These types of coatings also provide excellent adhesion to the steel and will dry to form a smooth tile like finish. They have a long and successful track record in tank lining.

Another option for proactive protection is to install a solvent-free double skin liner, which includes a monitoring system to supervise tank integrity, giving the operator further piece of mind.

When installing a lining system to protect your storage tanks, it's always worth remembering that it makes better financial sense to install whatever system you choose in a series of tanks on the site, as the costs are spread more evenly between the tanks.

Biofuel usage will increase in the foreseeable future, so proactive protection is important to ensure valuable assets are safeguarded and the environment is shielded from potential spills and damage caused by microbial induced corrosion. This allows you a greater level of management and planning; it also makes better financial sense in the long-term.

www.abfad.co.uk

EnviroCube Cab from Western Global

With over 50 years of experience, Western Global are one of our leading fuel storage suppliers. They are continuously ensuring all tanks are up to date with the highest standards and approvals; and provide a range of fuel storage tanks, ideal for temporary and permanent needs to suit various applications; complete with pumping equipment.

Fuel is the core function of every fuel distributor's business. Providing customers, in construction, farming, or retail, with the best product is vital to operating a successful business. Having a safe and reliable storage and transport solution can bring efficiency, and even revenue, to a distribution operation.

Western Global can supply a number of units and configurations especially suited for your needs. Smaller fuels tanks, like the TransCube, have proven their superiority for rent or purchase to customers onsite.and continually strive to implement unmatched, efficient innovations.

EnviroCube Cab

They have just introduced the EnviroCube Cab; a stationary fuel tank (5,331 – 50,000 litres) that offers superior security and versatility for stationary fuelling applications. It features a full height lockable cabinet, secure hose access, lifting eyes and access hatch. The EnviroCube Cab is ideal for large projects that require generator power installations or other standby applications.

The EnviroCube Cab, for Watsons Fuels holds 30,000 litres. This particular tank has been fitted in Newlyn Harbour, Penzance, Cornwall and will be used for the refuelling of fishing boats. The pump has an online management system that can track the use of fuel and the level in the tank making it ideal for the round-the-clock port.

Likewise for fuel management stations for fleet refuelling or dispensing fuel for sale, tanks can be fitted to become complete fuel management systems with the use to track and control fuel levels ensuring efficient fuel safety and accountability.

This product range is also suitable for bulk fuel purchases unit is ideal for refuelling vehicles, construction machinery and agricultural equipment efficiently.

www.western-global.com

Petrol Sign: Breathing new life into old car washes

Doncaster-based Petrol Sign have recently been employed to bring new life into old tired car and jet wash facilities, for several customers. With the current challenging trading climate, operators are increasingly looking at improving the look of their valeting offer, but without the high cost of replacing facilities. Combining their signware and cladding skills with state of the art vinyl printing capabilities, Petrol Sign are ideal to pull these projects together.

Free survey

After a free survey (preferably with the client on site) a decision can quickly be made regarding the level of refurbishment required. The work can range from simply vinyling over stained glazing panels with a graphic, to a full strip down, re-cladding, new lights, painting and vinyl pictures.

A recent project in Wentworth consisted of a wash building, looking very tired with faded and dirty cladding, dim lights and window panels; damaged by years of chemical exposure. The wash was completely stripped of old cladding, and new white panelling installed throughout. All the wash machinery was stripped down, painted and new graphics applied.

On the outside, the old windows had full length, high resolution picture vinyls applied to complete the new look. Finally, new lights were installed to make the wash bright and inviting for customers. The customer was extremely pleased with the final result and customers have been commenting on how much more appealing the facility is after the refurbishment work.

Brand new sites as well

Petrol Sign have also been busy adding large vinyl high resolution graphics to brand new wash buildings, as completed on the new Shell site in Frome. Adding high resolution pictures to valeting units seems to be increasing in popularity to try and differentiate new washes from the competition; driving new business by attracting passing trade to the facility. Again with their own printing facility and installation crews, Petrol Sign are ideally placed to assist the forecourt operators with these advertising products.

www.petrol-signuk.com

Fuel thief caught red-handed

Thanks to FuelQuip TG3M Alarm

Pennine Pump & Tank Co. recently installed the FuelQuip TG3M Fuel Theft Alarm at a Manchester City Council depot. By working closely with Greater Manchester Police, they managed to catch a thief red handed.

The FuelQuip TG3M is a cost-effective alarm, which detects any rapid drop in fuel, and then sends warning alerts. It indicates a possible serious problem with the tank, such as the integrity of the tank being compromised or with a possible major fuel spillage. Or, as in the case with Manchester, that fuel is being stolen.

"A lock only stops an honest person"
Unfortunately, onsite fuel storage tanks can be an easy target for thieves. It is therefore imperative to ensure that as many precautions and deterrents as possible are put in place.

Having a fuel management system installed is one of the first steps in highlighting any discrepancies between theoretical and book stock. If these figures don't tally, it can be a good indicator that something is amiss; either the equipment needs recalibrating, there is a possible tank/fuel line leak, or fuel is being stolen (which was the case for Manchester City Council).

The initial action was to calibrate the tank gauge and the pump meter with the fuel management system, to rule out the possibility of any fault with the refuelling equipment. Despite several checks of the pumps, gauges & management system, sadly the problem continued to persist. Something much more serious was obviously happening.

Here today, gone tomorrow
Manchester Council would receive a fuel delivery during the week but, come Monday morning, stock levels would be significantly out of sync again.

It became apparent that the fuel thief was utilising the weekends, when fewer members of staff were about. The tank was sited on the border of the compound, backing onto woodland, so the thief was totally hidden from view.

Location, Location, Location
When clients approach Pennine Pump and Tank to install or relocate a tank, they usually suggest along the perimeter fence, out of the way. However, whenever feasible, we always suggest the tank is positioned centrally in the yard. This serves two purposes; it creates an accessible refuelling island and also helps with visibility to prevent theft.

Manchester needed a cost-effective solution, and quickly. Moving the tank was not really an option; neither was hiring extra security guards and it would take too long to install and monitor extra cameras. Pennine suggested installing a cost effective, long life battery powered FuelQuip TG3M tank alarm; to produce warning alerts and notifications when a rapid drop in fuel is detected. These can be installed in under 5 minutes.

Teamwork
The Council alerted the Police to the problem and informed them of the new alarm. They agreed to work with the Council to try and catch the thief in action, giving consent to receive the alerts and to attend site.

Pennine Pump & Tank installed the FuelQuip TG3M Tank guard on the Friday and, at 1am Saturday morning, GMP received the notification that the Council were experiencing a rapid drop in fuel.

Units were immediately dispatched and arrived at the scene within minutes of the alert coming through. Officers found the thief in the midst of siphoning diesel into an IBC in the back of his van. He was swiftly arrested and placed in custody

Recommendations
Pennine Pump & Tank highly recommends installing the battery powered FuelQuip TG3M Fuel Theft Alarm in addition to high/low/bund/ overfill alarms and tank contents gauges.

It is an accurate probe that works independently of any other equipment, and detects when a rapid drop occurs. Plus, being battery powered, it works independently of any other tank gauge or monitoring system. As well as issuing warning alerts, it can also be linked to trigger a remote sounder and even be interfaced with existing intruder alarm systems for increased security.

Make sure you put security measures in place prior to fuel being stolen, rather than afterwards when it's too late. Victims are not only subjected to loss of money, but also suffer additional costs, such as replacing damaged tanks, severed fuel lines and any clean ups.

The old adage of "A lock only stops an honest person" is very true when it comes to fuel theft, as Manchester City Council experienced first-hand; and more units are now being installed across their depots.

The FuelQuip TG3M Tank Guard is perfect for fuel suppliers, farms, fleet operators, building sites and remote generators. It reports tanks contents level for trending usage patterns, with reports downloadable via a standalone user-friendly cloud-based software platform.

For more information please visit **www.fuelquip.co.uk**

Another 8 new PEIMF members!!

We accept and review new PEIMF member applications every 3 months, at our quarterly committee meetings. In February we welcomed the highest ever number of new members – 8 – so we must be doing something right.

The companies below have now joined the association and we look forward to working with them.

Falcon Fuel (N.I) Ltd
Retail, commercial installation & maintenance

Hunter Fuel Solutions
Fuel system installation, maintenance & servicing

Clarke Construction Services Ltd
Civils, installation & maintenance. Knockdown & rebuild

Propel Finance plc
Asset finance in the forecourt & convenience market

Regenesis UK Ltd
Remediation design & technical support

Tennants Distribution Limited
Chemicals distribution, Adblue manufacturing & distribution

Allego Charging Ltd
Pan European installer of electric vehicle infrastructure

Fuelcare Ltd
Fuel polishing, testing, sampling experts

If you're not a member yet, come and join us: 01474 321999

Directory of PEIMF members

A & G Group Ltd
01579 344503
www.aggroupltd.co.uk
Electrical and tank testing, supply installation and servicing of pumps

A & R Pavelin Transport Ltd
01268 270470
Distribution & collection of pumps and forecourt equipment

AbFad Ltd
0191 543 7166
www.abfad.co.uk
Tank linings, leak detection, rope access

Adler & Allan Ltd
01992 657400
www.adlerandallan.co.uk
Tank cleaning & lining, VR testing, fuel polishing, sampling & analysis. Spill response

Aidan Strain Electrical Engineering Ltd
02830 888861
www.aseeltd.com
Electrical & mechanical generator installation contractors

Air Fuel Systems
01268 928827
www.airfuelsystems.com
Systems to preserve aviation fuel

Air-Serv
01942 722333
www.air-serv.co.uk
Air lines, jetwash, vacuums, servicing, chemicals

Allego Charging Ltd
07444 515517
www.allego.eu
Pan European installer of electric vehicle infrastructure, including own network of 14,000+ chargepoints.

Alliance Inspection
01244 952531
www.allianceinspection.co.uk
NDT & asset integrity inspections

AMGS Electrical Ltd
0117 967 6500
www.amgselectrical.co.uk
Electrical contractors specialised in petrol filling stations

Ancorra Environmental Services Ltd
0151 546 3012
www.ancorraenvironmental.co.uk
Forecourt maintenance, tank & vessel cleaning, foam injection

Andel Ltd
01484 845000
www.andel.co.uk
Pollution control, tank & fuel maintenance

Andrew Simpson Electrical Services
01772 616826
www.andrewsimpsonelectrical.co.uk
Electrical contracting, maintenance on hazardous areas

Arnold Diggle & Co
01229 582769
www.arnolddiggleandco.co.uk
Tank cleaning, oil depot decommissioning/ demolition & remediation

Baltor Systems
02890 603232
www.baltor.co.uk
Design, supply & installation of fuel equipment

Berrys Technologies Ltd
0121 558 4411
www.berrys.com
MIDAS, OP, USpump spares, pipework, tank lid assembly, forecourt equipment

Broham Forecourt Developments Ltd
www.broham.co.uk
01206 210 455
Specialist principal contractors in retail forecourt & commercial fuel installation

Bulk Meter Services Ltd
01233 740134
www.bms-ltd.com
Supply, install & service bulk meters & registers for fuelling applications

Centaur Fuel Management Ltd
0870 757 6323
www.centauronline.co.uk
Installers of fuel pumps, tanks & fuel management equipment

Centre Tank Services
0121 351 4442
www.centretank.com
Fuel dispensing, storage tank and AdBlue equipment, Piusi products and Husky nozzles

Clarke Construction Services Ltd
01543 361636
www.clarkeconstruction.co.uk
Civils, tank and pipe installation and maintenance, knockdown/rebuild

Commercial Fuel Solutions Ltd
02380 231007
www.commercialfuelsolutions.co.uk
DSEAR specialist in fuel storage & handling systems, bulk metering, management, AdBlue

Cookson & Zinn (PTL) Ltd
01473 825200
www.czltd.com
Above & below ground fuel storage tanks and pressure vessels

County Pumps Ltd
01295 780746
www.countypumps.co.uk
Installation repair and service of fuel systems, pumps & fuel monitoring systems

C P Installations Ltd
01702 544442
www.cp-installations.co.uk
Tank & pipework specialists, electrical services, site maintenance, decommissioning

Craggs Environmental Ltd
0808 1644 570
www.craggsenvironmental.co.uk
Fuel testing, polishing & uplifts; tank cleaning, installation

D & S Forecourt Services
01463 715324
Pumps, tanks, pipes installation & maintenance

DM Petroleum Services Ltd
07836 587291
Pump & pipework installations, line testing

DMCS Ltd
01244 289161
www.dmcslimited.co.uk
Calibration of bulk liquid storage vessels

Dover Fueling Solutions
01695 52175
Fuel management solutions for independent, hypermarket and multinational.

DP Fuel Tank Services
01737 767524
www.dptanks.co.uk
Tank cleaning, decommissioning, lining, maintenance, fuel conditioning

Durapipe UK
01543 279909
www.plxpipe.co.uk
Manufacturer of plastic pipework systems

D R Forecourt Services Ltd
01691 610733
Installation of all equipment on petroleum/dispensing stations

E & S Environmental Services Ltd
01993 852419
www.eandsgroup.co.uk
Tank cleaning & testing, site maintenance, fuel services

EdgePetrol Ltd
0203 865 8689
www.edgepetrol.com
Software start-up providing real-time visibility to petrol retailers

Elaflex Ltd
01992 452950
www.elaflex.com
Forecourt dispenser nozzles & accessories

Equipe Environmental
01744 731462
www.equipeenvironmental.co.uk
Supply, install & test tanks, gauges, covers, pipeworks, pump spares

ETTS
01437 532511
www.etts.co.uk
Electrical installations, maintenance & testing

Eurotank Service Group
0800 311 2149
www.eurotank.eu.com
A group of forecourt engineering service companies

Falcon Fuel (N.I.) Ltd
0151 353 2870
www.fleetsolve.com
Biofuel combined heat & power systems

Forecourt Installation and maintenance
028 388 41215
Pumps & equipment service & installation

Franklin Fueling Systems
028 3885 2870
Pumps & equipment service & installation

Fuelcare Ltd
01743 360784
www.fuelcare.com
Fuel polishing, testing, sampling experts

Fuelcom
02890 410655
www.fuelcom.com
Install & maintain pumps, pipework, tanks & gauges. Plus risk assessment in Ireland

FuelMii
07917 644599
Fleet mobile refueling service

Fuel Proof Ltd
01524 850685
www.fuelproof.co.uk
Bunded fuel tanks, diesel bowsers

FuelQuip Ltd
0845 838 1048
www.fuelquip.co.uk
Suppliers of fuel management, pumps, tanks, gauges & alarms

Fuellink Systems
01698 841888
www.fuellinksystems.com
Manufacturers of commercial fuel management systems

Gilbarco Veeder-Root
01268 533090
www.gilbarco.com/eu
Pumps, commercial and AdBlue dispensers, gauges, POS, OPT, service & maintenance

Global-MSI
01302 361558
www.global-msi.com
Forecourt structures, canopies & signware installations supply & repair

Greenchem Solutions Ltd
07793 258876
www.greenchem-adblue.com
AdBlue and AdBlue tank manufacturer

GripHero Ltd
01752 875640
www.griphero.com
Design, manufacture and supply dispensers of disposable hand protection on forecourts

GT Forecourt Solutions Ltd
01268 780109
enquiries@gtforecourt.com
Forecourt maintenance, construction, pipework installation

Hazardous Area Technical Training
07484 517059
www.hatt.uk.com
H&S training & advisors, SPA passports, IOSH & confined space training

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Htec Ltd
02380 689200
www.htec.co.uk
Epos, payment & loyalty solutions, back office, head office, installation & maintenance

Hunter Fuel Solutions
07766 807645
Fuel system installation, maintenance and servicing

Hytek (GB) Ltd
01279 815600
www.hytekgb.com
Fuel dispensing & management, lubrication products

Ideal Tanks & Pumps Ltd
01604 843359
admin@idealtanksandpumps.co.uk
Supply, maintenance & installation of tanks, pipes. Tank cleaning & decommissioning

Industrial Services
01334 838793
www.fuelworking.co.uk
Fuel equipment supply service and maintenance

Istobal UK Ltd
01299 826967
www.istobal.co.uk
Install, maintain & repair forecourt valeting equipment

Jackaman Ins Services Ltd
01474 557427
www.jackamaninsurance.co.uk
Specialist insurance services to the petroleum industry

James Blake & Co (Engineers) Ltd
0131 554 1646
www.blakegroup.co.uk
Storage tank manufacturers and steel fabrications

Judvia Construction Service Ltd
01594 826364
www.judviacs.com
Forecourt branding specialists, accident repairs and new companies

J W Hinchliffe (Tanks) Ltd
0113 263 5163
www.jwhtanks.co.uk
Tank cleaning, removal and disposal services

Kidderminster Petroleum Services Ltd
01562 861636
www.kidderminsterpetroleumservices.com
Petrol forecourt Installation, maintenance and service

LCM Environmental Ltd
01884 841387
www.lcmenvironmental.com
Tank care, environmental services, decommissioning and remediation

Ledbury Welding & Engineering Ltd
01531 632222
www.lweltd.co.uk
Bunded tank manufacturers, SuperVault modular filling station

Lees Industrial Services Ltd
01508 471600
www.leesindustrialservices.co.uk
Decommissioning, BritFoam & fuel disposal

L.I.S (North Western) Ltd
01942 722244
www.lisgroup.co.uk
Tank cleaning, product transfer, tank removal, interceptor cleaning

LS Forecourts Ltd
07921 392577
www.lsforecourts.co.uk
Pumps, pipes, tanks, gauges, sales, service, installation and repair

Mantec Systems Ltd
0191 280 4015
www.mantecsystems.com
Additives to protect, clean and maintain fuel

M & S Construction Group Ltd
01299 890348
www.mandsconstruction.net
Drainage specialists, groundwork and civil engineering

MDM Services (Cardiff) Ltd
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Installation and maintenance of forecourt and commercial fuel products

Merridale Ltd
01902 870037
www.merridale.co.uk
Fuel management systems for commercial diesel supplies

Merkland Tank
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www.merklandtank.co.uk
Storage Tank Cleaning and Maintenance Services throughout the UK

Nanovapor
07854 195162
www.nanovapor.com
Degassing fuel storage tanks

Northern Pump Distributors
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www.npd.uk.com
Forecourt installations & associated services

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www.nupigeco.com
"Smartflex" complete multi-layer pipe system

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www.ohes.co.uk
Specialist insurers for the petroleum industry

O'Connell Site Services
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Tank installation, demolition, decommissioning, pump calibration

Octane Holding Group
0113 201 2460
www.octane.uk.com
Pumps, tanks, environmental and technical services

Oil Tank Supplies Ltd
01386 853409
www.oiltanksupplies.com
Fuel storage systems including hire and industrial tanks

O.L.E UK Ltd
01243 267930
www.oleuk.com
Manufacturers of tank gauges, pump controllers, alarms probes and monitors

On The Level
0780 0731489
www.onthelevleuk.co.uk
Installation & service of tank gauges, DCDs and associated equipment

OPW
01756 799773
www.opwglobal.com
Manhole covers, underground enclosures, tank & dispenser sumps

Orbis Tech Ltd
023 8022 7645
www.orbistech.com
Fuel retail software solutions; point of sale, back-office and head-office

Panks Engineers (Castle Hill) Ltd
01603 620294
www.panks.co.uk
Water specialists, dirty water, bore hole drilling, treatment and installations

Pennine Pump & Tank Company
01254 679099
www.penninepump.co.uk
Pumps, fuel management systems, tank, pipe and electrical testing

Petroassist
0131 440 5810
www.petroassist.uk
Fuel dispensers and forecourt technologies

Petrol Sign UK Ltd
01302 346968
www.petrol-signuk.com
Supply & install brand signage, sister company to Global MSI

The Petrol Tank Company Ltd
01283 820213
www.thepetroltankcompany.co.uk
Manufacture small above ground petrol tanks

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www.petrotec.uk
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www.pfsfueltec.com
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01442 872296
www.premiergroup.org.uk
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Project-A International Ltd
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www.project-a.uk
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01633 415222
www.propelfinance.co.uk
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Prime Fuelling Systems Ltd
01492 622664
www.primefuelling.com
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Protego UK Ltd
01543 420660
www.protego.com
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01692 500640
www.pumptronics.co.uk
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Pumpwatch Ltd
00353 458 92155
www.pumpwatch.ie
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Regenesis UK Ltd
01225 618160
www.regenesis.com/eur
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Risbridger
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www.risbridger.com
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R M Pumps (Cumbria) Ltd
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01782 414526
www.safefill.co.uk
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www.scotiaforecourt.com
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www.smiltd.com
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www.statechnical.com
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www.tpi-ni.co.uk
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www.fuelquality.co.uk
Fuel quality sampling and testing specialists

Tanks & Pipework Ltd
01474 855587
www.fassuk.com
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TLM Group
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www.tlmtechnologies.co.uk
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Transflo Instruments Ltd
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www.triscansystems.com
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www.united-pipework-specialists.co.uk
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Vectec Ltd
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www.vectec.co.uk
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Wales & West Services
01446 736900
www.wales-and-west.co.uk
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Western Global Ltd
01454 227277
www.western-global.com
Manufacturers of static and transportable above ground storage tanks

Westfield Services (UK) Ltd
01924 477324
www.westfieldservicesuk.com
Contractors for pumps, pipework, electrical and building work

Worcester Petroleum Services Ltd
01905 620053
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Yara UK Ltd
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www.yara.co.uk
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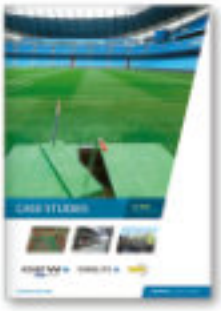

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