

## Power and Prestige

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# Powering One Of Central Europe's Largest Hospitals

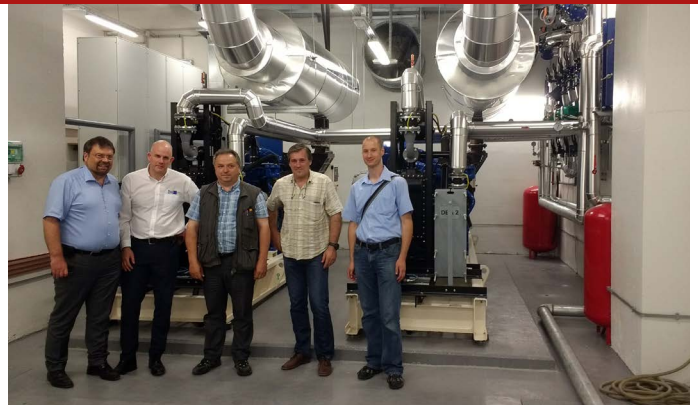
The Ljubljana University Clinical Centre, is the biggest public health institution in Slovenia and one of the largest hospitals in Central Europe, with almost 8,000 employees and beds for over 2,000 patients with over 115,000 patients admitted each year and almost 1.2 million out-patients.



The Centre is organisationally divided into a number of clinics, across the entire hospital campus, with six divisions and eight independent units and institutes.

Earlier in 2017, FG Wilson Slovenia dealer Prinsis successfully completed a comprehensive renovation and reconstruction of the hospital's standby power supply. At the heart of the project were two 1,500 kVA and two 1,000 kVA FG Wilson generator sets, installed to provide emergency and standby power anywhere inside the main hospital building and the new Medical Emergency Unit. Cooling for the two 1,000 kVA units is through heat exchangers and remote radiators installed on the roof of the hospital.

Hospitals have critical power needs and constant remote monitoring of the power system is important. Prinsis designed and installed complete automation of the power system, based on Schneider switchgear, Deep Sea control units and ESA control panels for local control and monitoring. Prinsis also designed monitoring software for the power system based on the Movicon platform. The complete generator set system is connected to the main control centre and to local monitoring computers, smartphones and tablets of the maintenance staff.



For Prinsis and FG Wilson, it was an exciting project to play a part in, not only for the engineering challenges but also playing a part in a hospital which is making a big positive difference to so many people.

To find out more about Prinsis visit [www.prinsis.si/home-page/](http://www.prinsis.si/home-page/)





# Coates Hire Renews Rental Fleet With FG Wilson

The long-term partnership between FG Wilson dealer in Australia / New Zealand, AllightSykes and Coates Hire took another solid step forward when a new fleet of 105 FG Wilson generator sets was delivered to Coates in June 2017.



Comprising of 50 trailer-mounted and 55 skid base generator sets, the purpose-built 14 kVA and 22 kVA units have been designed and built for long and productive working lives and will be hard at work across Australia.

The generator sets have been built with durable acoustic enclosures, skid bases complete with central lifting points for ease of transportation, outlets, terminals for connection of cables with a full range of protection systems available to suit many applications.

These versatile generator sets are used in building, construction, light and heavy industry, mining and resources, electrical testing, pumping and industrial

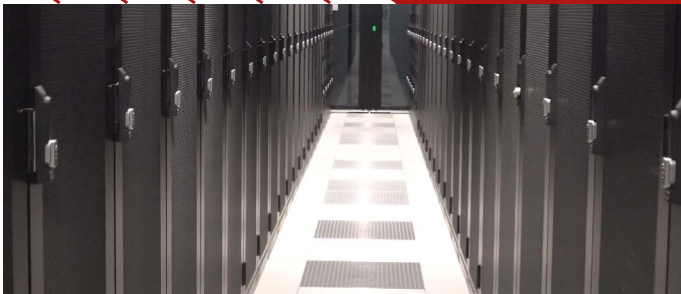
equipment, site power, process machinery, plant shutdowns and ongoing maintenance.

This project, the largest single volume delivery by AllightSykes for almost five years, was a collaborative effort between AllightSykes and FG Wilson to ensure that the generator sets met the rigours of the customer's design specification and gained complete customer satisfaction.

To find out more about AllightSykes visit [www.allightsykes.com/](http://www.allightsykes.com/)

# Delivering Emergency Power In The Netherlands

Considered one of the most connected countries in the world, the Netherlands is home to one of the most advanced markets for data centre operations in Europe.



About one third of all European data centres are located in the Amsterdam area, taking advantage of AMS-IX - the world's largest internet exchange.

Plus, the Netherlands' mild climate and robust renewable energy cluster provide sustainable and affordable options for data centre energy efficiency needs - from power production to cooling.

Based in Steenberghe, Nedzone is an ISO certified carrier and partner-neutral data centre offering colocation, selling bandwidth and hiring transportation capabilities to other data centres and offices.

Kemper en Van Twist, an FG Wilson dealer for over 20 years, began working with the Nedzone data centre in 2010, delivering and mounting three x P500P2 generator sets with CAE canopy. Located in the designated technical room, the generator sets ran in a N+1 configuration.

Due to expansion of the data center in 2016, increased emergency power was required. Kemper en Van Twist were awarded a contract to replace two of the three P500P2 models for P1750 generator sets, still in a N+1 configuration with the remaining P500P2 generator set. Yearly usage is 12 hours / year for test running and running during mains failure.



Keeping the data centre in service during the replacement process was a key consideration, explains Wilhelm Potters from KVT;

“Maintaining consistency of service was crucial throughout the delivery of the project, so we supplied the required temporary generator sets to keep all systems running in the N+1 configuration.

“The generator sets also had to fit inside the same technical room as the P500P2 generator set. We supplied the sound attenuation for exhaust and cooling air to meet the noise level, as the canopied P500P2 did outside the building.”

Nedzone can now look ahead to future growth, confident they have sufficient emergency power. With a strong relationship in place and KVT currently delivering a maintenance contract, a future order to replace the remaining P500P2 is likely.

For further details visit [www.kvt.nl](http://www.kvt.nl) or [www.nedzone.nl](http://www.nedzone.nl)



# Dieselec Thistle Generators Powers Up National Automotive Innovation Centre

Dieselec Thistle Generators, an FG Wilson dealer based in Glasgow, is underway with work to install the back-up power supply for the National Automotive Innovation Centre (NAIC) which is currently being constructed at the University of Warwick.



The 33,000m<sup>2</sup> facility will be a state-of-the-art technology hub for research teams and collaborative partners, to develop the vehicles and personal mobility solutions of the future. The NAIC will also focus on inspiring the next generation of engineers – from schoolchildren to undergraduates, to develop the skills required to help keep the UK globally competitive.

£150 million is being invested in the NAIC capital building and its research activities through a long-term commitment between Jaguar Land Rover, Tata Motors European Technical Centre, WMG and the University of Warwick, along with an expanding network of supplier companies. The government (Higher Education Funding Council England) has also provided £15 million of funding to support the capital project.

Dieselec Thistle Generators will install a 1250 kVA FG Wilson generator capable of remote synchronisation at two remote package subs for short term parallel return and testing. The plant room will also have 75 dBA attenuation with split inlet attenuation and motorised dampers utilising the mechanical plant room from the external wall as an air delivery pathway. The set also has a 24-hour fuel tank which is fill-able from a street level fill point. The set is installed in the second floor plant room with an extended exhaust flue to the atmosphere on the roof using a Schiedel lined ACS 5000 flue system.

To find out more about Dieselec Thistle visit [www.dieselec Thistle.co.uk](http://www.dieselec Thistle.co.uk)

# Powering Ahead In Turkey

Through centuries, Turkey's position on the world map has always played a key role in its economic development, connecting Europe with Asia and making the country a focal point of trade and commerce.



Recently, Turkey has seen some of the region's most exciting and ambitious infrastructure projects and it's also home to the largest city in Europe by population, Istanbul, with a population of almost 15 million and still growing rapidly.

Demand for quality electrical power has increased dramatically in that time. FG Wilson, one of the world's longest established manufacturers of generator sets, has been part of the Turkish economic landscape right through with a presence in the country since the 1980s.

FG Wilson are represented by FGW Jenerator Turkey, initially opening as a sales office and since 2009, a locally managed dealer with offices in Istanbul, Ankara, Izmir and Erbil in Northern Iraq, together with service centres throughout Turkey.

Koksal Er, CEO of FGW Jenerator Turkey says;

"We track urban transformation trends and we've been actively participating in many major power projects in Turkey, Northern Iraq and increasingly with Turkish contractors working on projects globally. We work very closely with developers on power projects from initial concept design through to installation and commissioning of generator sets. We've a dedicated team of specialist engineers for major projects and we work seamlessly with the UK-based FG Wilson engineering team all the way through each project."



This co-operation between dealer and factory has produced some strong results. In 2016, FGW Jenerator Turkey achieved full IBC seismic certification as part of a project to install 19 x 1700 kVA and 2 x 800 kVA generator sets at Skyland Istanbul, the second largest construction project in Turkey in 2016. The FG Wilson generator sets were manufactured in the UK, then tested and certified in Rome in July 2016 at the only shaker table test facility outside the USA able to accommodate machines of this size. This was the first time FG Wilson achieved seismic certification for large generator sets and is believed to be the first time a generator set powered by a Perkins 4000 Series engine has achieved full seismic certification.

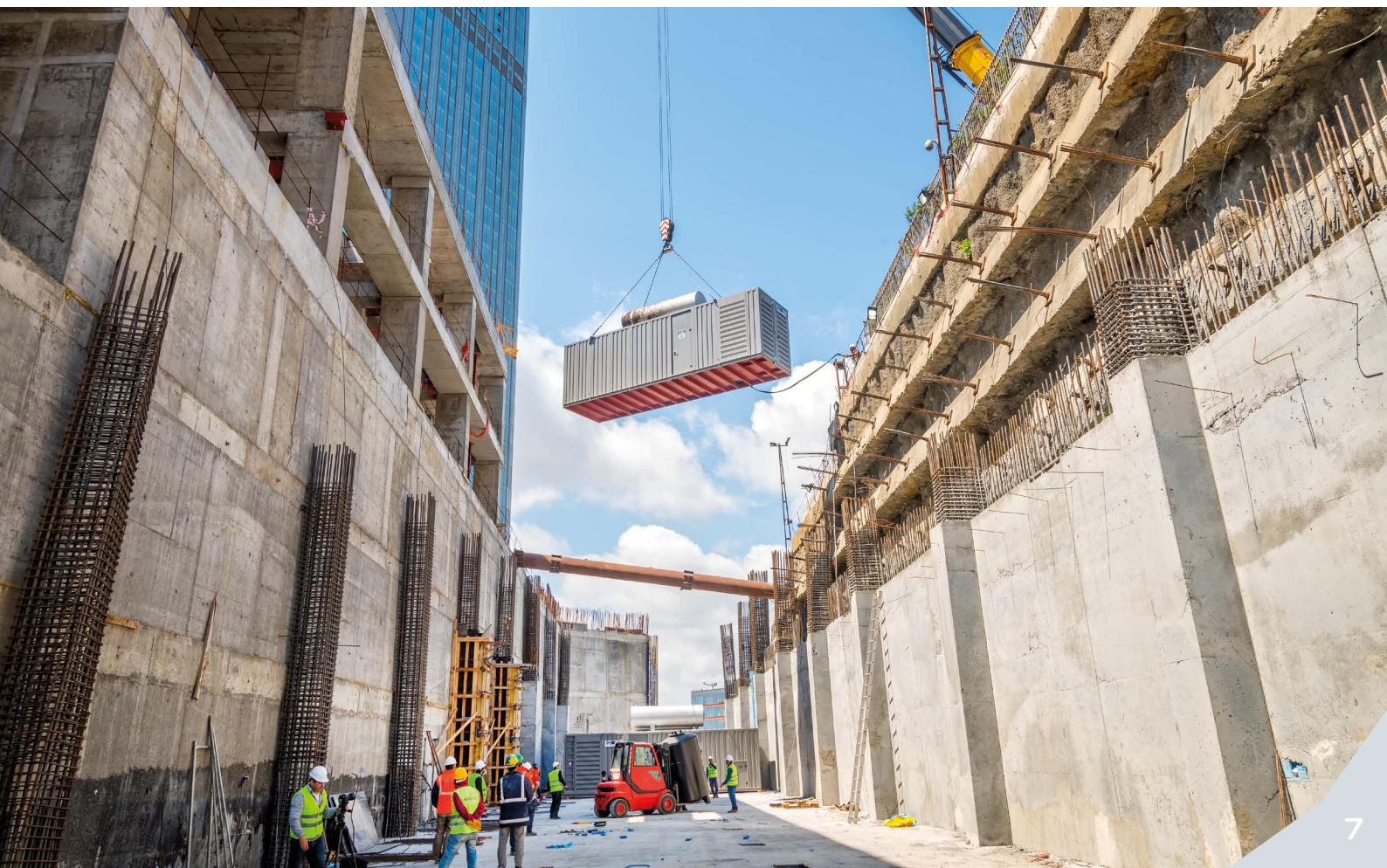
The list of projects completed by of FGW Jenerator Turkey reads like a catalogue of the country's most prestigious construction and infrastructure projects. One is the Yavuz Sultan Selim Bridge, a \$3 billion investment and the world's tallest suspension bridge, carrying eight lanes of cars and a two-way rail system across 2,164 metres of the Bosphorus Strait. The bridge relies for power on four 605 kVA generator sets for the bridge's towers, road lighting, tower escalators, service pumps, dehumidification units and architectural lighting.

In the last few months, FGW Jenerator Turkey has been working on standby power for one of Istanbul's most desirable new addresses, Pruva 34, developed by Doğa Madencilik, part of the Doğa Group, well known for projects that combine state-of-the-art technology products with contemporary architecture in safe, high-quality and durable buildings. Seven P900E1 generator sets were ordered to meet a requirement for 6,300 kVA and were installed as two separate synchronised groups. FGW Jenerator Turkey provided installation design of the generator room in accordance with local fire code requirements, also managing the design of the synchronisation panel and providing a consultancy service for sound isolation, seismic isolators and a daily fuel system.

Koksall says;

"It's an exciting time to be here and to see these amazing buildings and infrastructure projects take shape and it's wonderful to be a part of it. As each project completes successfully, we take that great experience and move on to complete new challenges."

To find out more about FG Wilson in Turkey, visit [www.fgwilson.com.tr/](http://www.fgwilson.com.tr/)



# What Goes In

Why fuel and fuel system maintenance are important.....



There's nothing worse than going to the expense of buying a generator set, then just when you need electric power, it won't start. General care and maintenance go a long way to help, but sometimes it's the things which are easiest to solve which cause problems – like fuel quality.

Diesel fuel starts to degrade almost from the moment it's refined and has a shelf life of 6 to 12 months at most. During that time, it's pumped through pipelines, transported and stored and then pumped into your fuel tank. All through this time, natural deterioration, build-up of condensation and opportunities for external contamination can all contribute to decline in fuel quality. Eventually this can cause the build-up in particulates in the fuel which will block or damage filters, fuel pumps and injectors.

But that's not the full story: during its lifetime, like any other organic liquid, diesel fuel starts to deteriorate, usually after about 100 days. The fuel begins to break down, fall out of solution, cluster up and drop to the bottom of the tank as a dark sludge. The fuel goes dark, smells bad and makes engines smoke. This is because some of the clusters can be small enough to pass through filtration and into the combustion chamber: the outer edges of the cluster get burned there but the rest goes out of the exhaust as unburnt fuel. As these clusters grow, they reduce the flow of fuel by clogging filters and eventually injectors will be ruined. Over time you'll see a loss of power, smoke from exhausts and a

bad smell of unburnt fuel. The less often you run your diesel engine, the more quickly these problems can arise.

The good news is there are some very simple steps you can take to prevent problems.

Always ensure that you fit genuine filters as specified in your operator manual. It's tempting to use lower cost filters which fit or to let routine maintenance slip to save money but in the longer term, this is only going to cause problems. Don't wait until you see a problem before you think about changing the filters.

Be careful that you buy fuel from reputable suppliers and that the tanker which delivered your fuel isn't containing diesel one day and something else the next.

Keep your tank full of fuel. This prevents condensation from forming which is the number one cause of algae growth within the fuel tank.

If you don't run your generator set regularly, remember the shelf life of the diesel in the tank. If you own a generator set from FG Wilson, you'll always have expert help. Your FG Wilson dealer can support and advise you on all the best practices for fuel system maintenance so that your generator set has a long and productive life.

For more information on FG Wilson parts, visit [www.fgwilson.com/en\\_GB/support/genuine-parts.html](http://www.fgwilson.com/en_GB/support/genuine-parts.html)



# Training For India Dealers

In August, our training team, with support from LPSP, ran product training for our dealers in India.



Attendees included 8 from GMMCO, 12 from TIPL, 2 From Unicorn, 1 from NRIC and 1 from VR Power.

The five day training was held in Satara and included:

- Features of two cylinder and three cylinder engines, and complete engine dismantling and assembly of 2 and 6 cylinder engines
- 2 cylinder chain and camshaft timing and IMV pump fitment
- 6 cylinder pump, crankshaft and camshaft timing
- Checking of sensors, connections, SMC 101, GC1122 and VAF controller programming
- Troubleshooting

- Use of Icomet service tool
- Application and Installation guidelines (foundation, earthing, exhaust piping, deration calculation based on altitude, ambient temperature, power factor and voltage)
- Single phase and three phase power calculations
- Load factor and fuel consumption calculations
- Case studies of site installations

The training was both classroom-based and hands-on and the trainers tell us that there was great enthusiasm and involvement from all the participants.

# Power For Speed

In the UK, and in many countries, there is a shortage of scientists, engineers and mathematicians.



One awe-inspiring project aims to encourage a new generation of people to embrace science, technology, engineering and maths (STEM) subjects at school and then at university: it's a project to build the world's fastest car, Bloodhound SSC, and reach 1,000 mph.

Bloodhound will be powered by a jet from a Eurofighter-Typhoon fighter together with a rocket hotter than a volcano. With its huge metal wheels spinning 170 times

a second, the equivalent of 135,000 horse power, Bloodhound will cover a mile in just 3.6 seconds, faster than a bullet.

FG Wilson dealer, Power Electrics, are among the sponsors of Bloodhound SSC. Power Electrics is playing a key role in ensuring that the Bloodhound team have the temporary power they need to achieve their mission, as they design and build a car to break the record. As part of





an ongoing sponsorship deal, the company is supplying the Bloodhound team with diesel generator sets and ancillary equipment for their major events across the UK.

Among the UK events is a trial at Cornwall Airport Newquay from 26th – 30th October, where the car will be undergoing “slow speed” (200 mph) runs on the 1.7 mile long runway at the airport, powered by its jet engine. Part of a series of key development tests for the jet engine, car and team, the event takes place 20 years after Thrust SSC set the current world land speed record of 763.035 mph and during the trials, the car will be driven by Wing Commander Andy Green, current holder of the world land speed record.

Richard Noble, Bloodhound’s Project Director, said,

“The runway trials at Cornwall Airport Newquay will be the biggest milestone in the history of the project so far. They will provide important data on the performance of the car and give us a first opportunity to rehearse the procedures we’ll use when we go record breaking.

“Just as importantly, it is a way of saying ‘thank you’, to the schools, students, families and companies, big and small, who support the project. We are proud



to be waving a flag for British skills and innovation on a world stage but, most of all, this is about inspiring young people. Last year alone we directly engaged with over 100,000 students in the UK and we have already seen more students take up engineering as result of Project Bloodhound. With the car running, we can showcase science, technology, engineering and mathematics in the most exciting way possible. Bloodhound is go!”

The expectation is that Bloodhound will head to Hakskeen Pan - a dried-out lakebed in Northern Cape, South Africa - in 2018 to begin its assault on an initial 800 mph target before then advancing to the 1,000 mph target.

Founded in 1963, Power Electrics are specialists in diesel generator hire, sales, service and parts and operate from five locations across the UK, including a London sales office, offices in the South West, South Wales, South Coast and Midlands and have the UK’s largest purpose built generator depot, with a fleet of over 1,000 generators and 15 HGVs.

You can find out more about the Bloodhound project at [www.bloodhoundssc.com](http://www.bloodhoundssc.com) and about Power Electrics’ involvement at [www.powerelectronics.com/about/bloodhound-ssc](http://www.powerelectronics.com/about/bloodhound-ssc)



# Monhorus International Attend Coal Mongolia 2017

In September FG Wilson dealer, Monhorus International, attended 'Coal Mongolia' a three day event taking place in Ulaanbaatar.

'Coal Mongolia' is an annual international conference and exhibition, now in its seventh year, with the objective of improving structure and conformity of coal export, trade, transportation, logistics and customs, as well as increasing foreign and domestic investments. Supported by the Mongolian government, the event introduces advanced technologies and aims to strengthen the competitiveness of the Mongolian coal sector in the Asian market.





# Social Media

This year Facebook has been our most engaging social media platform, proving to be a fast and effective way to talk to our customers. Here's some of our recent posts.

If you've ever visited our UK factory in Larne, Northern Ireland, you'll know we get a lot of rain. It means that even when we're not officially testing our generator set enclosures for water ingress, they're still being tested. And the sea air just loves to test metal as well. All of this plays a very big part in our thinking. As they say, every cloud has a silver lining.



FG Wilson Mongolia dealer Monhorus International has installed 8 generator sets from 50 to 1250 kVA at the New Ulaanbaatar Airport, a new all-weather airport, due to open in August 2018, which will serve 3 million passengers a year. Monhorus led the project with support from FG Wilson's UK team and from sister dealer Horus Energia. Monhorus have a very active Facebook page at [www.facebook.com/Monhorus.International.LLC/](http://www.facebook.com/Monhorus.International.LLC/)



Work is moving on well at Platov International Airport in Russia where our dealer ERIMEX has installed 5 generator sets: P1500E1, P1250E1, P1000E1, P900E1 and a P660-3 in sound attenuated containers with 85 dBA noise level and 1500 litre fuel tanks and electrical distribution systems, all capable of working down to -40°C temperatures. You can see two of them at the front of the photo.



Diesel Kragopwekkers is all for many years a famous face on farms and still probably the most adaptive and cost efficient way to provide it that functions can continue in times of Kragonderbrekings. FG Wilson build all for 50 years long kragopwekkers with over 600 000 what since 1990 worldwide work. Get more info [www.proagri.co.za/fg-wilson-boer-met-krag/](http://www.proagri.co.za/fg-wilson-boer-met-krag/)



Now we know that FG Wilson dealers climb mountains for customers. This installation at Baw Ga Li Water Distribution Centre is in a no-fly zone so our Myanmar dealer Ar Mahn Trading Co. Ltd, took apart a 70 kVA generator set, carried it to 2000 feet above sea level and rebuilt it there in 4 days.



Our Egypt dealer Triangle Heavy Equipment Co [www.triangle-fgwilson.com.eg/](http://www.triangle-fgwilson.com.eg/) have installed a P1875E1 generator set to provide emergency power for a hospital in Cairo, complete with two monthly fuel tanks plus a day tank in the generator room. This is Mostafa Serry, Application & Projects Manager for Triangle just after the installation was completed.



We have total respect for the people who live in Salekhard, Northern Russia, where temperatures go as low as -56°C (-45°C average) in winter, and as high as +35°C in summer. In this environment, electric power is as critical as it gets and it comes from 2 FG Wilson PG750B (1200 kW electricity / 1720 kW heat) cogeneration high voltage generator sets with step-up transformers.



# Build Your Own Generator Set

## FG Wilson Configurator - Build your own generator

The FG Wilson Configurator is a web based tool which has been introduced to enhance our customer online experience and lead generation process.

Users will now be able to go online, find the generator they want through guided selling, configure it and make a request to be contacted.

Once the request is made, a lead is generated in Salesforce which is routed to the dealer in that region by the Regional Sales Managers. Customers can easily access product information and print customised technical data sheets.

To access the FG Wilson configurator tool [click here](#).

# Enhancing Our 60 Hz Product Offering



Just a quick product news update on our Large Product Range. From 25th September our 900 – 1100 kVA range product powered by the Perkins 4008TAG engines will now be available at 60 Hz.

Both the P900P1/P1001E1 & P1001P1/P1101E1 models now enhance our 60 Hz product offering within 730 – 1500 kVA.

If you require any further information about this new product please contact your [local dealer](#).