

POWER ON

FG WILSON CUSTOMER MAGAZINE

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Online all the Time

When it comes to guaranteeing standby or emergency electrical power, in terms of cost, flexibility and responsiveness, there's really no better option than a generator set from FG Wilson.

You'll find our generator sets installed in many of the world's most iconic buildings, quietly guaranteeing that they always have electric power.

When you entrust your power project to us, you receive the full support of more than 300 skilled technicians who nurture your project from initial design and manufacture, right through to installation and commissioning.

And through a long working life, you'll have complete end to end support from our dealers.



To find out more,
visit www.fgwilson.com



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CASE STUDIES

STANDBY POWER FOR KEY NEW ZEALAND HYDRO POWER FACILITIES

In New Zealand's Waitaki Valley, the Aviemore Hydro power facility generates 220MW of electricity for around 107,000 homes.

Power comes from four 55MW generators, the largest in New Zealand, weighing 210 tonnes and with rotors nearly eight

metres in diameter. The dam itself is made in two parts: an earth dam and a concrete dam. It is the biggest dam of this type in New Zealand and is the second largest concrete dam.

For local service back-up power, the power facility relies on an FG Wilson P500-3,

supplied by our dealer AllightSykes www.allightsykes.com in January 2019 and commissioned by Aaron Clarke from Allight Sykes in association with Meridian Energy Limited and its on-site contractors.





POWERING THE ISLAND OF INCHCOLM

Our dealer Dieselec Thistle Generators www.dieselelecthistle.co.uk has just serviced two FG Wilson P16.5-6S generator sets which, since August 2018 have provided mains power for the beautiful and historic island of Inchcolm, off the east coast of Scotland. Both are synchronised and remotely monitored from the mainland allowing operators to run the generator sets and check for alarms or issues.

In August 2018, we successfully installed and commissioned two P16.5-6S generators at the Historic Scotland site, Inchcolm Island, which is situated off the south coast of Fife. The two synchronising single-phase sets provide mains power to the island. At our first servicing visit, we installed battery isolators, a sight glass for the bulk fuel

tank, and the DSE890 remote monitoring equipment. This vital piece of equipment enables our customer to remotely access the generators for monitor readings, checking for any issues or alarms, and running the generators. We have just serviced the generators again and they are ready to power the Island for another 500 hours, until the next service!

POWER FOR A WATER TREATMENT PLANT IN GAZA CITY

Omar Khoudary, Installation and Setup Engineer at our dealer in Gaza, Mustafa Mourtaga and Sons, sent us these photos of an installation which they've just completed at a waste water treatment plant in the Khan Younus area of Gaza Strip.

Scope consisted of the installation and start-up of three FG Wilson prime power generator sets at 810 kVA, 1,350 kVA and 2,000 kVA, with tropicalised 50°C advanced cooling. One of the photos shows Omar and his colleague Ashraf at the start-up of the 2,000 kVA unit.

It's a great installation and made all the more challenging because it arrived in five separate packages due to the size of the sets which could not be shipped as one unit.



Keep Powering On

For more than 50 years,
generator sets from FG Wilson
have guaranteed electric power
for businesses across the world.

We offer a complete range of
self-contained generator sets
from 6.8 – 2,500 kVA, designed
and manufactured in modern
world-class facilities, installed
and fully supported by our
extensive, fully trained
dealer network.

To find out more visit
www.fgwilson.com



ARTICLES



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. And 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 unburned 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 https://www.fgwilson.com/en_GB/support/genuine-parts.html

POWER FOR AGRICULTURE

For most businesses a power interruption delays a project or slows down manufacturing processes. While there is always a financial implication, few run the risk of losing an entire business cycle. Those few include farms and agri-processing.

A complete chicken production cycle can be lost in the event of a power interruption that's long enough to disrupt the circulation of food and water, and the maintenance of perfect climatic conditions inside chicken houses where up to 40,000 birds are being reared.

Similarly, much of a fruit harvest can end up spoiled if pack house processes are paralysed in the critical post-harvest period.

These are just two examples of the importance of reliable and efficient electricity supply to the agricultural sector.

Rory Reid, Sales and Marketing Director of FG Wilson South Africa dealer Master Power Technologies and an expert in backup power solutions, says; "Many farmers, especially those far away from towns, already have hybrid power systems or independent infrastructure due to ongoing challenges with grid electricity in remote areas. However, regardless of your current supply status, if you have not done so during the past year, you should now take the time to consider your energy system as a whole. The aim should be to outage-proof your operation while making it as energy efficient and cost effective as possible."

Drawing on more than 20 years' experience in the backup power solutions market, Master Power

Technologies specialises in providing power systems for critical applications. These include data centres that support telecommunication capabilities, banks and retail stores, as well as hospitals, the mining industry and the agricultural sector.

"Backup power is nothing new," says Rory. "What we are seeing is fast-paced development and evolution of technologies. Batteries and solar panels are becoming ever more efficient to provide clients with solutions that are more cost effective from both capital and operational expenditure perspectives."

These improvements also result in systems that are more environmentally friendly and that can reduce overall energy consumption. "Against this backdrop, we are advising farmers to not only add, for instance, another generator to their existing infrastructure, but to rather relook their complete setup," says Rory.

The solution best suited to a specific farm depends to a large degree on the type of farming. On a dairy farm, for instance, milking has to be done at specific times every day for optimal product yield and to ensure the wellbeing of the cows. To use the milking machines during a power cut, the farmer should ideally invest in a hybrid solution where electricity comes from solar panels, generators and the grid.

Such a mix of energy sources also meets the objective of cost savings under normal circumstances. "The farmer runs the solar system to displace some of the usual grid electricity usage,"

explains Rory. "When an outage strikes, the solar system also displaces some of the generator usage, resulting in a considerable diesel cost saving."

Generally speaking, solar energy is the cheapest energy solution a farmer can invest in. "Once it is installed and paid for, you will never look back," says Rory. "The beauty of solar is that it can also convert dead space, such as the roof of a barn or a pack house, into a power generating plant. Such spaces already exist on farms, so it's an opportunity to make your infrastructure assets work harder."

"However, the golden rule remains understanding exactly what your operation needs", says Rory. If, for instance, a farm depends on a critical application that cannot tolerate even a short break in electricity supply, look at a battery backup that kicks in while the generator powers up.

In terms of general power saving tips, Rory advises farmers to "put common sense into common practice". Change to more efficient LED lighting, replace corrugated iron roofs with fibreglass to take advantage of natural light, and use gas instead of electricity to power heating and cooling systems.

As our planet grapples with the growing challenge of food security, farmers are under increasing pressure to produce more with fewer resources and in a more sustainable manner. Energy supply and usage is central to increased efficiency, productivity, quality and optimal yield.

For more information about FG Wilson generator sets, visit www.fgwilson.com



FINDING GENERATOR SETS FAST

Roberto Doninelli of FG Wilson talks about how generator manufacturer FG Wilson is making it quicker and easier for customers to source and buy.

The digital world has revolutionised our lives, the way we interact with each other and the way we buy. And for business customers too? Roberto Doninelli, FG Wilson Digital Commercial Manager, has an answer: "The time is ripe for a change in how people buy in our industry and how we interact with customers."

FG Wilson have been manufacturing electricity generator sets for more than 50 years, mostly sold to businesses who want secure power supply. Roberto is behind an initiative at FG Wilson allowing customers to search and reserve online all in one place, quickly and easily.

He says, "We've all heard about B2C or B2B but I see it more as B2Everyone.

The way it feels when we're buying as consumers spills over into our business lives and we all expect the same online, real time experience when we're buying for our businesses. That means real time information and a fast response from suppliers."

During May, in the UK, France and Netherlands, FG Wilson launched the first phase of an initiative which will expand to more countries globally. It gives visibility of available FG Wilson generator sets at selected dealers, showing products and features, with real time tracking, pricing and configuration options. Units can be reserved and, as with many retailers, be collected or delivered and in all cases, customers can specify installation or commissioning support and extended service coverage. It's a platform connecting customers, dealers and FG Wilson, helping customers find the right generator set quickly and easily.

Roberto says, "This is the first step of something much larger, we're learning quickly and in steps. Ultimately, we want to grow this into a hub where our customers can self-serve, with dealer support when they need it, and make informed decisions on what options and services they need in their region to get an installation completed properly and efficiently. Once installed the lifetime support from our dealers is always there when needed. These new online tools enable customers to access our service at their own convenience, where and when they need to. Time is everyone's most precious resource. We want to give some of that time back to our customers."

To find out more about FG Wilson, visit www.fgwilson.com and to see online inventory visit www.easypower.fgwilson.com



Find Generator Sets Fast

In the UK, now you can quickly and easily search for FG Wilson generator sets for immediate delivery from real time inventory at a selection of our dealers.

You can see product specsheets showing features and options together with pricing and configurations.

And you can reserve any units, then collect or ask for delivery, with installation or commissioning support from our dealers if you need it.

And once installed, that lifetime support from our dealers is always there for you when you want it.

To get a real time view of inventory at our dealers at any time,

visit www.easypower.fgwilson.com



To find out more about FG Wilson,
visit us at www.fgwilson.com



DIGITAL WORKSHOP

In May, a group of dealers from Turkey, Liberia, Democratic Republic of Congo and Tanzania visited us for a digital marketing workshop. During that time, we were all treated to a great factory tour by Noel Bell and Colin McCune who took the group around the Larne Engineering Centre of Excellence.



GOLFING IN KINSHASA

In May, our dealer in the Democratic Republic of Congo, Unicomplex unicomplex.net was at the 21st Kinshasa Golf Open with FG Wilson flags on the practice green and a tent stand, and generator set at the 16th Green and 17th Tee Box.



ISLAND OF EIGG

One of our UK dealers, Dieselec Thistle Generators www.dieselelecthistle.co.uk has just delivered this FG Wilson generator set to the Scottish island of Eigg. It gives backup power to the island's renewable energy power network which is run by the local community-owned initiative, Eigg Electric.



FG WILSON EVENTS

HOSTING CUSTOMERS IN PRAGUE



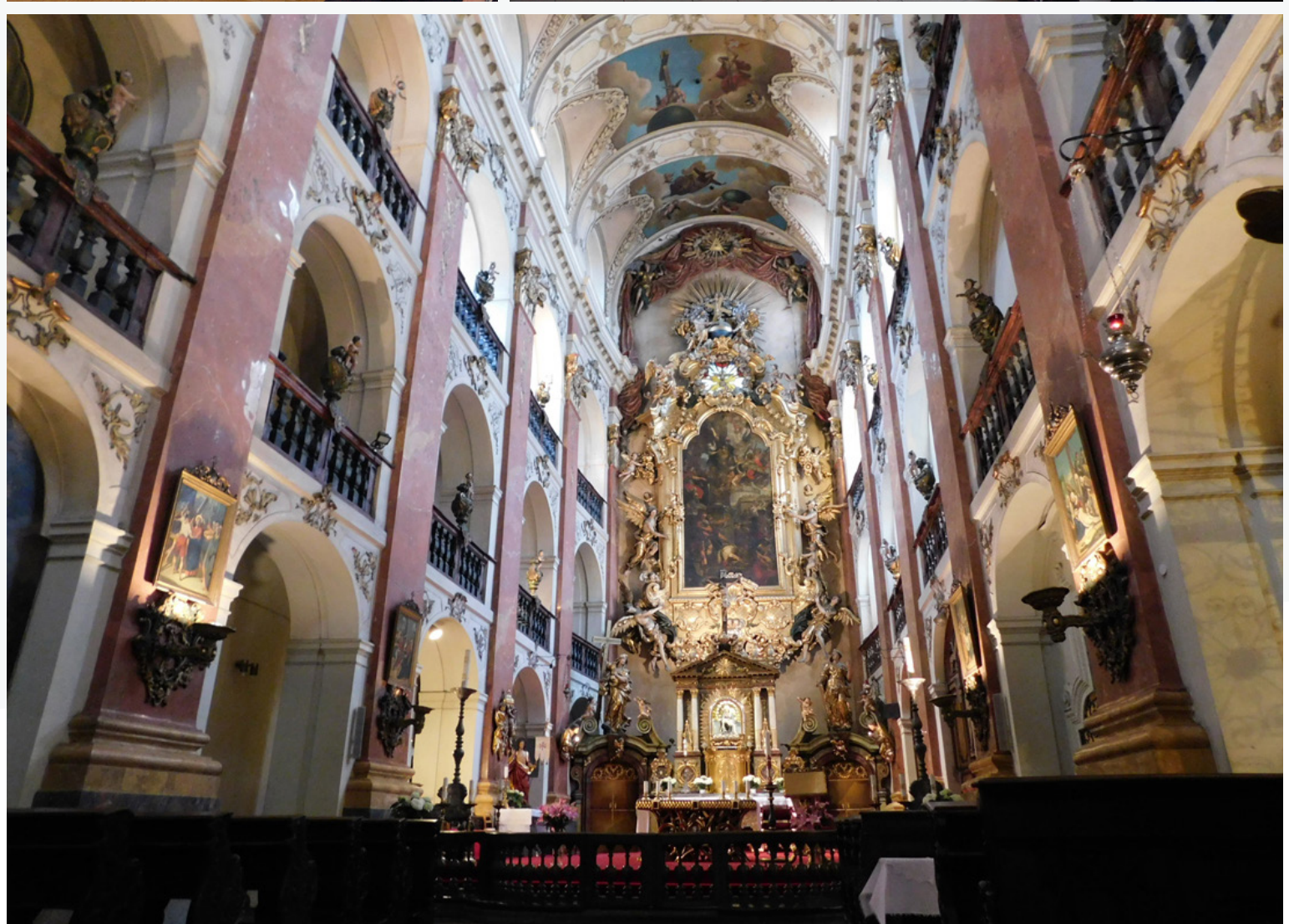
In May, Noel Bell attended a Power Safety conference organised by our Czech dealer Pronix.

The event was held in the Minorite Monastery in Prague, one of the city's most famous landmarks, dating from the 13th Century. There were more than 120 participants including customers,

consultants and decision makers. FG Wilson was present among several key suppliers to Pronix.

Noel presented to the delegates on FG Wilson's history and highlighted our support capabilities through the global dealer network.

He also talked through the FG Wilson product range including the new high power density P780-1 and P850-1 models, as well as updating on FG Wilson approach to EU Stage V emissions standards.



NEW ZEALAND SOUTH ISLAND AGRICULTURAL FIELD DAYS

In March, our New Zealand dealer AllightSykes were at South Island Agricultural Field Days in Kirwee exhibiting a range of FG Wilson generator sets.

Going back over 66 years and one of the oldest and largest agricultural events in South Island, the event gives opportunities for visitors to see the latest in agricultural machinery and services and reinforces the relationship between farmers, service providers, scientists and technical experts. This year more than 27,000 people made their way through the gates.





TRAINING IN MONGOLIA

Product training plays a very important part in what we do, and we have a very active training team who travel to dealers and spend time sharing and growing knowledge of our products and services.

In April, Ricky Croft spent almost two weeks with our dealer in Mongolia, Monhorus International LLC, covering our complete range from 6.8 – 2,500 kVA, including engine diagnostics and control panels.

Ricky says; "The Monhorus team had great technical capability which made the classes a joy to run, with many good questions and discussion as well as many practical hand-on demonstrations."

Two of the highlights for Ricky were when the Monhorus service engineers invited him to the Mongolian countryside for a traditional barbeque. The BBQ is called "Khorkhog", which people in Mongolia usually make for a guest. The meat in the barbecue was cooked on the way, prepared in an

airtight container, with flamed stones added and sealed for it to pressure cook which means the meat usually is seared from the hot stones. The second barbeque was called a "Jimbii", where the meat is cooked in its own fat for a couple of hours in a stove.

Ricky was full of praise for the wonderful hospitality of the Monhorus team. He says, "Cooking in the snow was such a great experience and one I'll never forget."

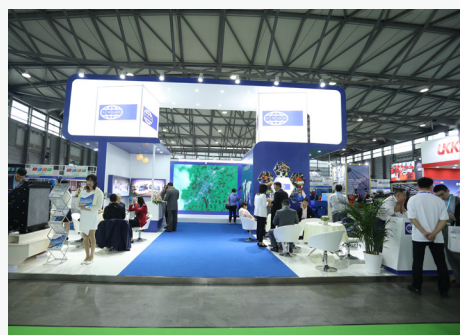
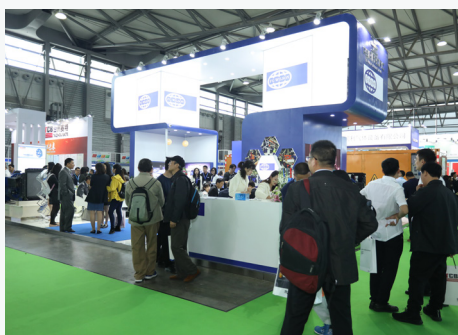
FG WILSON AT GPOWER, SHANGHAI

In April, together with our China dealer Asia Pacific Power Electric (APPE), we participated in the 18th China (Shanghai) International Power and Generating Sets Exhibition (GPOWER).

The event included a press briefing at our stand announcing the launch of a range of 24 - 220 kVA generator sets specifically for China, as well as the launch of 730

- 2500 kVA generator sets produced in our Tianjin manufacturing facility. Ciaran McCarney, FG Wilson Area Sales Manager for Asia Pacific and Pony Ma, Factory Manager at Asia Power Systems Tianjin, addressed the audience and media at the conference and the APPE management team also briefed the media about legacy of FG Wilson and benefits of new product launched for China market.

GPOWER attracted nearly 370 domestic and overseas industry leading enterprises from 40 countries and regions, across an exhibition area of more than 32,000 square metre. During the two-day exhibition more than 27,000 visitors came from 45 countries.



Because Your Business Never Stops

The seasons stop for no one and with a generator set from FG Wilson, neither do you.

FG Wilson offer a complete range of robust and reliable self-contained diesel generator sets from 6.8 – 2,500 kVA which are easy to operate and require a minimum of installation work.

Our dealers can help you choose a generator set which will give you years of service, install it for you and ensure that you have all the service and support you need.



To find out more, visit
www.fgwilson.com



DEALER MEETING IN VIETNAM

This March at the Hyatt Regency Resort in Da Nang, Vietnam, our Singapore-based dealer FG Wilson Asia hosted 50 dealer representatives from 16 different dealerships across Sri Lanka, Indonesia, Myanmar, Maldives, Malaysia, Vietnam, Thailand, Bangladesh and Singapore.

The three-day conference began on Monday 25 March with dinner. On Tuesday 26 March, Alan Ow, Executive Director of FG Wilson Asia, delivered the welcome speech and with a theme of "Advancing Partnership" the event included sessions on:

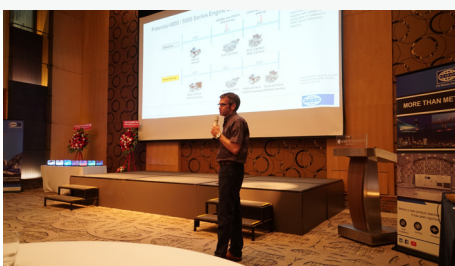
- Technology Disruption and Business Transformation: SH Leong, General Manager, FG Wilson Asia

- FG Wilson NPI Updates: Roger Kennedy, NPI & Product Engineering Manager, FG Wilson
- FG Wilson Factory Initiatives: Claran McCarney, Area Sales Manager, FG Wilson
- FG Wilson Parts Strategy: Uel McKinney, Regional Sales Manager, FG Wilson
- Digital Marketing Session: Mithilesh Singh, Marketing Communications, FG Wilson

After the presentation of a crystal plaque by Alan Ow to each dealer, the event concluded with a dinner in the ancient city of Hoi An, a well-preserved UNESCO-listed site.

On the final day dealers visited Ba Na Hills to experience a 5,801m ride in the world's longest non-stop single-track cable car, followed by a visit to Ba Na Hills resort.

What made the event extra special was that every location: Da Nang Airport, Da Nang Hyatt Regency Hotel, Ba Na cable car and Ba Na Resort all rely on FG Wilson generator sets for standby power.





PRODUCT NEWS

730 - 2,500 KVA RANGE LAUNCHED IN TIANJIN FACILITY

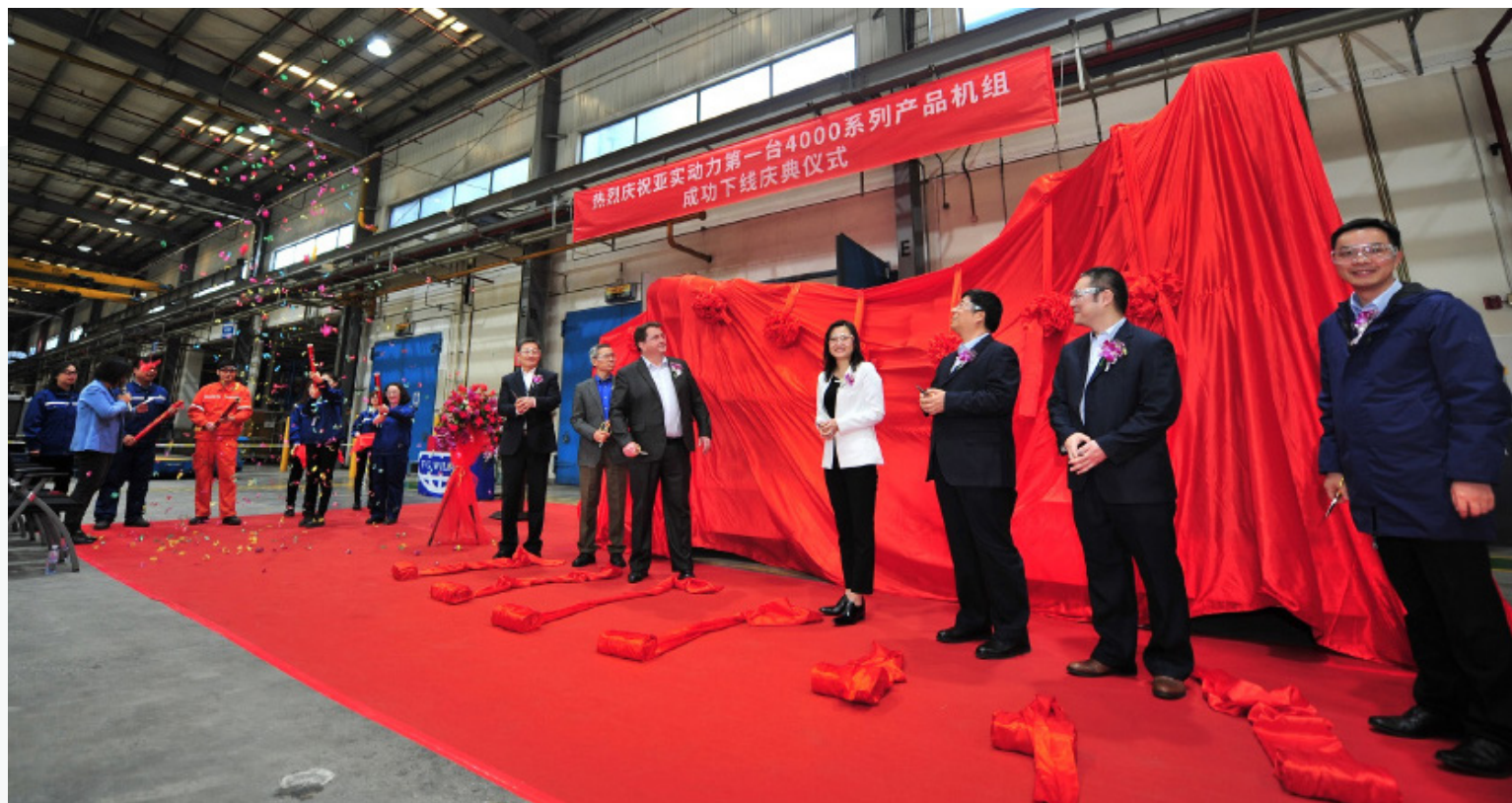
The FG Wilson 50 Hz 730 - 2,500 kVA range of generator sets is now available from our APS facility in Tianjin, China.

This means our customers have a choice of two sourcing facilities, with products built to the same

global design and sharing the same components. The range comes complete with mechanical engines offering excellent design, reliability and simple servicing, Leroy Somer alternators, compact package footprint and full availability of parts across the range.

The first unit rolled off the production line on 6 March in a ceremony marked by China Business Director Apple Fu, together with ten guests from FG Wilson dealer, Asia Pacific Power Electric Ltd and Facility Managers from the Tianjin factory.







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