

# powernews

Middle East Electricity 2015 special edition

## Improved performance and fuel savings from Perkins® 1500 Series

A new engine designed to meet the needs of electric power generator set manufacturers is on show at Middle East Electricity 2015.

The 1500 Series range replaces the existing Perkins 1300 and 1600 Series families, delivering improved load acceptance and fuel consumption benefits of up to seven percent cycle weighted and up to an eight percent improvement in altitude and ambient capability.

An 8.8 litre, 6 cylinder air-to-air turbocharged diesel engine, the 1500 Series ElectropaK meets the key power nodes from 200 kVA to 330 kVA in prime and standby ratings, and is switchable from 50 Hz to 60 Hz.

A dependable and cost effective power solution which, at the key nodes, is fitted with a tropical radiator to deliver high ambient capability, the 1500 Series ElectropaK is already available to order and will go into production in Seguin, USA, in March 2015.

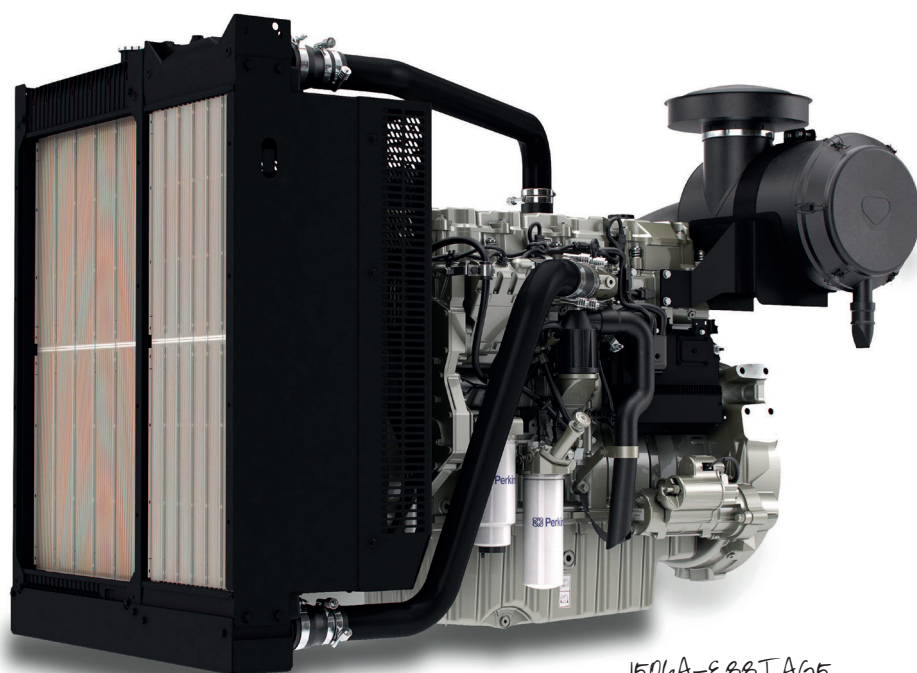
"This is a powerful package which gives generator set manufacturers the benefit of more power from a smaller engine," said Simon Gray, electric power marketing manager. "A number of prototype engines are already in use by some of our customers and the feedback so far has been positive with comments on the excellent load acceptance and available ratings.

"This new Perkins engine builds on a proven core, so end users can be confident that the 1500 Series is another dependable power solution. This is an important consideration as the engine is ideally suited to supply back-up power for health facilities and prime power for factory units, among many other applications."

Benefitting from Perkins electric power warranty of one year unlimited hours or two years up to 500 hours per year, the 1500 Series will also be supported in the market by Perkins highly trained global distributor network, ensuring it is kept running whenever and wherever it is used.

"In addition to improved performance benefits, our decision to replace the 1300 and 1600 Series with the new 1500 Series family will bring servicing benefits for our customers and reduce their parts inventory," added Simon.

**For more information on how our electric power offering can benefit you, visit [www.perkins.com/power](http://www.perkins.com/power) or to find your nearest Perkins distributor log onto [www.perkins.com/distributor](http://www.perkins.com/distributor)**



1506A-EBBT AG5

 **Perkins®**

THE HEART OF EVERY GREAT MACHINE

# Allam Marine takes first UK built 1106A

To meet the growing global demand for its 1106A-70TAG engine, Perkins is now manufacturing the ElectropaK offering from its Peterborough, UK, facility.

Since 2012 the engine has been solely manufactured in Wuxi, China, but increased demand for the 200 kVA prime offering, also saw Perkins announce in April 2014, its plans to produce the 1106A-70TAG at its Curitiba plant in Brazil, in addition to the 7.1 litre Tier 2 equivalent mechanical and the electronic 1106C/D-70.

"The decision to also introduce the 1106A-70TAG, part of the 1100 Series platform, at the Peterborough plant, ensures we can be more responsive to global customer demand for this engine, whether they are based in Europe, Africa, the Middle East, Asia or the Americas," said electric power marketing manager Simon Gray.

Perkins 1106A-70TAG ElectropaK continues to stretch the boundaries of diesel engine development and operation by offering class-leading power density – all achieved in a compact, 6 cylinder, 7 litre mechanical package, without the need for common rail or full authority electronics.

A truly dependable power source, the 7.1 litre 1106A affords a number of advantages for generator set packagers, not least of which is the ability to do the work of much bigger displacement engines. In addition to its power density, the 1106A-70TAG is a robust product, able to operate in harsh conditions, while its excellent load acceptance ensures power is delivered immediately.

By using the right technology when and where needed, Perkins ensure that customers get maximum value for their products. The 1106A range is designed for ease of service and is able to adjust to differing fuel qualities around the world, ensuring that the machine starts every time when needed.

Thanks to its flexibility, the 1106A range hits all the main power nodes from 135 to 200 kVA prime power and up to 220 kVA for standby power.

"Our decision to manufacture the 1106A in three regions has been welcomed by our customers, many of who have already clocked-up thousands of running hours in the field with this product. Since we went into production with the 1106A in Wuxi in 2012, we've received excellent feedback from our customers who have positively commented on its load acceptance and dependability."

In November 2014, the first 1106A-70TAG engine manufactured in Peterborough was presented to Allam Marine's managing director Dr Assem Allam and operations director Ehab Allam by Perkins general manager, sales and marketing, Bill Giunta and facility manager, Warren Houston.

**The 1106A-70TAG is on display at MEE on Allam Marine's stand S1E10.**



From left Trevor Toulson (Perkins), Ehab Allam, Dr Assem Allam (Allam Marine), Warren Houston, Bill Giunta and Rob Collard (Perkins) with the first 1106A-70TAG manufactured in Peterborough, UK

## Peace of mind and protect your investment...

Offering up to five years and 15,000 hours extended cover, depending on application and model, an Extended Service Contract (ESC) can safeguard your engine from unexpected repairs beyond the standard warranty period and ensure peace of mind.

### What benefits will I get?

- Cost effective and comprehensive coverage
- Supported by the Perkins global network
- Fully trained professional Perkins certified technicians to complete all repairs covered by ESCs
- Genuine Perkins parts, rated and tested specific to your engine

### When can you buy an ESC?

You can buy an ESC at any time during the standard warranty – even the last day.

Purchased in minutes, protected for years - choose from flexible coverage options to suit your needs.

Two protection plans are available to ensure you have flexible options

- Gold – Comprehensive Protection Plan
- Platinum - Total Protection Plan

**For more information on ESCs visit**

**www.perkins.com/esc or to buy an ESC contact your local Perkins distributor at www.perkins.com/distributor**

# Ghaddar Machinery Co. launches its variable speed DC generator set

One of the most advanced variable speed DC generator set products in its category has been launched by Ghaddar Machinery Co.

The product is a variable speed DC generator set powered by a Perkins variable speed diesel engine, with Leroy Somer DC alternator's latest technology. This combination, which has already demonstrated its durability and reliability with standard AC generators, is now at the core of a hybrid DC power system for Telecom BTS sites.

Ghaddar Machinery Co's newly launched variable speed DC generator set is a result of two years of research and development with Perkins, Leroy Somer, and other suppliers in the fields of deep cycle batteries, speed governors, rectifiers, charging modules and control modules; throughout which it has proved to be a perfect solution for telecom companies.

The new product offering meets the needs of telecom companies due to the reduction in operating costs, which Ghaddar Machinery Co. says results from:

- Improved fuel consumption
- Less oil consumption
- Daily running hours reduced hence longer intervals for preventive service
- Longer time for minor and major overhaul
- Longer batteries lifetime – LS optimised charging
- Longer engine lifetime – optimised loading and operation

## It cites other key benefits as:

- No need for ATS
- Avoiding light load operation
- Increasing service life
- No AC spikes supports reliability in telecom equipment
- Pioneer design - no chance for counterfeit parts
- Optimised system for fixed and mobile applications
- Smooth ramp charging – no high step loads

The product passed both Perkins and Leroy Somer's application and installation tests and has since been installed and tested at Alfa – Orascom Telecom Sites in Lebanon, where Ghaddar Machinery Co. said it proved to be technically and financially beneficial to the customer's operation.

See Ghaddar Machinery Co. at MEE 2015 on stand S1C10



## Teksan Jeneratör release hybrid telecom generator

Teksan Jeneratör will exhibit its new TJ9PE-Hybrid model for the first time at MEE 2015.

The hybrid power system consists of a diesel generator set powered by a variable speed Perkins 403D-07 engine, PV panels, wind turbine and battery bank, with the power electronic devices specifically designed for telecom towers.

When compared to an AC generator set operating 24/7, Teksan Jeneratör said the new hybrid model delivered better fuel consumption and lower engine running hours, achieved by the use of renewable energy sources and a battery bank, in addition to a highly efficient PMG and a variable speed diesel engine which works at the optimum speeds, at the best efficiency points.

While various energy sources are working together, 48V DC reliable power supply is provided. An inverter is added to the system for AC loads such as cooling and lighting loads.

At MEE, Teksan Jeneratör will also show a prototype generator set, powered by a Perkins 4008TAG2A, coupled with an alternator and control panel, to explain how electricity is generated.

Visit Teksan Jeneratör at MEE 2015 on stand S3D50





# Manufacturing investment leads 4000 Series towards an exciting future

Customers rely on Perkins to deliver the highest standards of quality and innovation, both in its products and the way in which they are built.

And over the last decade we have made a significant investment in our 4000 Series manufacturing operation in Stafford, UK and in the soon to open Aurangabad facility in India.

To ensure our electric power customers have the quality product they expect, we are committed to maintaining our manufacturing investment, while meeting the growing demand for dependable engines for generator sets from the rapidly expanding Asian market.

To meet customer demand, a new state-of-the-art 4000 Series facility in Aurangabad, will open later this year, delivering the same high standards of

assembly quality which have long been associated with Perkins products. In Stafford, which will continue to produce the 4000 Series for customers in Europe, the Middle East, Africa and South America, significant investments have been made in machining to allow the highest level of control over all critical processes.

Other customer benefits come from the five fully flexible test cells which are operated on site, meaning the performance of a fully assembled 4000 Series engine is tested before it leaves the facility.

Reliability, durability and performance have long been associated with the Perkins brand. Since 2013, every 4000 Series model has come with a two year 6,000 hour and three year 1,500 hour (max 500 hours per year) warranty.



stafford manufacturing facility



Aurangabad, India

## Extended 60 Hz engine range gives customers more choice

With orders for the 4016-61TRG 60 Hz model open from Quarter 3 2015 and first production from Quarter 4 2015, Perkins has made the next step in its commitment to provide a product range which meets the global spectrum of power needs.

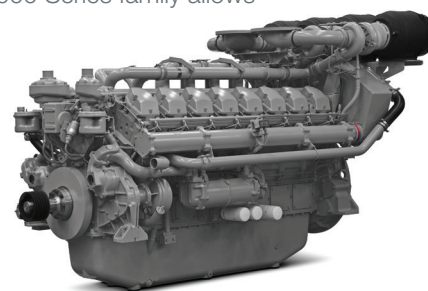
Specifically designed for the electric power generation sector, the 4016-61TRG 60 Hz model allows customers in all 60 Hz territories, for example Saudi Arabia and the Philippines, to access the higher end of the Perkins power range, offering 1600 kWe of standby power from the TRG1 and 1800 to 2000 kWe with the TRG2 and TRG3 respectively.

With more than 40,000 4000 Series in operation around the world, this latest incarnation, the 60 Hz 4016-61TRG model, offers the same exceptional power to weight ratio and load acceptance for both prime and standby power as its 50 Hz counterpart. "Our decision to expand the range to 60 Hz supports our customers who

operate in and sell to these territories," said Simon Gray, electric power marketing manager. "While helping these territories access the higher end of the Perkins power range, we've also designed the engine to allow efficient packaging for ISO containers."

Commonality of components across the 4000 Series family allows for reduced parts stocking levels, ensuring customers benefit from a quality product that offers a lifetime of low cost.

By extending its 60 Hz engine range rating to 2 MW Perkins has aligned its power density with the already established 50 Hz platform and has placed itself in a position to supply a comprehensive answer to the demands of the electric power generation market.



Perkins' 4016 60 Hz engines have been designed to allow efficient packaging for ISO containers.

## Jubaili Bros 4000 Series prime project

The Afghanistan branch of Jubaili Bros successfully undertook a project to supply, install and commission a complete power generation, transmission and distribution system.

A prime capacity of approx 6 MW, the project includes six 1250 kVA Jet and Marapco generators using Perkins 4012-46TWG2A engines.

**Visit Jubaili Bros at MEE on stand S1E30**



## A range of dependable solutions

Dependable, reliable and cost effective engines are essential requirements for the power generation market.

Our engineering expertise means Perkins engines are designed for life, engineered without compromise and are built for instant response with thousands of hours of dependable running, regardless of the environment or location.

Our complete range of engines up to 2500 kVA in diesel or 1000 kWE prime in gas power provides you with cost effective solutions, from competitive fuel consumption to ease of maintenance, whatever your power requirements, adding value not only to your equipment, but to your

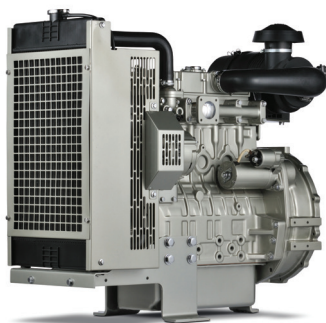
customers.

It's trusted performance borne out of thousands of hours of validation in the real world, working with electric power providers who value the reputation and expertise of an engine manufacturer who is continually focused on delivering the right technology solutions to meet your requirements. Each and every one of our engine solutions from the 400 to the 4000 Series range are backed by Perkins global service and parts network.

So when it comes to dependable, cost effective performance, Perkins engines have and continue to be the engine of choice for the power generation market.

### 400 Series - diesel

- Inline 2, 3 and 4 cylinder engines
- 5 – 40 kVA (4 – 32 kWe)
- Ease of servicing providing low cost of ownership



### 1100 Series – diesel

- Inline 3, 4 and 6 cylinder
- Common hook up points lower installation costs
- Available in mechanical or electronic variants, delivering excellent fuel economy

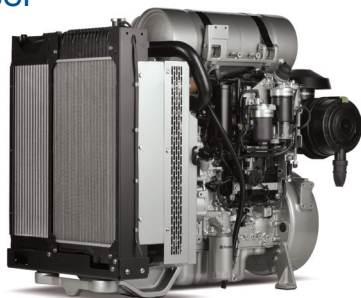
### 1100 Series – gas

- 4 and 6\* cylinder engines
- Runs on LPG and CNG
- Easy, low cost maintenance

\*(approved gas conversion through distribution network)

### 1500 Series – diesel

- 6 cylinder, fully electronic, turbocharged, air-to-air charge-cooled engine
- Provides dependable power even in extreme ambient climates
- Low cost of ownership, simple maintenance and reduced downtime



### 2000 Series – diesel

- Family of 13, 15 and 18 litre engines
- Turbocharged and turbo charge-cooled for extra power density
- Full authority electronics providing excellent fuel consumption

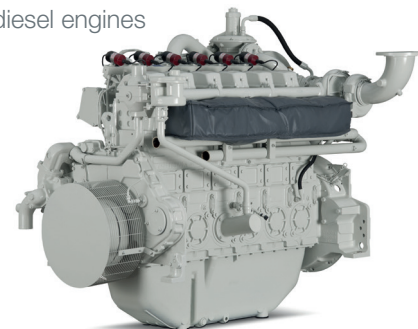


### 4000 Series – diesel

- 6, 8, 12 and 16 cylinder engines
- Available as either Electrounit or ElectropaK spec
- Commonality of components

### 4000 Series – gas

- 6, 8 and 16 cylinder engines
- Designed for operation on a wide range of methane based gases
- Reduced whole life cost through commonality of components with diesel engines





# Successful gas installations by Mayphil



Over the past two years Mayphil, a Perkins 4000 Series Gas Centre of Excellence, has significantly raised the profile of the 4000 Series engines in their appointed regions.

Mayphil has worked with end users and OEMs to provide effective solutions to their business needs, with recent projects including:

- 4000 Series gas engines running on biogas produced in a sewage treatment plant
- Engines running on biogas to provide heat and electricity at a concrete quarry
- Natural gas engines powering a shopping centre

Mayphil has the skills, experience and expertise to provide effective solutions to power generation needs and ensures it has engineers available locally to support its customer's equipment.

For more information on how Mayphil, one of six appointed Perkins 4000 Series Gas Centres of Excellence around the world, can help meet your gas needs, then email [gas@mayphil.com](mailto:gas@mayphil.com)

**Mayphil, the 4000 Series Gas Centre of Excellence, will exhibit alongside Perkins at MEE 2015 on stand S1D10**



## PSG's new regional training facility

Power Systems Gulf LLC (PSG), a member of The Kanoo Group, a strategic business unit and the Perkins distributor in the Gulf Region, recently opened the doors to its new training facility for Perkins products in Jebel Ali.

The training facility will bring advanced product innovation and accelerated learning to Perkins customers, dealers and end-users in the region and includes a dedicated classroom and conference area for 20 participants, as well as an indoor office and practical area equipped with modern devices, tools and systems to expedite leading-edge engineering, product and process learning development. Trainees will also get hands-on training on disassembly/assembly of engines and study the performance characteristics, diagnostics and fault-finding of a running engine.

The PSG regional training facility will benefit OEMs, OEM dealers, their customers and other end-users of Perkins engines in UAE, Saudi Arabia, Bahrain, Kuwait, Qatar, Oman and Yemen, ensuring they have access to the highest quality service and product support.

"The plan to eventually create an exclusive training facility for Perkins products was realised after studying the growing demands for product support requirements based on the number of Perkins engines entering the market every year," said PSG technical and training manager Shaik Rahim.

PSG is responsible for regional training and distribution strategy, the commercial operation and management of the Perkins engines distribution sales development and product support capability in the Gulf region.

Provide PSG with 10 correct Perkins engine serial numbers powering your fleet and be rewarded with a Perkins 4GB USB pen. For every 10 Perkins serial numbers verified by PSG, you will receive a Perkins 4GB pen from your local Perkins dealer. To submit your data and claim your prize visit:

[www.psgulf.com/enginepopulation](http://www.psgulf.com/enginepopulation)

**PSG, Perkins distributor in the Gulf Region will exhibit its service and product support offering alongside Perkins at MEE 2015 on stand S1D10**

