LIEBHERR

Press information

Liebherr extends gas engine model series

- Further developed gas engines from Liebherr are distinguished by a high degree of efficiency, low emissions and low life-cycle costs
- Extended delivery programme includes base version engines as well as completely equipped engines

Hanover (Germany) 11 November 2014 – At the EnergyDecentral 2014 trade fair in Hanover, Liebherr is presenting its further developed and fully equipped gas engines. With the validated and tested "Plug&Play" solution, customers can concentrate on the design and installation of their combined heat and power units or biogas facilities.

Liebherr has been developing and producing gas engines at the Bulle site in Switzerland for almost 20 years. Since 2011, the first 6-cylinder inline engine of the G94X model series has been available on the market for stationary applications. The smallest engine of the model series is a 4-cylinder inline engine with a mechanical output of 164 kW. An 8-cylinder and a 12-cylinder V-engine of the G95XX model series with 344 kW and 516 kW round off the performance spectrum upwards.

High degree of efficiency and low life-cyle costs

The highest priority during development of the engines was placed on a high degree of efficiency and high reliability as well as very good availability. At the same time, the emissions and life-cycle costs were to be kept as low as possible. Accordingly, with a degree of efficiency of 41.5% mechanical output, Liebherr's gas engines offer an attractive alternative to competitors' products. The scope of delivery for natural gas and biogas equates to that of conventional engines.

A particular feature is the patented "nose" in the installed piston of the Liebherr gas engines. It facilitates higher turbulence in the combustion chamber and, as such, allows for more efficient combustion of the air-gas mixture. Furthermore, the turbochargers and gas mixers specifically configured for the Liebherr gas engine make a high power

density possible at a constant speed. The very high compression ratio of 1:13 and a mean pressure of 16.5 bar also contribute towards this.

Customers benefit from “Plug&Play” solution

Apart from the base version engines offered until now, Liebherr now offers a complete package from one source. This encompasses a fully operational engine including sensors, ignition system, knock control as well as safety functions and an engine management system. Our customers who integrate Liebherr’s complete engines in combined heat and power units (CHP) can therefore be offered a “Plug&Play” solution: All they need to do is connect the fully validated and tested engine solution to the generator and heat unit. They can then focus their whole attention on the CHP installation. Owing to the well-balanced periphery and components, the new engines ensure a high degree of operating reliability and performance proficiency. This makes them suitable for a wider customer spectrum.

Currently, all of the engines of the G94X and G95XX model series are validated for natural gas and biogas applications in 60Hz markets. The adaptations will be finalised by the beginning of 2015, which means that the fully equipped engines can then also be launched on the North American market.

Further extension of product range planned

By 2016, Liebherr will extend the top end of the diesel engine product programme and introduce a 16-cylinder and 20-cylinder engine on the market. In the process, the gas engines will also be adapted: The G96XX model series that is currently being developed will enhance the performance spectrum of the 750 kW gas engines to almost 1 MW of mechanical output. The start of series production for the engine types G9616 and G9620 is planned for 2017.

Captions

liebherr-gas-engine-G9508-ignition-system-side-view-300dpi.jpg
Completely equipped gas engines from Liebherr comprise a fully operational engine including sensors, ignition system, knock control as well as safety functions and engine management system.

liebherr-diesel-engine-D9620-basis-of-new-gas-engine-G9620-300dpi.jpg
The D9620 diesel engine forms the basis of the planned G9620 gas engine with a mechanical output of up to 1 MW.

Contact person
Simone Stier
Head of Marketing and Communication
Phone: +41 56 296-4327
E-mail: simone.stier@liebherr.com

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Bulle / Switzerland
www.liebherr.com