



MAN Diesel & Turbo presents new gas turbine generation for industrial applications

In-house development shows off its performance capabilities

The new series was presented for the first time to a group of trade media journalists on 20 December 2010. With this product MAN Diesel & Turbo, a manufacturer of large diesel engines, compressors and turbines, adds the 6 to 8 MW output class to its portfolio of industrial gas turbines.

"Besides high reliability in continuous operation, the main focus of this development was to minimise exhaust gas emissions in order to comply with the most stringent environmental requirements in the world," explains Dr. Markus Beukenberg, Head of Gas Turbine Development at MAN Diesel & Turbo. A significant reduction in the emissions of nitrogen oxide (NOx) is ensured by state-of-the-art Dry-Low-NOx combustion chambers while at the same time an efficiency level of 34% guarantees optimum fuel utilisation with regard to CO2 emissions and operating costs. "This new series also focused on the exhaust gas temperatures of the machines in order to enable optimised steam generation for CHP cogeneration or for process applications," Dr. Beukenberg continues.

This turbine family will be mainly used as generator drives in energy generation. As is the case with the company's THM series, which has proven its capabilities over decades of operation, further possible applications include driving mechanical components, e.g. for compressors. During the course of development the close dovetailing of engineering, service and sales ensured not only that a high technical standard was offered but also that the customers' demands were integrated comprehensively and at an early stage.

Oberhausen / Germany,
20.12.2010

MAN Diesel & Turbo SE
Turbomachinery
Steinbrinkstrasse 1
46145 Oberhausen
Germany

Contact:
Trade Media Communications
Christoph Speckamp

Phone: +49 (0) 208. 692-9569
Fax: +49 (0) 208. 692-2019
christoph.speckamp@man.eu
www.mandieselturbo.com

For further information,
please contact:

Dr. Markus Beukenberg
Phone: +49 (0) 208. 692-9455
E-Mail:
markus.beukenberg@man.eu

Press Release

MAN Diesel & Turbo



Press Release
Page 2 / 2

A new test stand was built at the Oberhausen works (Germany) specifically for the comprehensive test runs of the prototype, which lasted several months. In addition to the test stand itself, the complete measurement facilities and instrumentation were fundamentally redesigned. Thus the period from 'first fire', the initial test run of the completely assembled unit, up to operation under full load took just one week. This fact as well as further detailed tests successfully demonstrated the high load capacity of the turbine as well as the company's considerable expertise in the field of testing and designing gas turbines.

The turbines are delivered as pre-mounted units on a base frame, complete with oil unit and ancillary units. The prototype was initially designed as a twin-shaft type which will be followed by a single-shaft design and variants with further increased output. A modular design with unsplit casings creates the prerequisites for an efficient and cost-optimised service life. The company-owned MAN PrimeServ service centres make sure that customers benefit from continuous further development and increased efficiency over many years of operation.

As a long-standing manufacturer of gas turbines, MAN Diesel & Turbo can look back on a history of around 70 years in this segment. In the past the company bought in gas turbine technology and further developed it. However, following a development period of about 6 years, it now presents for the first time a model which has been completely developed in-house, and which should ultimately act as the technological platform for future generations.

MAN Diesel & Turbo SE, based in Augsburg, Germany, is the world's leading provider of large-bore diesel engines and turbomachinery for marine and stationary applications. It designs two-stroke and four-stroke engines that are manufactured both by the company and by its licensees. The engines have power outputs ranging from 450 kW to 87 MW. MAN Diesel & Turbo also designs and manufactures gas turbines of up to 50 MW, steam turbines of up to 150 MW and compressors with volume flows of up to 1.5 million m³/h and pressures of up to 1,000 bar. The product range is rounded off by turbochargers, CP propellers, gas engines and chemical reactors. MAN Diesel & Turbo's range of goods includes complete marine propulsion systems, turbomachinery units for the oil & gas as well as the process industries and turnkey power plants. Customers receive worldwide after-sales services marketed under the MAN PrimeServ brand. The company employs around 12,700 staff at more than 100 international sites, primarily in Germany, Denmark, France, Switzerland, the Czech Republic, Italy, India and China. MAN Diesel & Turbo is a company of the Power Engineering business area of MAN SE, which is listed on the DAX share index of the 30 leading companies in Germany.