## Electronic peak pressure indicator introduced

IMES | The German cylinder pressure sensor specialist Imes GmbH has expanded its portfolio by offering a new type of electronic pressure indicator. The electronic peak pressure indicator EPM-Peak is part of the IMES EPM family.

"Like our well-known and reliable EPM-XP, the EPM-Peak is also an accurate, light-



The new electronic peak pressure indicator EPM-Peak

weight and easy-to-use hand-held electronic device. It is designed for measuring peak pressure and calculating engine speed on four-stroke engines," said Stefan Neumann, president of IMES.

EMP-Peak measures the cylinder pressure with the integrated high-temperature cylinder pressure sensor CPS and with a Thompson adaptor on the indicator cock of four-stroke marine diesel engines.

Ten consecutive pressure measurements (cycles) are collected to calculate peak pressure and engine speed. The measured data are displayed in numerical format on the LCD screen and stored.

"In comparison with conventional mechanical peak pressure meters, the EPM-Peak offers easy handling, the measurements have a higher accuracy, the data Pmax and speed will be displayed exactly on the LCD screen and up to 200 measurements can be stored. It is not necessary to list the measurements directly," Neumann explained.

EPM-Peak is factory-calibrated and has a measuring range from 0 to 300 bar. The equipment is temperature-compensated for the application range and will be delivered with a calibration certificate.

IMES also offers visualisation software to show the Pmax and speed data on a PC.

## Targeting cost management

**COSTFACT** | ThyssenKrupp Marine Systems has initiated development of a new MEKO product family for vessel modularisation. Thank to its ability to combine civilian and

military capabilities, the new product family will be able to flexibly cover the entire range of possible requirements – from civilian applications up to the highest military standards, ThyssenKrupp Marine Systems said.

In order to achieve targeted cost control from the beginning, ThyssenKrupp Marine Systems uses the CostFact cost management system. CostFact was specially developed for naval cost planning but is also used outside the naval sector for the development of work and support ships, passenger liners, and in mega-yacht construction. Besides targeting cost planning, CostFact enables the estimation of the effect of capability requirements on costs and the evaluation of alternative drafts from a cost perspective.

The advantages ThyssenKrupp Marine Systems expects from the use of CostFact include:

- > The simple integration of cost information from different sources and divisions;
- > The structured reuse of knowledge generated by prior projects;
- Reliable statements about the risks entailed by cost prognosis.

## Marine lithium-ion modules receive safety approval

SEANERGY | Saft, a France-based designer and manufacturer of advanced technology batteries for industry, says it has received the highest level of safety approval for its new Seanergy\* range of Li-ion Super-Iron Phosphate\* (SLFP) battery modules developed specifically for civil marine propulsion applications such as workboats, yachts, ferries, offshore support vessels, cruise liners and cargo ships.

The classification society Bureau Veritas assessed the Seanergy<sup>®</sup> modules according to the applicable marine standards and specifications. "Safety is at the heart of all Saft's marine activities, and this certification will inspire confidence in customers, investors and suppliers that the Seanergy<sup>®</sup> modules comply with best practice, especially as the standards have been written specifically to include Li-ion batteries in civil marine applications," said Didier Jouffroy, manager of Saft's Marine Products and Applications division. "This certification is effectively mandatory for the use of Li-ion batteries in the marine industry, and it is an important step in the commercialisation of our Seanergy\* solution."

Saft says it has developed the Seanergy<sup>®</sup> modules to offer the proven safety, performance and reliability advantages of SLFP chemistry in a fully integrated solution designed specifically for civil marine propulsion installations. The range includes a variety of energy and power modules that offer the flexibility and adaptability to create highly efficient, cost-effective battery sys-

tems to power full-electric and hybrid-electric applications for a wide variety of vessels. According to the company, the key advantages of Saft SLFP cell technology for marine applications are its increased safety, its light weight and compact size, high efficiency, long calendar and cycling life, fastcharging capability and high power output - both continuous and in pulses and the ability to deliver high voltages. Saft has built on the well-proven SLFP cell technology to create the new Seanergy® modules, which it says provide maintenancefree energy storage in a compact package designed specifically for marine applications, with the emphasis on long life and optimised total cost of ownership. Both energy and power modules are available.