SaCoS 5000 Represents Major Upgrade of Engine-Control System

Function-oriented architecture addresses growing complexity of modern four-stroke engines

MAN Diesel & Turbo has announced the latest release of its proprietary engine-control system. SaCoS 5000 represents a comprehensive upgrade and expansion of the original system's capabilities, and marks the culmination of four years of R&D effort.

The development of SaCoS 5000 is a response to the increasing complexity and exponential growth in functionality of modern engines. Günther Glas, Head of Systems Automation - Four-Stroke, MAN Diesel & Turbo, said: “The main benefit of SaCoS 5000 is its function-oriented architecture that makes it ultra-flexible and enables us to offer tailor-made solutions, like in the automotive industry. This allows us to add different options to a standard system for the individual customer, such as cylinder-pressure measurements, crank-case monitoring, and injection-system leakage monitoring.”

Furthermore, the new system is capable of handling complex functions that demand a lot of control and calculation resources. Such functions include cylinder balancing and the company’s own ECOMAP function that grants operators the flexibility to run an engine following different SFOC power characteristics, facilitating optimal efficiency at different load points.

The new SaCoS also lays the foundation for the next generation of MAN Diesel & Turbo's digital products: “SaCoS 5000 is a key element of our digitization strategy and enables a new line of digital solutions which will be available from the year 2018 on. This will offer distinct benefits to our customers”, states Audi Lucas, Chief Digital Officer at MAN Diesel & Turbo. “Those solutions will feature a new and modern security design, with both active and passive defenses, while continuous upgrades will ensure that the system evolves as needs change. They will also allow hybrid local and cloud based analytics across a customer’s fleet and a completely new and revolutionary way to exchange data in real time with all partners necessary. With the introduction of SaCoS 5000 we take a first step into that digital future.”

SaCoS 5000 was primarily developed at MAN Diesel & Turbo’s headquarters in Augsburg with assistance from its St. Nazaire and Copenhagen sites. It is now introduced to the market on the new MAN 45/60 engine.
About MAN Diesel & Turbo
MAN Diesel & Turbo SE, based in Augsburg, Germany, is the world’s leading provider of large-bore diesel and gas engines and
turbomachinery. The company employs around 14,500 staff at more than 100 international sites, primarily in Germany, Denmark,
France, Switzerland, the Czech Republic, India and China. The company's product portfolio includes two-stroke and four-stroke
engines for marine and stationary applications, turbochargers and propellers as well as gas and steam turbines, compressors
and chemical reactors. The range of services and supplies is rounded off by complete solutions like ship propulsion systems,
engine-based power plants and turbomachinery trains for the oil & gas as well as the process industries. Customers receive
worldwide after-sales services marketed under the MAN PrimeServ brand.