

steering committee, analysis of installed horsepower, analysis of available emissions control and monitoring technologies, and review of technology and market gaps.

The industry-recognized solution for lean-burn engines, a low-emissions retrofit that included increased airflow and precombustion chambers, was found to successfully control engine emissions of NO_x and CO. However, the standard nonselective catalytic reduction (NSCR) system recognized by the industry was found to be unable to consistently control both NO_x and CO emissions, sometimes varying hour by hour.

Because difficulties with this system seemed to be the result of exhaust gas oxygen (EGO) sensors that produced identical output for very different exhaust gas conditions, models were developed to describe the behavior of the EGO sensor and an alternative, the universal exhaust gas oxygen (UEGO) sensor.

Meanwhile, an integrated NSCR system using an advanced, signal-conditioned UEGO sensor was tested and found to control both NO_x and CO emissions. In conjunction with this project, several advanced monitoring technologies have been developed and commercialized.

Another advanced research project is being conducted in collaboration with the Federal Aviation Administration. The project will develop sensing systems that can reliably and economically detect contamination of gas turbine compressor bleed air used to pressurize and ventilate commercial aircraft cabins so that its source can be pinpointed and corrected before it becomes a safety and health hazard. NGML is developing a test bed based on a small turbine engine with the capability of introducing known contaminants. It will be used to experimentally study the characteristics of bleed air contaminants and to test sensing technology.

"The NGML remains focused on its mission statement of maintaining a center of expertise to reduce the life-cycle costs of prime mover operations and be a focal point for industry education, research and application and outreach," Jones said. CT2

PRIME MOVERS

Vienna to Host 9th EFRC Conference

Vienna, Austria, will play host for the 9th EFRC Conference (European Forum for Reciprocating Compressors). The biennial conference will be held Sept. 10-12, 2014.

During the two-day meeting, 40 papers will be presented to an audience expected to gather more than 400 delegates from 30 countries. Conference papers will be grouped into 10 different sessions: Controls, Monitoring, Sealing, Calculation, Design, Technology update, Pulsation, Lubrication, Application and EFRC Working groups.

The EFRC was founded in June 1999. Its mission is to provide the targeted exchange of ideas and information between operators, manufacturers, scientists and component suppliers of reciprocating compressors. The objective of the forum is to advance reciprocating compressors, both technologically and economically.

"This conference is a platform for the exchange of ideas, experience and information," said René Peters, Chairman of the EFRC. "It is where people gather and are open to share experiences so that new ideas can grow. The EFRC stimulates collaboration between suppliers, manufacturers and end-users because we believe that in collaboration, innovation can take place. Only when we do not accept the environment in which we find ourselves, then successful change and innovation can be realized. The best ideas are generated when we do not accept the status quo."

Online delegate registration is open until July 31. Complete details, including session topics, times and locations, can be found at www.recip.org.

Kobe Steel

Kobe Steel Ltd.'s subsidiary, Kobelco Machinery do Brazil Ltda. (KMB), has begun full-scale marketing of nonstandard compressors in South America. Based in Sao Paulo, KMB is Kobe Steel's first location in Brazil.

Kobe Steel, also known as Kobelco, supplies centrifugal, reciprocating and screw compressors. It said demand for nonstandard compressors has been increasing at refineries and petrochemical plants. In Brazil, Kobe Steel has supplied screw compressors used in FPSOs.

Established in November 2013, KMB recently began full-scale marketing. By strengthening its marketing, sales and after-sales services, Kobe Steel aims to expand its compressor business in South America, it said.

In addition to nonstandard compressors, Kobe Steel's Machinery Business supplies a range of products such as small and medium-size standard compressors, reactors for petrochemical and oil refining plants; tire and rubber machinery; and physical vapor deposition equipment.

Hydrotex

Hydrotex, which makes and distributes high-performance lubricants, has named **Philip Kramer** its vice president of business development and hired **Matthew Peebles** as a fuel specialist.



P. Kramer



M. Peebles

Kramer has more than 20 years of experience in strategic business development and planning initiatives for companies such as Nokia, McAfee and Samsung, serving as vice president of strategic planning and vice president of alliance development. Prior to that, he owned a hazardous materials decommissioning and disposal company in the Dallas-Fort Worth area.

Peebles will be responsible for testing and tracking diesel fuel quality as part of the fuel management program.