

Frost & Sullivan Selects Achates Power for New Product Innovation Award

Company's opposed-piston engine is recognized for its significant fuel efficiency and emissions-reduction benefits, as well as its tremendous potential for large-scale market adoption

SAN DIEGO – March 5, 2013—[Achates Power, Inc.](#)—a developer of radically improved internal combustion engines that increase fuel efficiency, reduce greenhouse gas emissions and are lower cost—today announced that it received the [Frost & Sullivan](#) 2013 North American New Product Innovation Award in the medium- and heavy-duty commercial vehicle engine market. Achates Power was [recognized](#) for its innovative efforts to modernize the opposed-piston engine and develop a credible, design-centric solution to future regulatory challenges, including the [GHG Emissions Program](#) for model year 2014-2018 commercial trucks.

“Strong, fundamental research and advanced engineering have enabled Achates Power to develop more than 1,000 unique engine innovations. It’s these innovations that have produced a clean, significantly more fuel-efficient, opposed-piston, two-stroke engine that holds the potential for application in several medium- and heavy-duty commercial vehicle applications,” said Sandeep Kar, global director of Commercial Vehicle Research, Frost & Sullivan. “With the volatility of fuel prices and the strengthening of global emissions regulations, the Achates Power engine is well-positioned for commercialization and growing market penetration.”

“Our goal at Achates Power has always been to create a more economically and environmentally sustainable engine,” said David Johnson, CEO, Achates Power. “We’re honored to be recognized by Frost & Sullivan, which is known internationally for its comprehensive commercial vehicle research. This award further validates our work and corroborates the feedback we receive from our customers and supplier partners around the globe.”

When benchmarked against leading, conventional diesel engines, the Achates Power opposed-piston, two-stroke engine has demonstrated:

- 20 percent lower cycle average brake-specific fuel consumption
- Similar engine-out emissions levels
- Less than 0.1 percent fuel-specific oil consumption
- Reduced cost, weight and complexity

Additionally, after nearly 4,000 hours of dynamometer testing, the Achates Power engine has achieved brake thermal efficiency of 47.8 percent. This is due to its [inherent thermal efficiency advantages](#), which include:

- Less heat transfer due to a lower ratio of surface area to volume in the combustion chamber, caused, in part, by the elimination of the cylinder head;
- Leaner, faster and earlier combustion;
- More favorable relationship between the compression and expansion ratios realized from asymmetric timing of the intake and exhaust events;
- Higher effective flow area due to ports on each end of the cylinder; and
- High scavenging efficiency from a high stroke-to-bore ratio.

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis and extensive secondary research in order to identify best practices in the industry.

Achates Power will accept the award at a ceremony on March 12 at the Hilton San Diego Resort & Spa.

About Achates Power, Inc.

Achates Power, Inc. has developed radically improved internal combustion engines that increase fuel efficiency, reduce greenhouse gas emissions and are lower cost. Founded in 2004—by serial entrepreneur and influential physicist Dr. James Lemke—with the mission to build better, more efficient engines, the San Diego-based company has an experienced staff of engineers and scientists focused on applying their proven technical know-how and expertise, coupled with the industry’s leading-edge testing, simulation and analysis tools. Achates Power has received widespread recognition from groups such as *BusinessWeek*, *AlwaysOn*, *The Guardian* and *Cleantech Group* for its leadership in the cleantech sector. It is backed by top private equity firms Sequoia Capital Partners, RockPort Capital Partners, Madrone Capital Partners, InterWest Partners and Triangle Peak Partners. For more information, visit www.achatespower.com, www.twitter.com/achatespower and www.youtube.com/achatespowerinc.

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