## International Newsroom

Navistar Looks to Future to Extend Technology Leadership Strategy
Navistar to Invest in Danish Technology Company

**WARRENVILLE, III., (Dec. 21, 2009)** – Navistar Inc. has signed an agreement to acquire an interest in Danish technology company Amminex.

"By leveraging our assets and those of Amminex, this agreement supports Navistar's three-pillar strategy of product leadership, competitive cost structure and profitable growth," said Daniel C. Ustian, Navistar chairman, president and chief executive officer. "Amminex offers another tool for Navistar to explore cost-effective, customer-friendly technologies that fit our MaxxForce® Advanced EGR platform, meeting emissions requirements while removing the burden liquid urea places on the industry."

The Amminex technology is a customer-friendly metal ammine-based NOx reductant delivery system, and is a tool which Navistar engineers will use to explore exhaust gas NOx reduction for specific applications. The technology is very efficient when matched with Navistar's clean-burning 2010-compliant engines, which have already achieved 0.4 to 0.5 g/bHp-hr (grams per brake horsepower per hour) of NOx using only Navistar's in-cylinder NOx reduction technology, MaxxForce Advanced EGR. The Amminex delivery system shows the potential to be very cost-effective as an added component of MaxxForce Advanced EGR. In addition, several automotive OEMs are evaluating the technology's use in light-duty vehicles such as autos and pick-ups.

"Our in-cylinder approach with MaxxForce Advanced EGR technology remains our prime path to achieve a tailpipe emissions compliance level of 0.2 NOx," said Jack Allen, president, Navistar's North American Truck Group. "The Amminex technology fits perfectly into our Advanced EGR prime path – assuring that the responsibility of emissions compliance remains with the

OEM and eliminating the need for customers and third parties to invest in a new infrastructure for liquid urea."

As previously announced, all of Navistar's 2010 products will come to market EPA certified and in full regulatory compliance between 0.4 and 0.5 g/bHp-hr NOx under all operating conditions, consistent with all EPA standards when used with Navistar's green credits.

"While other commercial truck manufacturers have limited their investment in emissions technology, declaring liquid urea-based SCR to be the solution for NOx reduction, Navistar continues to invest in new technologies that support our philosophy that emission control is the responsibility of the manufacturer, and that trucks should operate cleanly under all operating conditions," said Eric Tech, president, Navistar Engine Group. "This not only enables our engine strategy in the U.S., but also can be a key enabler as more stringent standards come into effect globally."

## **About Amminex Technology**

The foundational metal ammine-based delivery system developed by Amminex was initially developed for fuel cell applications. The technology is flexible and may be applied to fuel cells and other applications in the future, as fuel cell and battery technology matures.

"This new relationship with Amminex not only broadens our technological capability, but also allows us to share in potential benefits as other OEMs evaluate and adopt the technology," Ustian said. "Navistar's continued investment in leading-edge engine technologies has enabled the company to deliver great products that address future regulatory emissions goals while meeting customer needs." He cited a number of examples of Navistar's demonstrated commitment to establish product leadership with advanced engine technologies:

- Advanced engine components. Navistar recently acquired Continental Diesel Systems' advanced fuel system technologies and resources and formed a new company, Pure Power Technologies, LLC, which will vertically integrate research and development, engineering and manufacturing capabilities to produce world-class diesel power systems and advanced emissions control systems, including Amminex-derived technology.
- Emissions control technologies. Navistar vehicles have consistently achieved the EPA's tough emissions requirements years ahead of time. Using a combination of advanced fuel injection technology, proprietary combustion bowl design, advanced air management and improved electronic control and calibration, Navistar introduced the customer-friendly 2010 emissions solution, MaxxForce® Advanced EGR.
- Hybrid solutions. Navistar produced the industry's first hybrid commercial trucks and school buses, marketed under the International® and IC Bus® brands. The company has also developed advanced hydraulic hybrid solutions in partnership with Eaton Corporation.
- Advanced aerodynamics. Navistar's advancement in aerodynamics has made the International® ProStar® the most fuel-efficient long-haul truck on the road.
- All-electric vehicles. Most recently, Navistar's work on zero-emission allelectric delivery vehicles was recognized when U.S. president Barack Obama announced a Department of Energy grant for Navistar to build 400 vehicles in 2010. Navistar has entered into a joint venture with Modec Ltd. of the United Kingdom to produce and sell electric Class 2c-3 commercial vehicles in North, Central and South America.

"It is a major breakthrough for Amminex that a global leader such as Navistar

has entered into a series development agreement as well as a long-term supply agreement with us," said Jens Hinnerskov, Amminex chief executive officer. "Our ability to attract investment from a wide spectrum of entities bodes well as we continue to focus on advanced power solutions and clean technologies."

## **About Amminex**

Amminex, based in Søborg, Denmark, is privately held. Current investors include SEED Capital Denmark K/S, Conduit Ventures Ltd., Yasuda Enterprise Development Co. and the Nordea Foundation. Additional information is available at <a href="https://www.amminex.net">www.amminex.net</a>.

https://news.international.com/news?item=343