Advanced Engineering Keeps Deere At Forefront Of Technology

MOLINE, Ill. — There's little doubt we live in a technology-driven age. And while technology is absolutely essential in today's agriculture, the ongoing challenge for equipment manufacturers is to apply new technology in ways that provide tangible returns to the producers who purchase and use these companies' products.

The mission of the Advanced Tractor Engineering Group, part of the John Deere Product Engineering Center in Waterloo, Iowa, is to vigilantly look for new technologies that can be applied to John Deere equipment to deliver even more value to customers' operations.

"In simple terms, we're the eyes and ears to the future," says Merv Kizlyk, manager, Advanced Tractor Engineering. "Our task is to look for current and future technologies that may exist in other industries — automotive, space exploration and so on — to see if we can adapt them in ways that help us address our customers' challenges and make them more productive and more efficient."

Bob Mayfield, a colleague of Kizlyk's said, "It's never technology for the sake of technology. Our challenge is to sort through the bells and whistles and focus on technologies that will make our customers more profitable at the end of the day," according to the John Deere staff engineer.

Focusing On The Near Future

While you might assume Advanced Tractor Engineering concentrates on some pretty space-age stuff, Kizlyk said most of the group's work is focused on a timespan of anywhere from two to 15 years in the future.

"Obviously, we look at things that are more futuristic, that reach out beyond this timeframe. But our critical focus has been, and will continue to be, product innovations that can help our customers sooner rather than later," Kizlyk said.

Customers need look no further than the new John Deere 8020 Series Tractors for examples of real-world innovations made possible by the work of the Advanced Tractor Engineering Group.

The John Deere Active-Seat" combines electrohydraulic technology with air suspension to provide the smoothest ride in the industry and a significant reduction in operator fatigue.

Independent Link Suspension (ILS) is an independent front suspension system that transfers more power to the ground. ILS virtually eliminates power hop, enhances operator comfort, and increases productivity because of higher field and transport speeds.

"These innovations are great examples of John Deere's investment in advanced engineering," Kizlyk said. "Both were put on the fast track to market because of the value and benefit they would provide our customers."

While customers serve as the ultimate judge for any new product innovation, it is interesting to note that two John Deere suspension technologies, including the ActiveSeat and a fully suspended tractor design, recently received prestigious awards for excellence. Each innovation received a gold medal at the 2001 Agritechnica Fair in Germany. Agritechnica is a major international farm equipment exposition conducted every two years. Gold medals are awarded sparingly. In fact, John Deere received two of only three gold medals awarded on more than 260 product innovations submitted for consideration at this past year's event.

"Earning recognition for

our leading-edge technology is definitely rewarding," Kizlyk said. "But even more rewarding is the knowledge that this technology can help our customers do their jobs better, faster, more efficiently, more productively and more profitably than ever before."

AutoTrac: Tomorrow's Technology Today

John Deere's operator-less concept vehicle, the Autonomous Tractor, has helped the company capture headlines and imaginations in recent months. More importantly, though, the research and development effort on this proj-

ect has helped yield one of the more intriguing product innovations in recent years: the GreenStar® AutoTrac Assisted Steering System.

The Autonomous Tractor is equipped with "smart" technology that enables it to effectively perform a broad range of functions without an operator. While such an operatorless tractor is still years from becoming a market reality, Merv Kizlyk said the engineering involved in this project was key to the development of the AutoTrac System available on John Deere Track Tractors in 2002.

"AutoTrac is a valuable tool that can help operators shift their focus away from mundane tasks like steering to tasks that add more value to their operations," said the manager of the John Deere Advanced Tractor Engineering Group. "That's the real benefit of the investment in an effort such as the Autonomous Tractor project. It helps us research and accelerate the development of real, tangible innovations that will help customers in their operations today and in the very near future."

John Deere AMS Delivers Solutions To Agriculture's New Challenges

MOLINE, Ill. — The pace of change in the agricultural marketplace seems to accelerate with each passing year, and with this change come new challenges and opportunities.

Providing producers with solutions to address these challenges and capitalize on the opportunities is the critical role played by John Deere AMS (Ag Management Solutions).

"We see several trends having a profound impact on agriculture in the years ahead," said Barry Schaffter, vice president, John Deere AMS.

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