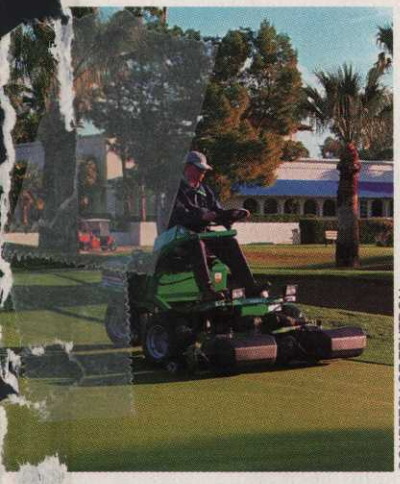
Giving a Charge?

BY LARRY AYLWARD, EDITOR

No one can say whether the electric triplex greens mower will transform the way the industry does maintenance. But the machine is gaining a presence in the industry



COURTESY OF TEXTRON

Textron will continue to pursue the electric technology. "We want to proliferate the technology and expand it to other turf maintenance products," says William Robson of Textron Golf, Turf & Specialty Products.

Frustrated by hydraulic fluid leaking on the golf course greens from the cutting units of his diesel-powered triplex greens mowers, environmentally minded superintendent Dean Baker elected to "go electric" in 1998. Baker, certified superintendent of Kinston CC in Kinston, N.C., purchased three Jacobsen Greens King Electric triplex greens mowers from Textron Golf, Turf & Specialty Products.

"I don't care how good of shape you have your diesel-powered greens mowers, there's always the possibility of fluid leaks," Baker says. "I was ready for a change."

Because electric triplex greens mowers don't require oil, gas or hydraulic fluid, they can't leak those liquids and damage greens. "Preventing spillage was my top priority," Baker says.

Baker, whose course is an Audubon Cooperative Sanctuary, also likes that electric triplex greens mowers are easy and inexpensive to maintain. Since there are no oil, filters and spark plugs to change, as well as no ignition components and radiators to maintain, Baker doesn't have to pay for parts and man-hours to service them.

Baker also contends that quality of cut is better with the electric mowers because their reels spin faster. "So even if the reels get dull, you can still get a good cut from them," he adds.

Finally, Baker is impressed with the quietness of the mowers. "All you hear is the reel turning and the grass hitting the bucket," he says.

But despite their benefits, not all superintendents have taken to electric triplex greens mowers like Baker. Most still prefer the tried-and-true power-train mowers fueled by gasoline and diesel fuel. Much of that has to do with superintendents unwillingness to change to something different, but it also has to do with the unavailability of electric greens mowers.

Until recently, only one of the industry's major mower manufacturers, Textron, offered electric triplex greens mowers. Last month, John Deere revealed possible plans for a greens mower with an electric reel drive. The Toro Co. has no current plans to introduce a similar machine.

"We're not pursuing it," says Helmut Ullrich, Toro's marketing manager for greens mowers. "The electric market is a niche market."

No one will say the electric triplex greens mower will transform the golf course maintenance industry. But with Deere's recent announcement and Textron's commitment to the machine, it has more of a presence in the industry than before.

"Our customer base is a conservative customer base," says William S. Robson, director of marketing for Textron Golf, Turf & Specialty Products in Augusta, Ga. "Our customers are careful about embracing new technology."

But Robson adds that more superintendents are gaining interest in the technology. "The tech-

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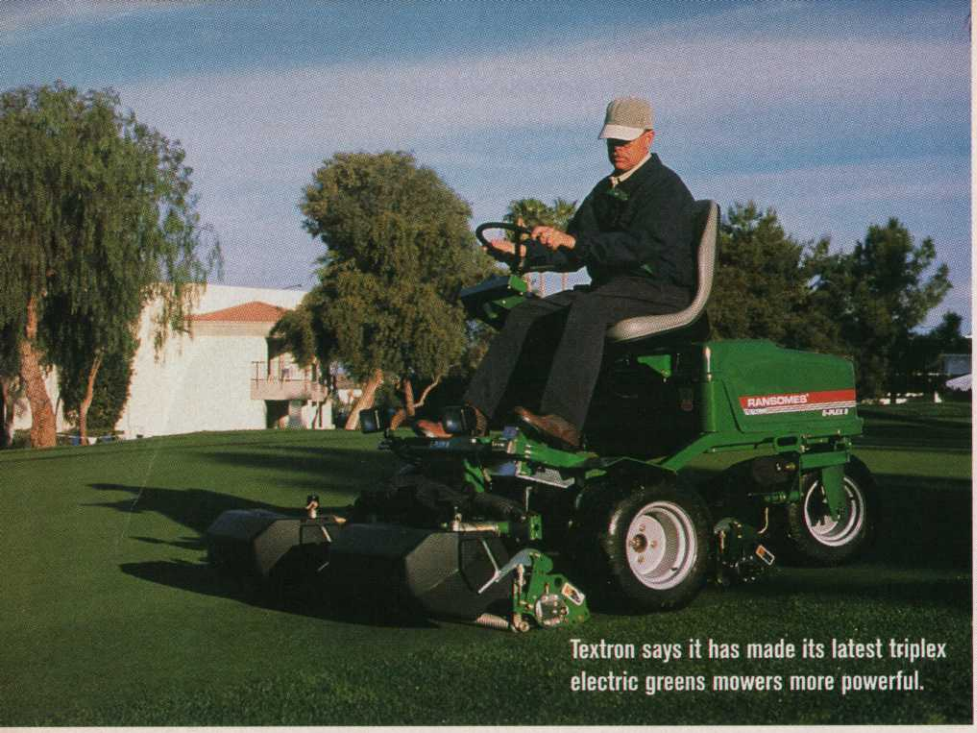

Textron says it has made its latest triplex electric greens mowers more powerful.

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nology continues to improve and reception among superintendents continues to increase," he adds.

Power play

Lack of power has been a criticism of triplex electric greens mowers. It has been about six years since Ransomes introduced the E-Plex, the industry's first electric triplex greens mower. Ransomes introduced the E-Plex II, an improved version of the E-Plex I, about three years ago. Textron introduced the Jacobsen Greens King Electric Triplex Greens Mower in 1996 and acquired the rights to the E-Plex when it purchased Ransomes in 1998. Robson says the electric technology has improved with the new mowers, especially in the power department.

"That's one area where continued research and development has helped us," he says. "Most superintendents can mow up to 20 greens without recharging the batteries."

Robson says the electric technology is more intricate than people realize.

"It wasn't by luck that we developed a mower that has the cutting, climbing and transport power to cut so many greens," he says. "It's a fairly complex machine."

Chuck Greif, manager of worldwide market and development for John Deere's Golf & Turf Division, says superintendents want electric triplex greens mowers mainly for two reasons: to cut down on noise and to eliminate fluid leaks. But Greif stresses that the machine must have the power to perform the same functions as a gas- or diesel-powered mower, such as verticutting, grooming and scalping for overseeded areas.

With that in mind, Deere presented a prototype machine — a diesel-powered triplex greens mower with an electric reel drive — for evaluation last month during the John Deere Golf & Turf 2001 Feedback Program. As Greif puts it, "The mower is electric where it needs to be electric."

"It has diesel power so you have power steering and traction drive," Greif explains, noting the mower has the might to perform the functions of a power-train mower. "But we've taken the hydraulics off the cutting units."

Hydraulic cutting units develop wear points from continuous raising and lowering, which creates the potential for leaks. But there are no leaks if the cutting unit is run by electric power.

There will also be less complaints about noise from people living on golf courses if more electric greens mowers are used by maintenance staffs. Noise is a major factor that will drive the success of electric greens mowers, especially as more homes are built on courses.

Jeff Davis, superintendent of the Sanctuary GC at Westworld in Scottsdale, Ariz., says homeowners often complain about "loud machines" and ask crew members why they must use the power-train mowers so early in the morning. When homeowners inquire about less-noisy electric-powered equipment, Davis tells them the technology is coming.

Greif says noise will always be an issue on courses with residents as well as resort courses. "We're all going to work to have to drive our noise levels down on our machines, whether they're electric, hydraulic, gas or diesel mowers," Greif says.

Davis suspects the noise issue will become more regulated by local governments. "Zonings and city codes will probably mandate that greens mowers and other machines operating before 6 a.m. be non-gas and non-diesel powered," Davis says.

Outlook

Proponents of electric triplex greens mowers vow that superintendents will save money on fuel and maintenance. It's not a huge amount, but Robson says a superintendent can save about $700 annually on operating costs with a unit.

The cost differential between an electric and a power-train mower is not large. Robson says a fully equipped Ransomes E-Plex II costs $19,110 compared to $17,740 for a fully equipped G-Plex II gas mower.

Greif says the automobile industry is driving the electric technology. Honda, Toyota, Ford and Chrysler have introduced hybrid (gas and electric) vehicles.

"If we can piggyback what the auto industry is doing, then we might be able to go somewhere with the technology," Greif says, stressing that there must be an adequate demand for electric mowers.

Robson says Textron will continue to pursue the electric technology. "We want to proliferate the technology and expand it to other turf maintenance products," he adds.

Toro is doing the opposite. "We have other products that have more priority than chasing a wild goose," Ullrich says, adding that Toro will only enter the market if there's more customer demand.

But, ultimately, the fate of the electric triplex greens mower is in the hands of superintendents. ■