ACCESSORY City More superintendents seek sleek for groups movers to improve our

More superintendents seek sleek add-ons for greens mowers to improve cutting and overall performance By Peter Blais



Riding mowers, such as John Deere's 2500E Tri-Plex, have basically the same options as walk-behind greens mowers when it comes to accessories.

hile basic greens mower technology has changed little in the past 20 years, accessories aimed at improving turf conditions are becoming increasingly popular, manufacturers say. With more and more courses being converted to modern turfgrass cultivars — like the new bentgrasses, ultradwarf bermudagrasses

and salt-resistant paspalums — mowing equipment has to be able to both cut low and groom turf better than ever before, according to Helmut Ullrich, marketing manager for greens products with The Toro Co.

"Although groomers have been around for some time, what I have seen lately is more people trying to brush, whether that's with a rotating brush replacing the grooming reels or

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COURTESY OF JOHN DEERE

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HELMUT ULLICH, THE TORO CO. Continued from page 54

a flat-out brush," Ullrich says. "That's especially true with walking mowers. We've introduced a push-broom-type brush that goes in front of walkings mowers. It has found a significant audience.

"We've seen more customers replacing grooming reels with rotating brushes, instead of installing grooming blades. By using rotating brushes, people are removing more grass-blade material. The steel blades only slice the grass. But the brushes lift the grass blades into the reel and allow the blades to be cut better. ... The rotating brush is used with both walkers and riders."

Another trend, Ullrich says, is the use of carbide-tipped blades for thatching reels or verticut reels. Carbide-tipped blades stay sharp longer, cut cleaner and therefore disturb the green less than common verticut blades, while also removing enormous amounts of organic material compared to traditional blades.

"You end up with firmer, speedier greens over time," the Toro executive explains. "In addition, the topdressing is able to work its way better down to soil level. Carbide blades



Toro offers a pushbroom-type brush that flips down in front of the mower and helps stand up grass for a better cut.

are much more expensive than traditional blades. But they are well worth the investment for the performance, lasting five to 10 times longer."

Rotating rear-roller brushes are becoming more popular to keep rear rollers clean on riding mowers, Ullrich adds. They attach to the frame, are adjustable and are driven by a belt of the reel shaft.

"Keeping the rear rollers cleaner accomplishes two things," he says. "First, if you are in a wet green or tee area, the dirt and clippings may build up on the roller and change



Toro's grooming reel and rotating brush are inter-changeable.

the height of cut. Also, if that [dirt and clippings] builds up on the rear roller, it may fall off in clumps and leave an unsightly mess on the

greens and tees. The brush disperses the grass before it builds up, and clumps begin falling off the roller."

While walking greens mowers have not changed for many years, there are many optional accessories superintendents can order for their particular situation or individual applications, according to Mike Koppen, John Deere's golf and turf products group marketing manager.

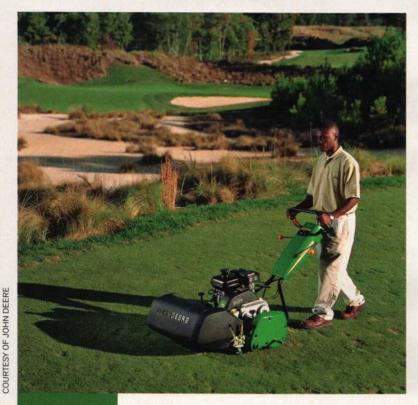
For example, Deere offers certain reels for mowing greens and others for tees and collars; different bed knives for different heights of cut; front-mounted rotary brushes that stand the grass up before it is cut, which controls runners and reduces grain; Greens Tender Conditioners, basically small knives that go in before the reel to slice the stolon, promote new growth, reduce thatch and reduce grain; smooth or grooved front rollers; transport wheels and trailers; and light kits to illuminate late-evening or early-morning mowing.

"What you have also seen in the last 10 years is the evolution of more safety features on walk-behind greens mowers," Koppen says. "Operator-presence systems have safety bails. If the machine gets out of the control of the operator, he simply releases the safety bail. The engine continues running, but cutting and traveling stops."

Riding greens mowers have basically the same options as walk-behind greens mowers, with a similar push for reductions in noise, more stability and operator-safety devices, Koppen says.

The golf market is seeking a reduction in hydraulics on greens and other turf-equipment

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Deere's new 2500E eliminates 102 potential hydraulic leak points.

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applications, the Deere representative adds. Deere introduced a new greens mower recently called the 2500E, which basically eliminates 102 potential hydraulic leak points. The reel circuit is now all electric, whereas in the past it was all hydraulic. This reduces the chance of leaks on the green and enables the operator to mow at about half-throttle, which reduces noise by a few decibels.

"In the future, we will probably be moving toward all-electric machines," Koppen says. "Noise and emission standards, not only in North America but also worldwide, are becoming much stricter."

Ryan Weeks, Jacobsen's director of product management, agrees the trend is toward electric-powered mowers and reels, noting that his company offers all-electric-powered riding and walking greens mowers. Jacobsen has a gaspowered floating-head walking greens mower that is popular and the company will release an electric version toward the middle or end of the year. The electric unit should provide cost savings and improved quality of cut.

"One of the things you can do with a unit like that is vary the speed of your reel from the speed at which the mower travels," Weeks says. "That helps ensure you get the right quality of cut. That cannot be done with a standard gear-driven mower with a drive system linked up one-to-one with the reel system."

Typically, bed knives are held on with 13 screws. About a year ago, Jacobsen came out with the MagKnife system that eliminated the screws and replaced them with bed knives that can be held onto the bed bar with magnets. The MagKnife allows blades to be changed in a matter of minutes rather than a half hour, Weeks says. Jacobsen introduced an improved version called the MagRazor at the Golf Industry Show. The thicker MagKnife can only be removed with a specialized pair of vice grips or pliers, although it can still be done quickly. The MagRazor gives the user the ability to remove the blades with just a pair of gloves.

"With the magnetic system," Weeks says, "you can take the blades off the reels while they are still sitting there beside the mower. You don't have to take it back to the bench, turn it upside down, take all the screws out and go through the whole sharpening process. The MagRazor, because it is a true knife held to the reel with the magnetic system, means you do not have to go through those long, drawn-out operations to get a sharp blade on the reel. There are big labor savings associated with that, as much as 30 minutes per reel in changing or sharpening blades.

Right now the MAG system is not factoryoptional but is available in conversion kits. For the first couple quarters in 2005, Weeks says, it will continue to be available as a conversion kit. Toward the middle of the year, it will become available as a factory option on some Jacobsen greens mowers. "That is where the MagRazor will see its first use. Farther down the road, we envision all our mowers coming out of the factory with a reel that will also have a MAG system."

Jacobsen, Weeks adds, is a big proponent of vertical mowing. "Along with the groomers on our reels, we sell verticutters. They allow you to create a healthier plant by not only cutting the top of the grass, but also cutting down into the grass to promote vertical growth of the plant and eliminate the runners that grow under the surface. We offer that with our reels."

Peter Blais is a freelance writer from Monmouth, Maine.