SMART PRACTICES FOR REEL MOWERS

ACHIEVING GREAT AFTER-CUT APPEARANCE isn’t purely a function of machine adjustments. It is an equal combination of precise machine adjustments, smart maintenance practices, and proper agronomic practices. Achieving two while neglecting the third can lead to poor turf conditions or an unsightly after-cut appearance.

PRECISE MACHINE ADJUSTMENTS

The cardinal rule when setting up the cutting units within a machine is consistency. All cutting units within a machine and all traction units within a fleet should be set up the same for consistent results. Many times, an operator or technician will experiment with different settings or accessories on one or a few of the cutting units and leave the other cutting units on the machine untouched. This typically leads to inconsistent cut quality and appearance. If things appear to go awry or you’ve lost track professionals who designed and built the field, including consultant Stan Moscrip of Athletic Field Development, LLC. “He really knew his business; I was so impressed, for example when he was checking the work of the GPS-operated laser leveler. My hat’s off to the turf industry.”

Curtis relayed a story that turf managers can appreciate. While speaking at a function, Coach Porter said, “My grounds people tell me . . .” and went on to make his point. Curtis rightly believes that that statement shows the good relationship his grounds staff has with their championship winning coach.

WINNING RELATIONSHIP

Cub Cadet Field was really born out of a great relationship between the University of Akron and Cub Cadet. “Cub Cadet equipment is used to help care for the grounds, we’ve filmed our products in use on campus and hired interns from their top-ranked programs,” said Jeff Salamon, Cub Cadet director of brand marketing. “So considering Cub Cadet’s commitment to caring for high-profile grounds, campuses and yards, the opportunity to have our name associated with one of the most impressive campuses and a showcase, state-of-the-art soccer fields in the country was a natural extension of this relationship.”

A commitment to impeccable grounds care extends beyond the playing field. In fact, the University of Akron has been recognized nationally as Campus of the Year multiple times. It is a remarkable institution—progressive and innovative—in a very vibrant, thriving market that is important to Cub Cadet. “The opportunity to extend our relationship with a university that fits so closely with our brand was a very exciting opportunity that really got our attention,” Salamon added.

“Cub Cadet’s reputation is progressive, innovative, premium quality and high performance, qualities that can also be said of the many universities and colleges like the University of Akron and its National Championship soccer team. The fact that we can also leverage the visibility of a #1 ranked college team in an important geographical market and to the university and college market made this a very smart decision for our brand.”

TEAM’S SUCCESS LEADS TO NEW FIELD AT U OF AKRON

NATIONAL CHAMPIONSHIPS and close finishes tend to bring a lot of attention to collegiate athletic programs and in the case of the men’s soccer team at the University of Akron in Ohio, that attention translated into a new, state-of-the-art natural turf pitch. Within a year of opening the new soccer facility, Akron beat Louisville 1-0 to win the NCAA men’s championship.

“At the behest of Coach Caleb Porter we wanted to create a European atmosphere with our new field,” said Ted Curtis, the university’s vice president of capital planning and facilities management. “That meant seating close to the field and natural grass.”

Curtis said the men’s team has been competing at a high level for years but the straw that broke the camel’s back regarding their no-drainage home field came 3 years ago when heavy rains dictated that the team give up a home NCAA playoff game, which they lost. The new field has a chevron drainage system under it and a continuous slotted drain around the field.

“The number one reason we built a new field on a new site was to get more seating, followed by needing to eliminate the drainage problems,” said Curtis. “We also had bad lighting, with leaning telephone poles and not enough light to televise night games.”

Curtis said he was “extremely enlightened” by working with the turf professionals who designed and built the field, including consultant Stan Moscrip of Athletic Field Development, LLC. “He really knew his business; I was so impressed, for example when he was checking the work of the GPS-operated laser leveler. My hat’s off to the turf industry.”

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of what adjustments have been made, one quick fix is to revert back to factory settings and start from there.

Knowing the true effective height of cut is also important to the health and appearance of the turf. A cutting unit height of cut is usually set in a shop using a metal bar across the rollers to simulate the surface on which the cutting unit rests. The problem with this bench set height of cut is the actual surface on which the cutting unit rides is not stiff like metal—it’s grass. Grass absorbs and cushions some of the weight, and it can give even more if it is wet. Because of this, the effective height of cut, or the height at which you are truly mowing the turf, is usually much lower than the bench set height. Cutting the turf lower than you think you are could very well lead to after-cut appearance issues. An effective tip to improve after-cut appearance is to raise the bench set height of cut.

Using the optimal clip rate, a more complicated concept is critical to achieving high quality after-cut appearance. Although unnoticeable to the eye, reel mowers leave a subtle scallop pattern, similar to waves on water, on the surface of the turf. The peaks of the “waves” are created by the reel blades and bedknife working together to gather and clip the grass. Ideally, the distance between the wave peaks, or the clip rate, should be equal to the height of cut.

The factors that affect the distance between the wave peaks are the frequency at which a reel blade hits the grass (a combination of the number of reel blades and the speed at which the reel is spinning) and the forward ground speed of the cutting unit. If the reel speed is too slow in relation to ground speed of the cutting unit, the reel blades and the speed at which the grass (a combination of the number of blades and bedknife working together) are cutting the turf lower than you think is not stiff like metal—it’s grass. Grass absorbs and cushions some of the weight, and it can give even more if it is wet. Because of this, the effective height of cut, or the height at which you are truly mowing the turf, is usually much lower than the bench set height. Cutting the turf lower than you think you are could very well lead to after-cut appearance issues. An effective tip to improve after-cut appearance is to raise the bench set height of cut.

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**SMART MACHINE PRACTICES**

Keeping reels and bedknives sharp is critical to achieving good quality of cut and after-cut appearance. Whether it is cutlery, a saw blade or a mower reel, blades cut cleaner and more accurately when they are sharp. Dull reels and bedknives tend to tear grass versus cutting it. This can make the after-cut appearance less attractive and endanger the health of the turf.

Light bedknife-to-reel contact will ensure a good after-cut appearance, too. With light contact between the bedknife and the reel, the two act like a pair of scissors to clip the grass. This light contact setup also serves to act as a self-sharpening mechanism for the two blades. This can lead to less maintenance through a longer service interval.

Verticutting is a practice vital to an attractive after-cut appearance and overall turf health. Verticutting is the process of using vertically rotating blades to remove some of the horizontal growth and thatch that occurs around a grass plant. This process provides several benefits to the turf: it opens the turf canopy to allow for more sunlight exposure, it allows topdressing to penetrate into the plant and soil more easily, and it forces the plant to stand up straight and focus plant energy on vertical growth rather than horizontal growth. This emphasis on vertical growth leads to a more uniform turf surface, which then leads to a higher quality of cut—provided by The Toro Company.

New aerator model on market

Precision Welding has introduced its ProAerator commercial series of aerators in the USA. Available in four models with sizes ranging from working widths of 39” to 102”, complete with closed spoon (core) tines or slicing blades which are independently mounted for easier turning and minimal turf damage. Mounted on a 1” steel shaft, tines are manufactured of temper-hardened steel and have oil impregnated Teflon-coated tine bearings with grease fittings for ease of maintenance and extended life. Commercial models are built using a welded 1 ½” square solid steel frame with heavy duty expanded steel shields which serve as weight racks. Also available is an optional water tank for weight. Units are available with tow behind draw bar or Cat.1, 3-point hitches. An optional tow-behind kit is available for use with all terrain vehicles.

**Precision Welding**

**TurfMuncher field reclamation machine**

Now turf manufacturers and field owners and builders have a sustainable alternative when it’s time to replace existing turf field installations. TurfMuncher from FieldAway provides a cost-effective and efficient means of removing turf sports fields that need replacement. TurfMuncher offers an opportunity to reclaim and recycle used turf and infill. TurfMuncher is towed by a 25-hp hydrostatic drive tractor, and its hydraulics are powered by a separate 40-hp gasoline engine. After the turf field is precut, TurfMuncher lifts the turf and infill in panels up to 15-feet wide and then separates up to 98% of the infill from the turf and deposits it into carts, buckets, or bags. Finally, the turf is rolled and delfed in rolls up to 250 feet. The TurfMuncher can reclaim up to 30,000 square feet of field turf per day.

**FieldAway**

**Ariens’ profesional 36 Sno-Thro**

Ariens Company offers the Professional 36 Sno-Thro with a 342cc Ariens Polar Force engine by Briggs & Stratton, which removes snow from sidewalks and large areas with its 36-inch clearing width. The all-steel, 16-inch serrated auger and three-blade, 14-inch steel impeller enhance clearing ability. A 50-foot discharge range ensures that snow lands outside of the clearing path of the machine. Automatic traction control optimizes maneuverability, and with no levers or triggers, steering is effortless. The Sno-Thro also features a 120-volt electric start with recoil backup, a 3.2 quart fuel capacity, 6 mph forward and 2 mph reverse speeds.

**Ariens Company**

www.stma.org

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**OFTEN OVERLOOKED GRINDING ADVICE**

Turf Managers and technicians all seem to have their own ideas on when and how to grind reels. For some, their grinding philosophies are as guarded as a certain colonel’s seven secret herbs and spices.

So, for an expert look at reel maintenance, we asked Erik Sides, training manager for Jacobsen Turf Equipment, to give a few basics to technicians and managers who keep in mind when it’s time to grind.

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