Rain Bird® Integrated Control (IC) System™ gives you flexibility for today and tomorrow. In a class of its own and masterfully engineered with rapid two-way communication, real time diagnostics and centralized control, the fully underground IC System puts you in command of individual rotors from your central control computer, tablet, radio and smart phone. The IC System helps save costs using significantly less wire and material, making it easy to install, expand and adapt as your course grows and evolves. With the Rain Bird IC System, you're setting a course of action. Set your course at rainbird.com/ICS.
Redexim North America:  
Breaking Barriers To Better Turf

Redexim North America is a leader in the design and development of professional turf equipment produced specifically for aeration, seeding, top dressing and environmental maintenance. With marketing operations in over 50 countries in the world, it has the largest range of equipment in its sectors, supported by a worldwide network of authorized distributors.

The Redexim North America corporate office is in Fenton, Mo., with its parent company and central engineering base in Zeist, Holland, with sister companies in England and in Australia, supported by manufacturing in the USA, UK, Holland, Italy and Hungary. The Group's philosophy is to supply to each market with products that meet local needs.

"These products are designed to withstand vigorous use in all conditions, and are backed by a distribution network that can handle technical, parts and service back-up that is the best available in the industry," said Paul Hollis, executive vice president of Redexim North America. "We lead the way with products like Verti-Drain, Verti-Core, Verti-Seed, Verti-Quake, Verti-Knife, Over-Seeder, Easy Spread, and Turf Tidy. These unique and trend-setting machines are the most advanced turf management tools on the market, recognized for performance, quality, durability and customer satisfaction. All Redexim products pass the toughest test of all – the test of time.

"The quality construction and advanced design of Redexim products are backed by the best after-the-sale service program in the industry. Our distributor network, the finest in the world, guarantees spare parts availability to keep your equipment running. Redexim North America has become a leader in golf course and turf management equipment by supplying the best machines money can buy, and by listening to the people who use them. Forging strong relationships with customers, built on trust and respect, is essential to our promise of quality."

Paul went on to say, "Innovative design, craftsmanship, and heavy-duty construction make Redexim products the standard of quality in the turf management marketplace. We know what our customers need – machinery that performs well, saves time and offers value. The market-leading range of Verti-Drain’s and other fine equipment have outsold and outperformed all competitors for over 30 years."

Redexim products have been used by golf course superintendents in the four major championships, and by sports turf managers in championship venues for the NFL, MLB, NCAA, IOC, FIF, UEFA, and the World Cup.

In the coming year, Redexim North America plans to launch its walk-behind power plant called the Carrier, which can work with seeders, aerators, verti-cutters and a multitude of other small three-point mounted equipment. In addition, Paul told us that Redexim North America is planning the exciting introduction of a new high-speed deep-tine aerifier called the Bullet in two sizes later this spring or summer.

"While we have no crystal ball to foresee the future, our hopes are that we see the world economy to pick up and strengthen existing revenue streams. Further expansion of our factory-direct store, Redexim Turf Products, as an alternative to conventional distribution is on the drawing board, as well as additional investment in our agriculture division, Tortella North America, while the agriculture market continues to be booming," Paul concluded.

www.redexim.com
636.326.1009
Introducing 'The Bullet' by Redexim North America. This new Verti-Drain has working speeds near 4 mph for the highest performance in its field.

The Bullet has working widths of 64 and 83 inches and is the most productive Verti-Drain ever built. It is built heavier than other high speed aerators, yet it can be used with tractors starting from 45 hp and up.

Both models are low maintenance with sealed bearings on most pivot points, a single-speed gearbox and optional hydraulic depth adjustments made from the tractor seat. These units penetrate 9 inches into the soil, and our patented parallelogram action give you a true forced heave to the tines, thus producing the shattering effect and relieving compaction, leaving the surface ready for play.

NO PARALLELOGRAM - NO FORCED HEAVE.
Redox Turf Proves Less Isn’t Just More ... It’s Better!

Redox Turf Proves Less Isn’t Just More... It’s Better!
Golf course superintendents are constantly under pressure from three fronts: agronomically, to produce vibrant, healthy and quality playing conditions; economically, to produce positive results profitably; and environmentally, generating visible results while faced with the demand for lower inputs and reduced impact on ground and surface water.

Lower nutrient inputs – particularly phosphorus and nitrogen – is not simply a fad that superintendents can expect will fade away. While most people educated in agronomy understand the need for nutrients to generate quality turf, it is also understood that the nutrients need to be kept from leaching into ground water.

Through the development of high-efficiency fertilization solutions, Redox Turf provides protected, complexed nutrient molecules, preventing "tie-up" in the soil.

With superior effectiveness, and dramatically lower application rates, Redox Turf allows you to be environmentally responsible without sacrificing conditions.

The result is more effective uptake by the plants and dramatically lower inputs, protecting ground water from potential ecological harm.

Much of today’s conventional product chemistry was developed decades ago with simple product chemistry in mind, often neglecting the agronomic requirements that may be necessary for optimum plant growth.

The science of Redox focuses on Agronomic Chemistry centered on four primary considerations: The agronomic needs of the plant, potential soil and plant interactions, interactions of the elements in solution and finally, product chemistry. In essence, we address the question of product formulation in a reverse order of the traditional approach.

The result is plant nutritional solutions that work, and work effectively together, to produce healthy and high quality turf.

On golf courses across the nation measuring by all relevant standards, including Visual Quality, the use of Redox Turf has continually shown to be agronomically, economically and environmentally advantageous.
Introducing the most complete plant nutrition solutions for fairways and greens that allow you to control Nitrogen inputs.

TurfRx Fairway and TurfRx Green are highly efficient sources of carbon-chelated K & P nutrients, combined with essential micro-nutrients, giving you the power through all seasons to improve and maintain plant health without excessive growth. Add only the Nitrogen you need, based on cultivar and season.

From coast-to-coast, Redox Turf has been the solution of choice of leading course superintendents. Now, we are introducing easy-to-use formulations of our two most popular products:

Cost effective, safe to handle and easy to mix, the Redox Turf Flowable solutions provide powerful, plant-available nutrients that strengthen plant growth in any growing environment.

Call your Redox Turf representative today to learn more about the fast, easy and affordable way of improving conditions on your course.

Visit www.redoxturf.com to find a distributor near you.
Improve Turf Quality and Reduce Maintenance Costs With Turf Screen

Since its introduction in 2010 by a former golf course superintendent, Turf Screen™ has received widespread recognition from golf courses throughout the US and Canada for its ability to help turfgrass cope with summer stress conditions (http://turfscreen.com/blogs/testimonials). But Turf Screen helps superintendents do their job better and more effectively in other ways, too. Research studies by independent testing laboratories and universities have verified that Turf Screen improves fungicide efficacy and duration when part of a sound agronomic maintenance program. Turf Screen can also help provide firmer and faster playing conditions, and reduce overall maintenance costs.

So, how can such a simple concept and product—a pigmented “sunscreen for turf”—achieve these wide-ranging and important benefits? Very simply, its patented formulation of titanium dioxide and zinc oxide, which puts Turf Screen in a pigment class all by itself. Here’s how it works.

Refractive Index:
Due to their high refractive index, TiO2 and ZnO are the only FDA-approved natural ingredients for human sunscreens. In simple terms, TiO2 and ZnO reflect solar radiation away from its surface—particularly plant-damaging UVB and IR radiation. UVB is widely known to be greatly damaging to turf, up to and including cell collapse and death. Additionally, UVB has been demonstrated to damage the plant mechanisms directly responsible for photosynthesis production. Solar radiation's IR component is a major source of plant overheating on hot days. It’s pretty simple: by reflecting and reducing UVB and IR exposure, Turf Screen improves turf quality and allows turf to better withstand extreme summer stress conditions.

Fungicide Photo-degradation:
If you spray fungicides, add Turf Screen to the tank-mix to improve fungicide performance. Many fungicides are highly susceptible to UVB radiation and will breakdown rapidly from exposure to solar radiation. Turf Screen reduces the fungicide degradation effects of UVB radiation so fungicides stay intact longer on the turf.

Sticking Technology:
We’ve all heard fungicide companies tout the next generation of weather sticking technology. But none comes close to matching the incredible sticking power of Turf Screen. TiO2 and ZnO are used exclusively in primer paints because of their excellent ability to cling to surfaces and not wash off. Independent laboratory testing in 2011 showed that Turf Screen was able to stick to turf for over 100 days! Turf Screen enhances the sticking power of everything else in the mixing tank.

Product Safety and Inertness:
TiO2 and ZnO are non-hazardous and completely inert. Their safety is indicated by their wide use in human sunscreens, and ZnO is a well-known treatment for babies’ diaper rash. Humans ingest TiO2 and ZnO every day since the food industry uses them extensively to make products like milk and sour cream look whiter. Because of their chemical inertness, they are extremely safe on turf. They simply cannot have a reaction in your spray tank or on your turf.

If you are looking for commonsense, safe and effective ways to improve turf quality and cut your maintenance costs, try Turf Screen today. Its effectiveness, versatility and affordability will impress you. Visit www.turfscreen.com today for more information.
You can't forecast what Mother Nature will bring. So guard your turf with the best of both worlds this fall and winter by adding Turf Screen and TS Dormant to your tank mixes. Turf Screen is proven to provide complete plant protection, increase snow mold fungicide efficacy and improve turf quality year-round. TS Dormant is a special formulation that increases canopy and soil temperatures by attracting solar radiation. Whether you manage warm or cool season grasses, you'll get healthy, great looking turf next spring when you add Turf Screen and TS Dormant to the tank this fall. Learn more at www.turfscreen.com.
How Super Efficient Deep-Cycle Batteries Can Lower Overall Operating Costs For Fleets

Golf courses and businesses that incorporate a fleet of golf cars, are always looking for ways to lower their operating costs. Because all deep-cycle golf car batteries will eventually run through their life cycles, extending battery life in the fleet plays a major factor in determining quarterly and annual operating costs.

While many golf courses and companies tend to minimize costs by purchasing the least expensive batteries they can find, the results in the long run don’t always turn out that way. New formulations in battery plate technology allow some deep-cycle batteries to produce greater total amp-hours in service, longer cycle life, and fewer cycles to reach rated capacity. “Anyone in charge of maintaining a fleet of golf cars needs to look at their battery expenditures in terms of cost-per-cycle, and cost-per-amp hours delivered over the life of the battery,” says Fred Wehmeyer, Senior VP Engineering for U.S. Battery Manufacturing. “Comparing battery ratings on the label or published life cycle, doesn’t always tell the true story. In addition, purchasing the least expensive batteries you can find, almost always never adds up to a cost savings in the long run.”

Wehmeyer suggests the best way to determine the cost-per-cycle and total cost-per-amp hour delivered over the life of the battery, is to first make regular, routine maintenance checks. These include measuring the condition of the batteries on a weekly basis and determining the total service hours you get from a full charge (total amp hours), and noting each time the batteries are charged (number of cycles), before they are no longer useful. Over the course of several months, the average run-time and amp-hours of your batteries become evident, allowing you to compare that information against the battery purchase cost.

Once fleet managers compare the actual operating costs between various battery manufacturers, they can begin to see that not all deep-cycle batteries are the same, and those that are more efficient, even at a higher initial purchase price, can actually save overall operational costs in the long run.

This is one of the reasons why manufacturers like U.S. Battery, improved the efficiency of its deep-cycle golf car batteries, by reformulating the lead sulfate crystal structures that are used in the company’s battery cell plates. The company’s XC2™ formulation and Diamond Plate Technology® allow its batteries to reach peak capacity in fewer cycles, providing higher total energy delivery, and extended battery life. “Our batteries with XC2™ formulation reach peak capacity in as few as 25 cycles,” says Don Wallace, U.S. Battery CMO/Executive Vice President. “This also increases the battery’s rated capacity and service life, creating a longer-lasting, more efficient battery that saves golf car fleet owners time and money.”

For comparison, a U.S. Battery with XC2™ was tested against a popular brand. The results show that the more efficient U.S. Battery delivered a 36 percent longer cycle-life and 55 percent more total amp-hours than the nearest competitor. If the purchase price for the batteries are the same, this example translates to a 27 percent reduction in cost-per-cycle and a 65 percent reduction in cost-per-amp hour over the life of the battery. Putting this into hard dollars, if both batteries cost $100, the more efficient battery offers a 0.148 cent cost-per-cycle compared to 0.200 cent cost-per-cycle on the competitive battery. The U.S. Battery product also costs 0.135 cents per 100 amp hours, versus 0.210 cents per 100 amp-hours on the comparison battery. Multiply those figures by the number of batteries in any fleet, and the savings in operating costs become much clearer. For more information on deep cycle battery maintenance or selecting the right battery for your golf car fleet, contact U.S. Battery Manufacturing, 1675 Sampson Ave., Corona, CA 92879. (800) 695-0945. Visit http://www.usbattery.com.
Discover U.S. Battery's Proven XC2™ Technology now available in our entire golf line.

Our batteries may not help your game, but we sure can help your drive.

FEATURES AND BENEFITS OF XC2™

- Highest initial capacity.
- Fastest cycle up to full rated capacity.
- Highest total energy delivered over the life of the battery.
- Ultimate compatibility with the wide range of chargers used in the field.
- High charge efficiency designed to meet the new California Energy Commission regulations for combined charger/battery charge efficiency.

U.S. Battery Manufacturing Company is providing you with the highest rated batteries available today. With the addition of XC2™ Diamond Plate Technology our batteries will last longer and outperform the competition, saving both time and money. U.S. Battery offers you both flooded (wet) and AGM (sealed) deep cycle batteries making us your one-stop-shop for premium lead acid batteries. Our new line of AGM maintenance-free batteries offers ease and convenience, minimal gassing and no leak applications.

U.S. Battery has three manufacturing plants strategically placed within the USA and a network of distributors throughout the entire world making it extremely easy to obtain our superior made-in-America battery products no matter where they are needed.

We LOVE our Facebook fans!
"Like" us and be automatically entered in our Facebook Give-A-Ways

See our entire line of American made products at: www.USBATTERY.com
Wiedenmann Products Delivers a Payback

Superintendents face ongoing challenges throughout the year. Wiedenmann manufactures several pieces of equipment to aid in clean up and cultivation practices that provide excellent results with a large payback in time and labor.

Wiedenmann’s newest product is the Core Recycler, a self-contained walk behind machine for collecting and processing cores. The sweeping head gently collects the cores and transfers them into 4 rotating screens that separate the sand from the organic material (thatch), then returns the sand to the green while the thatch is collected into the high dump hopper. The hopper can then be dumped directly into the bed of a utility vehicle, thus saving money by re-using approximately 75%-80% of the topdressing material and saving labor to transport and spread the topdressing material. By top dressing 20%-25% of new topdressing material prior to aerification, the need to run a heavy topdresser over a freshly aerified green is eliminated. Plastic inserts can also be placed on the inside of the rotating screens for core collecting.

For aerification, Wiedenmann manufactures several models of Terra Spike deep tine aerifiers that will obtain the depths needed to break through any black layer, thereby reducing compaction and increasing water, air, and nutrient exchange to the roots. A variety of tine options, both solid and coring, are available as well as multi-tine blocks for tighter hole spacing. The Terra Spikes are the fastest deep tine machines on the market, are very durable and user friendly, and feature Quickset, VibraStop and PowerPack, Quickfit, and ATC (Advanced Tine Control) systems.

For debris clean up, Wiedenmann offers the Mega Twister blower which swivels 270° on the ground while producing 14,000 cfms of airflow and creating very little noise. Another tool for debris clean up is the new Super 120 M turf sweeper, a self-contained sweeper that efficiently collects leaves, debris, aeration cores, etc. Due to its compact size, it can be maneuvered on and around greens and tees as well around other tight areas. It is also ideal for cart paths and hard surfaces. The bigger brothers to the Super 120M are the Super 500 and Super 600. These machines do a superb job with wet and dry debris cleanup and also perform some mulching of material while sweeping and collecting. The airflow is so great that the multi-purpose sweeper head does not come in contact with the surface. Once collected, debris can then be deposited into a dump truck or other container by using the high dump feature allowing dumping up to 83" off the ground.

For mowing native areas, the Super 500 and Super 600 with flail blades are the ultimate tools for mowing and collecting the clippings in one pass. Debris can be dumped in a container or dump truck by using the high lift feature of the Super 500 and the Super 600.

For removing excess thatch by verticutting, the Super 500 and the Super 600 will verticut and collect the thatch in one pass, which allows for verticutting without making a mess. Verticutting can be completed by choosing optional spacing of \( \frac{3}{4} \), 1 \( \frac{1}{2} \), or 2 \( \frac{1}{4} \). The Super 500 and Super 600 have high dump hoppers that will lift up to 83" high. Another method for thatch control is to use the Terra Rake to pull up the thatch material from the turf and deposit this material on the surface. This is accomplished quickly by the rake fingers of the Terra Rake.

For more information, please contact Wiedenmann North America, LLC. www.wiedenmannusa.com. (912) 790-3004. info@wiedenmannusa.com