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ITT believes technology should be invisible. People don't have to think a lot about our engineering. Its benefits, on the other hand, cover the landscape.

Goulds Pumps



ITT Industries

Engineered for life

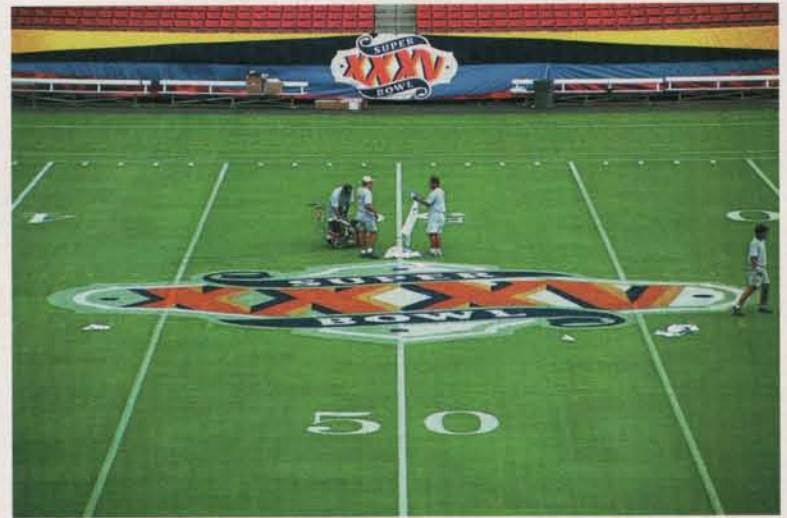
www.goulds.com



TURF & SOIL CONDITIONER IN ONE

Turf Double Team is a blend of Turface MVP and natural organic fertilizer. It conditions the soil and provides plants with organic nutrients to recover from the stress of intense athletic traffic. DoubleTEAM is designed to help produce and maintain stronger and healthier athletic turf under the toughest conditions. It is manufactured for use in sports field construction, renovation, installation and topdressing programs.

Profile Products/800-207-6457
For information, circle 164, or see www.OneRS.net/210sp-164



FIELD PAINTS

World Class has spent years improving the chemistry of grass paints to better suit the needs of turf managers. Bart Prather of Mississippi State says, "World Class Premium White is a true concentrate; therefore you are able to adjust the mixture for your practice field and game field situations." Kenny Gajewski of the University of Oklahoma adds, "World Class premium has no calcium carbonate, so it's turf friendly and can be mixed, used, stored, re-mixed and used again."

Danny Neely of Millsaps College says, "World Class Premium will cover, hide, and disperse through your machines more efficiently than any other turf paint."

World Class Athletic Surfaces/800-748-9649
For information, circle 196, or see www.OneRS.net/210sp-196

YES.



Flowtronex can meet any of your irrigation needs through our full line of standard and custom engineered pumping systems. Sports complexes, city parks and commercial landscapes have relied on Flowtronex for years because we deliver the finest engineering, design and construction techniques in the industry. All of our systems are field tested

under actual operating conditions before they're ever shipped out, which guarantees trouble-free pump stations for any and all applications. And with the Flowtronex Service Network, you have a single source for repairs, replacements, upgrades and new station consultations. Say yes to the best in the industry. Say yes to Flowtronex.



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1-800-786-7480 ~ www.flowtronex.com

NEW COLORS IN INFIELD CONDITIONERS

Soilmaster infield conditioner is now available in new colors. Soilmaster Brown creates a striking effect on your infield. Pro's Choice specially developed it for Miller Park, home of the Milwaukee Brewers, and now it's available for your ballfield. Of course, Soilmaster Red, a Pro's Choice favorite, and Soilmaster Green, used for cosmetic turf repair, are also available.

Made of thermally optimized montmorillonite, Soilmaster conditioners meet the challenges of wet, dry and compacted infields and turf.

Pro's Choice
800-648-1166
For information, circle 175, or see www.OneRS.net/210sp-175



Circle 111 on card or www.OneRS.net/210sp-111



NEW MEMBER SWEEPSTAKES!!

**All New Members Joining Between
October 1st and December 1, 2002, will be eligible
for a drawing for a free registration to the
STMA 14th Annual Conference & Exhibition,
January 15-19, 2003 in San Antonio, Texas**

BONUS - EVERYONE WINS

Join Now - and get up to three months FREE!

**That's Right! If you sign up RIGHT NOW,
your membership is in force through December 31, 2003.**

Get Serious With STMA

**Use the application card in this issue to begin receiving
ALL the benefits of being an
STMA Member!**

ADDITIVE FOR SEEDER

The FINN Additive System, designed for the company's Hydroseeder machine, provides more uniform germination, better root establishment, and erosion control, says the company. The system is composed of 12 additives that can be applied individually or in a variety of custom blends.

The additives can be combined with seed, fertilizer, soil amendments, and mulch fiber to thick slurry.

FINN Corp/800-543-7166

For information, circle 173, or see www.OneRS.net/210sp-173



NEW TURF REINFORCEMENT MATS

Following the successful launch of a new tan version of its Pyramat high performance turf reinforcement mat this spring, SI Geosolutions has added two new naturally colored turf reinforcement products. Tan-colored Landlok turf reinforcement mat is now available to complement the tan Pyramat in arid and semi-arid climates, and a green version of Pyramat now offers an aesthetically pleasing look immediately upon installation in more fertile environments.

SI Geosolutions/800-FIX-SOIL

For information, circle 162, or see www.OneRS.net/210sp-162



Our innovations in sport and recreational surfaces, are born of experience, research and testing.

Stabilizer Solutions, Inc. is the developer of **Stabilizer™** the all climate, natural cohesive for crushed stone and native soil infield mixes. Other product innovations in sport surfaces include **TurfGrids®** and **Hilltopper™**. **TurfGrids®** fibers stabilize turf for baseball, football or soccer fields, equestrian venues and golf courses. **Hilltopper™** is a polymer coated clay for baseball or softball mounds and home plate areas.



Stabilizer™ our natural soil amendment provides an outstanding infield or warning track when mixed with a screened blend of sand, silt, clay or crushed stone. This mix provides a firm, resilient playing surface that has less mud and dust. It has good water bearing capacity and load bearing strength, retains flexibility, cushion and reduces wind and water erosion. It can be used with other ballfield amendments. Stabilizer is available internationally as a bagged component to be mixed on-site.

Stabilizer Pre-Mixes are available from our regional dealers. We have developed Pre-Mixes for Infields, Warning Tracks, Soccer Fields, Pathways, Parking and Recreational Areas. Contact us for a dealer near you.



Optimize your turf's shear strength & load bearing

TurfGrids® are safe, non-toxic, polypropylene fibers that help provide a consistent athletic surface that can be worked and maintained with conventional equipment. These small fibers act as a mass of indestructible roots. Turf roots intertwine and interlock with these "fiber roots" resulting in an extremely strong reinforced turf surface that resists divoting and rutting. TurfGrids® can be used for complete field stabilization or in selected high wear areas. TurfGrids® are a proven performer on all types of turf surfaces including, golf courses, turf race tracks, baseball, football and soccer fields. **Improve Stability, Drainage, Divot Resistance, Aesthetics and Durability**



Make a good field better with Hilltopper™

Hilltopper™ is a simple solution to improve the flexibility of your mound and home plate areas. Hilltopper needs no water, just spread and tamp. It's ready for play! Installation or repair takes half the time of traditional clay products due to Hilltopper's unique mix of long lasting binders, coatings and natural clays.

This product is available in 50 pound bags (40 per pallet).

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www.StabilizerSolutions.com
email: lphubbs@stabilizersolutions.com

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all areas fax 602•225-5902

SPORTS TURF FERTILIZER

A favorite among sports turf managers, Milorganite organic nitrogen fertilizer is naturally slow releasing, non-burning, iron-rich and easy to use, says the company. Its slow release-formula provides nitrogen over an 8 to 12-week period. Deep-greening iron promotes an aesthetically pleasing turf. Uniform granules ensure spreading accuracy.

Milorganite/800-287-9645
For information, circle 166, or see www.OneRS.net/210sp-166

BATTERY-POWERED CONTROLLER

Hunter Industries has available its SVC Smart Valve controller that operates off a 9v battery and mounts directly to any Hunter valve without additional wires or special tools.

The SVC is designed for isolated or power-restricted areas and runs a single station up to nine times daily. It has a bright LCD display with simple icons and versatile programming, flexible scheduling, programmable rain delay, and more.

Hunter Industries/800-733-2823
For information, circle 174, or see www.OneRS.net/210sp-174



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Circle 114 on card or www.OneRS.net/210sp-114

Constructive ideas

Contractor tells how to plan

Field construction is no small task. The planning, equipment and construction techniques are important factors. SPORTSTURF magazine recently spoke with Chad Price, agronomist, from Carolina Green Corp., a general contractor specializing in sports field construction, renovation, maintenance, and design. Carolina Green constructs all types of natural grass fields, including sand based, modified soil and native soil systems. The majority of the company's work is at the college/university/professional level, but the company also works with little league and athletic associations.

ST: How far in advance of actual construction should planning for a new field begin?

PRICE: Most projects need 6 months to 2 years planning, depending on scope and number of people involved in approval of the project. Approval of issues such as erosion control, zoning, wetland protection and utilities may take months to pass and should be addressed early in the design development stage.

ST: What occurs during the planning stages, and what type of preparation is done before construction begins?

PRICE: The planning process may vary depending on the type of construction process used for the project. The three most common construction projects I see are design/bid/build, design/build, or request for proposal (RFP). In design/bid/build, the owner and architect come to terms on the scope of the project, bid the project, and award the job to the lowest responsible bidder. In design/build, the owner selects a qualified contractor up front and negotiates the terms before construction, and the contractor acts as the designer. In an RFP, the owner provides an outline of the scope of the project to qualified contractors, who then respond with their individual design proposal and cost. The owner then selects the contractor with whom they are most comfortable. There are advantages and disadvantages to each approach, and the method used usually depends on legal issues with public and private funding.

With any process, a good planning team is critical to a successful project. The

team has two sides, the owner and the designer. The owner group typically consists of the person with the money, the turf manager and a coach/team rep. The design group could be the architect, the field contractor or both.

The planning process would start by the owner group communicating exactly what they expect in terms of field performance and level of use as well as budget for the project. We need to know how many events—games and practice—will be played per week, will they play rain or shine or allow for cancellations, are there periods of down time to perform maintenance, what equipment and personnel will be available for maintenance, and what is the construction and maintenance budget.

Once this is established, the field contractor, turf manager, and architect can work together to develop design specifications for a field capable of that level of perfor-



mance. Considerations include initial construction costs as well as long-term maintenance requirements. We run physical soil analysis tests on the existing topsoil to determine compaction potential and amendment needs. We then identify suppliers of materials that meet the specifications and, if possible, get the material contracted for delivery. This is especially important with rootzone mix and sod in fields with internal drainage. The soil in which the sod is grown and the rootzone mix need to be compatible for drainage purposes, and that can be a challenge.

The architect can then package the field design with the other issues in the project such as seating, lighting, and access. The team should bounce ideas off each other on issues such as field rotation opportunities, warm-up and practice areas, and spectator access and protection.

ST: What type of information/input do you look for from the turf manager, and/or the other parties you are dealing with, during the planning stages?

PRICE: Information and input from turf managers is critical in the planning process. Problems encountered in many projects can be traced back to failure to include and elicit input of the turf specialist in the design stage. The turf manager needs to inform the design team of their current capabilities, and what additional personnel and equipment may be needed to maintain the new facility (these costs should be added to the project).

We can often make slight changes in design to help an understaffed maintenance crew. These options can include grass base paths, automatic irrigation on skinned areas, or building the field longer to allow periodic shifting out of worn goal mouth areas. Even seemingly small details, such as gate placement to reduce turf wear, can make a big difference in daily maintenance.

We also want input from coaches and teams to help us better understand the level of traffic the fields will need to endure. This also gives us an opportunity to inform them on ways to limit wear during practice.

ST: Detail for us the construction stages and the steps it takes to create a quality playing field.

PRICE: The field construction stages are fairly simple. The problems usually arise in dealing with other contractors around the field such as fencing, seating, and lighting. There always seems to be someone who thinks it is necessary to drive a concrete truck across the field after the grass is down. This goes back to coordination with other contractors during the planning stages.

By the time construction begins, we know what our drainage and irrigation layout will be and what soil materials and modifications will be needed. The sequence of installation varies depending on whether we are dealing with sand-based, modified soil, or native soil fields, but they all start with a laser graded sub-grade that is a mirror image of finish grade. Once the base is perfect, we install drainage, irrigation, soil mix, infield mix, and warning tracks with the use of our laser guided equipment. Sometimes drainage precedes irrigation or vice versa, depending on the type of field design, but each step is followed with the laser grader to true up the elevations as we build the soil profile. When building a modified soil field, we install the rootzone components with our laser grader in precise increments, and then use specialized blending machines in the field to create uniform rootzone over all portions of the field.

After all components are in place, tested, and operational, we install the sod, sprigs, or seed and provide a grow-in program. It is always a good idea to re-test the irrigation system before ordering the grass. Things have a way of getting damaged on a construction site, and realizing someone has cut your irrigation main line when you have truckloads of sod in the parking lot is not a good thing.

ST: Describe some of the laser-guided equipment that you use, the tasks that each piece of equipment fulfills and the biggest benefits of using laser-guided equipment.

PRICE: Laser guided equipment is a daily part of our work. We use automatic laser grading systems on dozers, track loaders, and high flotation tractors on all aspects of field installation. The equipment is adjustable to within 1/12th of an inch and available in flat, slope, dual slope, or cone configurations. We install drainage lines with laser guided trenchers to achieve precise fall in the lines. The speed and accuracy with which we can bring a field to grade makes it a must in our work. Without question, any field construction project should have laser grading outlined in detail in the specifications. With laser grading, you get a field free of birdbaths and humps and bumps.

ST

FASTER STRONGER EASIER

and best of all AFFORDABLE

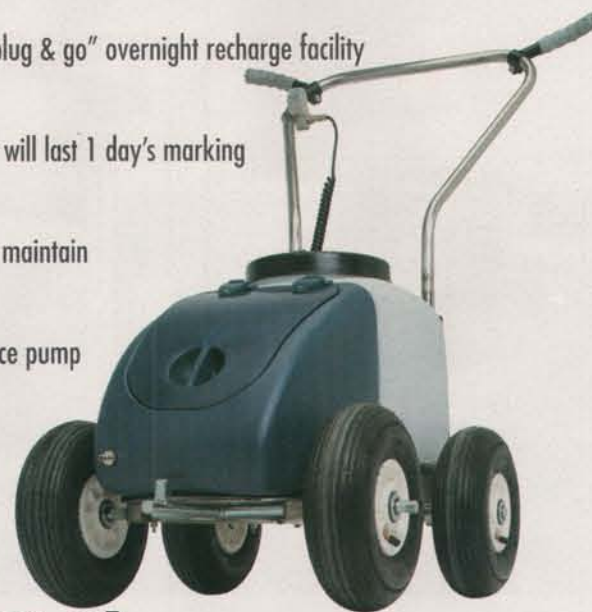
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Save time and money! The Kombi's self mixing capabilities allow you to leave Fleet paint in the Kombi overnight and self mix the paint the next day directly in the machine.

Simply put, it's the best line marker on the market.

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LEVEL MID CUT

Encore's prowler mid cut riding mower has a side-to-side articulating floating deck for a smoother, level cut, says the manufacturer. The deck suspension reduces scalping and allows a faster operating speed. A PTO shaft feeds power to the blades and the steel deck with reinforced channels control vibration.

All Prowler models, 52-, 61-, and 72-in. have blade spindles with a 2-yr. warranty on parts and labor.

Encore Manufacturing/800-267-4255
For information, circle 144

MOUNTABLE BROADCAST SPREADER

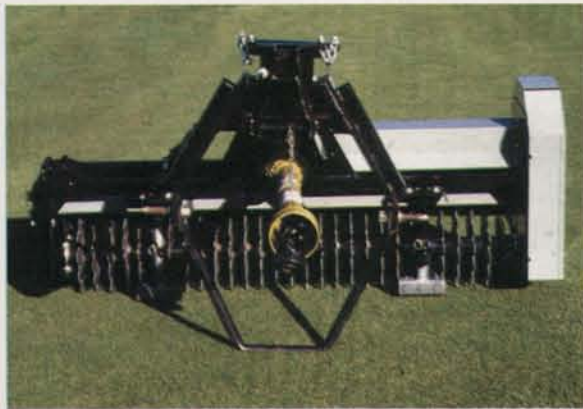
To apply chemical, fertilizer, or seed from a utility ATV, Gandy Co. is offering a 2.3 cu. ft. capacity polyethylene and stainless steel broadcast spreader, which can hold 120 lbs. The hopper has a cam gauge rate adjustment to increase or decrease its metering openings. A hand lever is within reach of operator; a 12v DC motor activates the stainless steel spinner that can spread 10 ft. each pass.

Gandy Company/800-443-2476
For information, circle 148, or
see www.OneRS.net/210sp-148



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Circle 116 on card or www.OneRS.net/210sp-116



NEW FACILITY, NEW TURF

The Supreme Green turf cover has been used throughout North America for new greens as well as new field construction since 1990. The product is a multi-purpose turf growth cover made of specially designed material that accelerates seed germination and encourages root development and rapid growth. Package comes with anchor pegs and storage bag.

Coverttech/800-837-8961

For information, circle 140, or see www.OneRS.net/210sp-140

COMPACT SKID-STEER LOADER

The compact skid-steer loader business is a competitive one. Just ask Walter Butman, executive vice president of Finn Corp. "To be competitive with a compact skid steer in this market, we knew we needed to exceed the features and benefits of the products already on the market," Butman shares. The Finn strategy: the Eagle 244-D, a compact skid-steer loader featuring a standard Cat 3003NA diesel engine. The diesel-powered mini machine is an addition to the Eagle line of compact skid steers, which Finn introduced 1 year ago.

Finn Corp/800-543-7166
For information, circle 143, or see www.OneRS.net/210sp-143



WHY DO MAJOR UNIVERSITIES, THE MAJOR LEAGUES, AND N.F.L. TEAMS CALL CYGNET WHEN THEY NEED EMERGENCY REPAIRS OR NEW INSTALLATIONS? (not to play ball)



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Circle 117 on card or www.OneRS.net/210sp-117



VACUUM EXCAVATION SYSTEM

A new, large capacity version of the Ditch Witch FX30 Vacuum Excavation System is now available with a 1,200-gal. vacuum tank and a fresh water capacity of 500 gal. Its innovative rear tank door latch, space-efficient trailer configuration and hose reel provide big-machine productivity in applications with small, confined workspaces.

Ditch Witch/800-654-6481

For information, circle 141, or see www.OneRS.net/210sp-141



The thing practically crawls up walls.

This may very well be the most versatile tractor line on the globe. To be versatile, you've got to do two things: be agile and be user-friendly. Lots of old guard tractors are so big and clunky that they're hard to maneuver. Yes, they're durable, but difficult. Options can cost you.

Carraro tractors offer a unique array of ergonomic and operational functions built in, and are engineered for simplicity, comfort and increased return on investment.

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articulate to all terrain types and each wheel independently grips the ground for superior balance and stability. The center of gravity is so low that it virtually hugs the turf. Each wheel being the same size means you get equal ground pressure on all 4 wheels, all the time.

Other neat features include a completely reversible seat and control system that changes direction in seconds, loads of attachments that mount front, back and even on top, as well as powerful, yet fuel minimizing engines that help keep operations costs down. Call us for our free video and more details.



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Circle 118 on card or www.OneRS.net/210sp-118

15-MPH MOWER

At 15 mph, the Super Z from Hustler mows fast. Its new features include: lifetime warranty on the tractor frame and deck's leading edge; stainless steel, high-pressure hydraulic lines with Parker Seal-Lok o-ring face seal fittings; and heavy-duty air cleaner as standard equipment. The simple, foot-operated deck-lift system can be accompanied by optional 9-bushel BAC-VAC catcher.

Hustler Turf Equipment/800-395-4757

For information, circle 142, or see www.OneRS.net/210sp-142



LIFT FOR SERVICE

The Heftee 2000 safely lifts up to 2,000 lbs. to 6 ft. in seconds, says the company and easily adjusts to handle many pieces of equipment. Techs can stand comfortably to work with unrestricted access to service areas. The unit is free standing so it can be moved around the shop, and it features a ramping system to ease loading and unloading of equipment.

Heftee Industries/800-755-7540

For information, circle 139

