When it’s a dirty job, but someone’s got to do it...

Rain Bird PES Scrubber Valves

Sand. Silt. Algae. Dirt. Debris that would clog most valves poses no problem for Rain Bird’s PES Series. These valves are designed to operate with superior precision—under even the most troublesome conditions.

A self-cleaning, flow-activated scrubber prevents valve-control water ports from clogging. PES valves incorporate many of the quality features found in Rain Bird’s proven PE valve line:

- Industrial-grade plastic construction
- Reinforced nitrile rubber diaphragm
- Slow-closing capability to reduce water hammer
- Industry-high operating pressure rating of 200 psi
- 5-Year trade warranty

Maximum reliability—minimum maintenance. The PES Scrubber Valve from Rain Bird.

For more information contact:
Rain Bird Sales, Inc., Turf Division
145 No. Grand Avenue, Glendora, CA 91740

Circle No. 142 on Reader Inquiry Card

*Not a consumer warranty. Please see 1987 Turf Irrigation Equipment Catalog for details.
Covers a lot of ground for less.
Its low cost looks good on paper. And its long-lasting turf disease control looks good on your fairways. BAYLETON turf fungicide. For the long haul. Mobay Corporation, Specialty Products Group, Box 4913, Kansas City, Mo. 64120

Circle No. 129 on Reader Inquiry Card
GAME from page 50

quarry out there,” he says of the ground the field is built on.

The headaches didn’t stop there. “The field when it was originally built in 1927 had an 18 inch drop-off, which nobody really knew,” he explains. “When you look at the track you can see we had to move the field because it needed to be perfectly flat. One end is down and the other end is up.”

Laying it down

The PAT system is constructed with a flat subgrade and plastic barrier under a system of perforated pipes. The pipes set below a special mixture of sand, peat and nutrients. Pumps connected to the pipe system can draw off excess surface water in minutes.

When weather cleared in the spring of 1986, the PAT people began installing the system. “We have our graduation out there (on the field),” Volkmer recalls. “By graduation, they had just put in all the sand.

“If you can imagine everybody sitting in the stadium; I mean everybody looked at me like ‘what did they do to the football field?’ If they could have had my ass, they would have had it. Everybody goes to the games. We’ve got 5,000 to 8,000 for every football game. It’s like the only game in town.”

Volkmer adds the pumps are only used in heavy downpours on or near game days. This occurred twice during the 1986 season. “The first game we had just a huge rainstorm. Huge. We had to hold up the game until 8:30.”

“You couldn’t see from one end of the field to the other,” adds field maintenance manager Chuck Andrus. His job has been relatively easy. The PAT system worked so well, the field looked as good last November, after 11 football games, as it did before the season started.

“The footing was never bad (during the first game),” Volkmer notes. “That’s the key thing: the footing and the safety of the ball players.”

And that’s no small change either. LM

RESOURCESFUL RENOVATION

Even when budgets are low, school systems can renovate athletic fields. Here’s how a Philadelphia area school system tackled the job.

by Heide Aungst, managing editor

B are spots speckle the field. Stressed turf clumps fight to hang onto life. Twelve gym classes, a soccer league and a junior high football team trample and tear up what’s left. A kid cries after a fall on the rock-hard surface. The field cries for renovation. The field manager cries for more money. The school board cries for the lack of money.

Everybody loses.

Money may be hard to come by for some school systems, but excuses are abundant. Field managers jump at the “we-can’ts” before fully exploring the “how-tos.”

Every industry has tricks of the trade and corners to cut. It’s possible in athletic field management, too. Just ask the Springfield, Pa. County School District. They’ve used almost every trick in the book, and some they dreamed up themselves, to renovate dwindling fields on a dwindling budget.

“About 35 percent of the ground on one field was bare,” says Bruce Thomas, maintenance supervisor for the Philadelphia area school district. “The school was complaining about the bare ground and the field was lower.”

Personnel

Thomas took the first step by hiring Bob Scanzaroli as grounds manager in mid-August. The school system couldn’t afford to create such a position, but when the grounds manager left for another job, Thomas made sure the replacement had the necessary turf knowledge. Scanzaroli is an ’84 graduate of Penn State University.

Together Thomas and Scanzaroli consulted with the Philadelphia County extension agent, Andy
LESCO Fertilizers with Dursban® deliver that protection.

LESCO gives you the best of both worlds by combining quality slow-release sulfur-coated fertilizers with the effectiveness of Dursban insecticides. You get steady, gradual greening — while eliminating chinch bugs, sod webworms, armyworms, cutworms, billbugs and a variety of other pests.

LESCO offers several fertilizer/Dursban combinations. One is right for the turf you maintain. Save time and labor and get the results you expect and deserve — dense, healthy, insect-free turf.

If you prefer Dursban without fertilizer, LESCO has both granular and liquid formulations. Deliver the protection your turf deserves. Put LESCO Fertilizers with Dursban to work for you.

Call LESCO today to order. (800) 321-5325 NATIONWIDE
(800) 362-7413 IN OHIO

LESCO, Inc., 20005 Lake Road, Rocky River, Ohio 44116 • (216) 333-9250

Dursban® is a registered trademark of The Dow Chemical Company.
LANDSCAPE PROFILE

McNitt. States differ on their approach to extension agents. In western Pennsylvania, McNitt explains, agents sometimes cross county lines depending on their specialty.

Besides seeking McNitt's advice, Thomas looked at other fields in the area that had been renovated. He consulted with managers at local Swarthmore College, where he could see results.

Equipment
The next step was to take an inventory of the equipment the school system already had, and that which would be needed. The pair resurrected a more than 20-year-old reel mower from the grave. They got the cooperation of the local parks and golf course in sharpening the reels for free.

They did decide to replace a 30-year-old tractor with a new 40 hp version. "It was a $25,000 expenditure from the replacement equipment budget," says Thomas. "Some school districts choose to lease them. We feel it's worth our while to purchase it. In the winter we use it to push snow."

They bought a new rotovater. The two new purchases have since been lent free of charge to other "poor" school districts which can't afford to purchase their own equipment.

Materials
The third step was to decide which fields should be renovated and what seed and other materials would be used to do it. Thomas chose two fields to start with. A third, the varsity football field, is currently undergoing similar renovation.

The first field they chose to renovate was at E.T. Richardson Junior High School. The field is used by soccer teams, lacross, softball and gym classes. The field isn't irrigated.

"We chose rye because it enabled us to put the field in use by spring," Thomas says.

The key to the field renovations is an organic material called Earthlife. The material is made from the city of Philadelphia's sewage sludge, similar to Milorganite. The difference is that Earthlife is mixed with wood chips.

Scanzaroli renovated the field—practically by himself in five days. "That was as early as we could get the field," Thomas says. "We also got a lot of support from the school district and community.

"The first day and a half, I aerated the field more than 20 times," Scanzaroli explains. He aerated with a Westpoint aerater then dragged the field to break up the cores.

By the third day, he dumped five trailers (250 yards) of Earthlife on the field and dragged it. The next day Scanzaroli aerated and fertilized. "That allows the material to drop into the holes," he explains.

The final step was to fill in the holes with Champion perennial ryegrass mix of 49 percent SR4100, 24½ percent SR 4000 and 24½ percent Tara. They did this using a Jacobsen verticut seeder.

The entire project cost only $4,300: $2,900 for Earthlife; $450 for seed; $300 for fertilizer; and $650 for labor.

Multipurpose field
The next field, Halderman, is a multipurpose field used for varsity soccer, varsity lacross and community softball.

Because of the intense use, the school district decided to spend more money on the renovation to provide a good sand base. "But it won't need to be renovated again for 10 or 12 years," says Thomas.

"Sand cuts down on compaction, but the particles have to be uniform or it will compact more," McNitt says. "You have to use more than 50 percent sand or it will turn into cement.

"Because it's an all-weather playing field the sand aids in drainage," adds Thomas.

During the renovation of this field, Scanzaroli rotovated the field three times. Then brought in the Earthlife and sand and rotovated again another three times. Then Scanzaroli graded the field and seeded with a special Springfield mix. The mix included Adelphi, Merit, Eclipse and Glade Kentucky bluegrass and Premier, Jazz and Fiesta perennial rye.

The field used 500 cubic yards of one millimeter sand at $13,000; 300 lbs. of Earthlife at $2,300 and $690 of Springfield seed mix.

Scanzaroli and two other workers maintain a total of 83 acres of athletic fields on an annual budget of $22,000. They plan more low budget renovations in the future.

After all, they'll admit, where there's a will, there's a way. LM
THIS TEST WON'T HOLD WATER — OR AIR.

Water passes easily through highly permeable Duon Weed Control Mat.

Just blow through Duon to see how easily air passes through it.

The proof is stronger, longer lasting plants with DUON® Weed Control Mat.

Both water and air pass easily through Duon Weed Control Mat, made of Phillips Fibers non-woven polypropylene. As a landscaper, you know how important this is to a plant's root system and to the future well-being of your big landscape jobs—especially when you use them as references.

When water and air can't get through, plants die. Black plastic won't work for the long-term. And woven polypropylenes are nowhere near as permeable as nonwovens. For example, the air permeability for nonwoven Duon is about 14 times greater than for woven polypropylenes and the water permeability for Duon is about 10 times greater.

Put our words to the test. Hold Duon under running water, then take another piece and breathe through it. Then try the same test with a competitive weed control mat.

When covered from sunlight, Duon is virtually permanent. It allows plants to thrive and impedes about 95% of weed growth (in most areas). It also keeps mulch from going down into the soil.

For your quality landscape jobs, order Duon. For further information, call Phillips Fibers (803) 242-6600.
Selecting the appropriate tractor is an important purchasing decision for a landscape manager. Here are some things to look for before making the big purchase.

The guidelines to follow when choosing a tractor and associated attachments are as varied as the tasks for which they are used and, therefore, require careful consideration.

"It's important to determine the work that has to be done prior to purchasing a new piece of equipment," says Roger Strome, JI Case product supervisor for under-30 hp tractors. "Whether you're landscaping an office complex or mowing grass on a golf course, matching the tractor to the job will improve efficiency."

A number of criteria are involved in the buying decision, including horsepower requirements, tire selection, three-point hitch, power take-off (PTO) options and maintenance needs. All considerations should be assessed based on required performance by evaluating the type and variety of tasks and the size of machine needed to properly perform them.

**Horsepower**

Horsepower requirements depend upon the size and scope of the job and the amount of lifting, pushing and pulling to be performed. Tractors ranging from 15 to 30 hp will handle most mowing, scraping and loading chores.

For more rigorous work, however, a tractor from 35 to 75 hp may be a better choice. Some machines are specifically designed for heavier loading and scraping.

**Tire tips**

Tire selection is another key consideration. Turf tires are usually desirable for mowing grass and other landscaping. Bar or lug-type tires are also suitable for many landscaping, utility and agricultural applications. Just as tires should match the application, the three-point hitch and PTO should correspond to the job and the attachments being used.

Front, rear and mid-mounted mowers, blades, loaders, snow throwers and other equipment have different requirements that should be considered during the buying process. Maintenance and safety features are also important, particularly when several employees are working with the machine.

Comfort, convenience and ease of service will increase efficiency of both the tractor and operator. Adding features that enhance performance and expand a tractor's versatility should also be considered during the purchasing process.

"An option that's becoming more popular on smaller tractors is mechanical front wheel drive," Strome says. "This provides extra traction by supplying power to the front wheels as well as the rear, which reduces slippage in wet conditions, in loose soil and on slopes. The result is improved productivity and a unit that can easily handle a wide variety of tasks."

Weighing realistic expectations according to a tractor's capabilities will help insure that the selected unit provides optimum performance and satisfaction.
RODEO® AQUATIC HERBICIDE
controls more than 160 types of emerged grasses, brush and broadleaf weeds

- Rodeo can be used in and around aquatic sites, either flowing or non-flowing waters.
- Rodeo is rapidly absorbed and translocated throughout plant tissues.
- Rodeo is odorless, non-volatile and practically nontoxic to most animals and the environment.
- Rodeo is biodegradable.
- Rodeo will not leach.
- There is no residual soil activity with Rodeo.
- Rodeo does not bioaccumulate.

RODEO®
AQUATIC HERBICIDE
by Monsanto
RODEO® IS NOW AVAILABLE IN CONVENIENT 1-GALLON CONTAINERS.

To place your order call us at 1-800-544-6116. You can also use this toll-free number to get more information on Rodeo. (Rodeo is also available in 2½-gallon and 30-gallon containers through our network of agents.)

No mail orders, please.