

# RELIABLE IRRIGATION SYSTEMS are not a bargain basement investment . . . . says John Lelean

Irrigation systems, like hedgehogs are inclined to winter hibernation, but there the comparison ends. Whereas our spiny friends emerge unscathed and ready for a summer's foraging, the irrigation system is affected from the ravages of the winter and when needed most, suffers the inevitable breakdown.

Now is the time to test the system, ensuring all the sprinklers are working correctly and the underground pipes and electrical controls are functioning to full efficiency.

During the winter months, course maintenance is such, greens, may be reduced in size, the cutting regime is drastically curtailed and sprinkler heads become buried. A complete survey of the whole system is a must during the month of April to avoid unnecessary expense later in the year.

There are few courses in Britain that have not installed at some time an irrigation scheme, though many of the early installations are now out of date compared to the modern computerised schemes available from the major manufacturers.

An update of the existing system or the installation of a completely new one is fraught with danger if care is not taken. Because the irrigation scheme is likely to be one of the largest capital expenditures any course is likely to make, price often becomes critical and there is a tendency for clubs to cut corners and take the cheapest option.

The major suppliers of irrigation schemes have recently formed an Association - The British Turf Irrigation Association, under the chairmanship of Peter Roberts of the Toro Company. Their aim is not only to protect the good name of the irrigation industry

but to maintain the high standards necessary to produce systems which will not only work, but give service throughout the life of the scheme.

In a recent statement a leading manufacturer has criticised the cost conscious attitudes of some green committees for accepting quotations purely on price without regard to the needs of the course. Efficient irrigation is a scientific engineering operation, not something that can be given to the local plumber!

An acquaintance presently working in Tunisia on the development of a new course has discovered this to his cost. Because of the shortage of foreign currency, local materials and labour were used rather than the equipment specified. It does not take much imagination to realise what happened. The pressure required to put sufficient water on the tees, greens and fairways, blew the system. Unfortunately there will be many similar 'cowboy' operations in this country if price is regarded as the dominant factor.

The problem, according to Peter Roberts, is based on the fact that club secretaries and greens committees are not technically aware.

"How can they judge if an automatic watering system is hydraulically sound? How can they tell if underground pipe joints are capable of standing water pressure put through them or that the pumps specified are man enough for the job? The simple answer is that they cannot - yet they are the ultimate decision makers!"

"We are spending more and more of our time improving or up-dating other people's handiwork these days but when we negotiate with clubs seeking their first, new watering

system, we find that the bottom line figure seems to be more important to them than the long term quality of the system!"

"If my designers thought that cheap plastic sprinklers were the answer to a golf club's needs we would specify them. The fact that we do not must surely be significant" he says.

What about the B.T.I.A. standards? we asked. Most golf course watering systems are designed to standards laid down by the Association.

"Yes they are" says Roberts. "But these standards have to be interpreted on a local basis. What is good enough for one club's system is not necessarily good for another. It depends on the course location, soil structure, prevailing winds, existing water resources and other factors like the quality of installation work and subsequent re-installation". We have a found a recent case where a local council accepted a 'lowest price' quotation - from a local plumber!"

"Club secretaries should view the B.T.I.A. standards as a minimum requirement but experience indicates that although many system designs adhere to these principals they do not take into account local conditions which quite often call for a much higher specification, if the system is to be really efficient. As it is, a lot of systems rely on natural rainfall to get by. When the weather suddenly turns dry over a few weeks the problems become evident as greens become hard and green, turf changes to straw..."

"Unless golf clubs are prepared to look beyond the bottom line figure I'm afraid that quite a few of them are going to end up with just an expensive collection of pipes, pumps and sprinklers".

## CAMERON INTRODUCE NEW RAINBIRD RANGE

Cameron, the horticultural, sports turf and amenity division of Wright Rain Ltd., are using a new range of Rainbird products, for which they are the sole U.K. distributor.

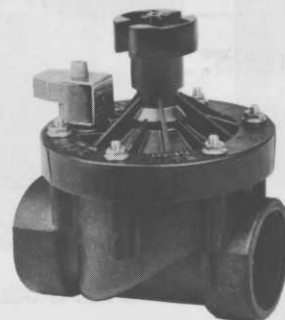
The 95DR valve-in-head electric rotor is ideal for irrigating large turf areas such as football pitches, lawn bowling greens, golf courses and parks. The 95DR combines part and full circle operation capability in one unit, its unique circular or wheel impact drive resulting in a slower and more even rotation speed for longer life. This water lubricated impact sprinkler has a precision moulded power nozzle to maximise radius of throw, while its low 23° angle of trajectory provides superior wind resistance.

### PES — ELECTRIC PLASTIC SCRUBBER VALVE

PES scrubber valves are effluent water valves which contain a self-cleaning flow activated scrubber consisting of a stainless steel cylinder screen and a plastic scraper. The scrubber keeps algae, micro-organisms or silt from clogging the valve control ports thus giving trouble free operation in very dirty waters.



Rainbirds new 95DR  
Valve in Head  
Electric Rotor.



Scrubber Valve keeps algae and silt  
from clogging system

PES valves are available in two sizes and can also be ordered with an optional pressure regulating device, the PRS-2 which senses inlet pressure and maintains constant outlet pressure despite fluctuations in mainline pressure. This ensures better sprinkler performance and saves water energy. PES valves have a brass flow control stem and manual on/off capability. PES valves provide brass valve features including high pressure operation at economical plastic valve prices.



Launched in October last year is a new advanced, TW2 computer irrigation controller from Watermation.

This all British designed and made controller has all the advantages of a low cost computer controller. The operation is extremely simple using prominent push buttons and it requires no previous computer knowledge.

The TW2 has been developed by Watermation from their TW1 two wire controller, which has been enormously successful, especially with golf clubs. It is capable of controlling 396 individual irrigation stations, which means it can handle a complete golf course scheme including greens, tees and fairways - all from one unit.

The TW2 will operate four different zones, each zone capable of having four different start times. In practical terms this means that given sufficient water and pumping capacity, four different areas could be operated simultaneously, or, in fact, any combination of areas. The timing, is computer accurate with set times as wide as one minute to ten hours, which makes it suitable for both drip and sprinkler irrigation. It displays "rain" when the rainstat has operated during the night.

This is a flexible, easy to use irrigation system suited to all types of layout, soil, elevation and weather conditions.

**GREENKEEPERS!**

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FROM THE PEOPLE WHO KNOW ABOUT WATERING SYSTEMS

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Designed to connect to most existing golf course watering systems, Aquaflow Plus reduces installation costs to a minimum.

**ISS** Ask Gary Parker for more details - he will be pleased to show you how...

## IRRIGATION & SLURRY SERVICES

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# £ For £

## TORO SPRINKLERS GIVE YOU AND YOUR CLUB TWICE THE PERFORMANCE!

Sprinklers, the sharp end of a golf course watering system are vitally important to the economics, efficiency and long term viability of your club's investment!  
If your club is thinking of installing or improving an existing water system, now is the time to consider the types of sprinklers to be used...

Consider these important points:-

- 1. CORROSION & DAMAGE**  
Unlike sprinklers containing corrosive metal working parts, Toro Sprinklers are engineered with hi-tech plastics such as 'Cyclocac®' and 'Delrin®'. This eliminates corrosion whilst making each sprinkler highly resistant to impact damage. (It also saves expensive mower blades from accidental damage!)
- 2. EFFECTIVE COVERAGE**  
Being gear driven each Toro Sprinkler provides a smooth, uninterrupted working action which enhances water distribution.
- 3. SELF PROTECTION**  
The gear drive assembly inside a Toro Sprinkler is lubricant sealed and, therefore, protected from water-borne materials such as particles of sand. This ensures the gears work smoothly and helps reduce maintenance.
- 4. WET SPOTS**  
Check Valves also eliminate the problems of 'low head drainage' and the need for gravel sumps on low lying areas.
- 5. INDIVIDUAL CONTROL**  
The valves also enable greens staff to use sprinklers individually - applying larger or smaller amounts of water on selected parts of the course...
- 6. EASE OF MAINTENANCE**  
Toro Sprinklers are designed to make servicing simple. Repairs can be carried out on the spot - no need to take the sprinkler away to a workbench!
- 7. IMPROVED WARRANTIES**  
Toro now offer increased Warranty protection for large size sprinklers - in some instances these have been given twice the length of validity - there's confidence!
- 8. WHO USES TORO SPRINKLERS?**  
St. Andrews, the All England Lawn Tennis & Croquet Club, Wimbledon and Wembley Stadium - three good examples!

Consider these points then ask your nearest Toro distributor for the facts. He will explain how £ for £ your club can enjoy twice the performance.

**TORO**

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- Home Counties, East Anglia & South East  
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