



IRRIGATION: A TECHNOLOGICAL LEAP

Golf is becoming more sophisticated in every respect. Professional golfers now have their own coaches, personal trainers, sports psychologists, dieticians; golf club manufacturers use technology which is one step up from that employed by NASA on the Space Shuttle while the materials used on golf courses themselves - grass swards, sands, rootzones, chemicals, organic and otherwise, is simply mind boggling if compared to when the game of golf was born and even just a few short decades ago.

So it's no surprise that the field of irrigation has taken such a technological leap in the recent past and is likely to maintain its advance.

Put simply irrigation is the act of watering a plant and in the early days a watering can or hose pipe was the only way of ensuring the turf didn't curl up at the edges.

Things moved on to basic systems which then became automatic with larger clubs employing dedicated irrigation technicians, with other clubs giving a member of staff the added responsibility of being the irrigation man on the team.

Things have now taken a further jump forward with evapotranspiration meters ensuring the correct amount of moisture is returned to the leaf and the ability to operate an irrigation system via internet access from anywhere in the world!

These developments are exciting John Deere who announced their arrival as an irrigation company servicing the UK and Europe, at a press conference in Manheim, Germany, last autumn, having launched in the States in 2006.

"The big issue at the moment is water which has become a very scarce resource and as a result is becoming more and more expensive," said Graham Williams, John Deere's Director of National Accounts and Dealer Development.

"That means that the control of the irrigation system is becoming more and more important while sensing is also uppermost in the minds of greenkeepers."

To highlight the point Graham explained that in Spain currently, water is in such short supply that if a golf club were to run even a basic tees and greens system it would cost the equivalent of £200 a night to irrigate the course.

"So you can see how the costs can mount up."

To counter the cost issues irrigations systems are becoming much more accurate and can now be set to run by the second rather than a minute, as was the case with previous systems.





“Greenkeepers now want to ensure that all they are doing is replacing the moisture which has been burnt off during the course of a day in evapotranspiration, so much more accurate systems are required and it also means that irrigation water is not wasted.”

The other innovation, which will have a major impact on golf course maintenance, is the ability to operate a system via the internet.

A wall mounted control panel as part of a central control system will include a modem which uses similar technology to a mobile phone but just carries data rather than voice and data.



“It means that from any internet link, anywhere in the world, you can log in and operate or set your irrigation system and it is much quicker and less expensive than current remote systems,” explained Graham.

“We recently priced a system in Ireland and discovered that the cost of the GSM card required to operate the modem is around €6 (euro) and with this system you don’t need to buy a pc and a whole bundle of software to make it work. So it’s quite competitive when you think about it.

“And it means that you can be anywhere in the world and if you can get a pc connection to the internet you can take a look at your irrigation system. And not only that if you have a problem, with a password, our dealer or supplier can go in as well,” said Graham, who added that with services centres in Paris, New York and California there is service support for 20 hours of the day.

Couple that ability with sensing systems like a rain gauge or an evapotranspiration meter and the system can be overridden if you’ve set it to go off and there has been an unexpected downpour all day.