

MONSOON IQ Monitoring the Green

Main Use

Golf course irrigation

Davey Product

Monsoon IQ intelligent pump system with

2 x 18kW duty VSD 2.4kW jockey VSD

Customer

Tirhatuan Lakes
Public Golf Course

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Location

Rowville, Victoria



Davey's intelligent pump controller, the Monsoon IQ, has given Michael Elijah, Superintendent at Tirhatuan Lakes Public Golf Course an intimate understanding of how his irrigation system is behaving, making it safer, more efficient and protecting his pumps from unnecessary wear and tear.

The course sits on a relatively flat 50-hectare site, backing onto the Dandenong Creek and flood plains. It is prone to flooding and can be extremely wet in winter and very dry in summer. Approximately 70% of the course is covered in irrigation.

Over the past five years the pump pulling water from the creek hasn't been working at capacity so the course has experienced drought. Another concern to superintendents was not knowing if the irrigation system had shut down properly overnight — which sometimes led to overwatering and waste.

The existing system was a competitor's pumpset with a common basic configuration of two duty pumps and a jockey pump. Joel Gresham, General Manager Innovation, Davey, says talking with Michael it became quite clear that his major frustration was that he had no real connection to his pump system's operation, and unless he travelled the five minute drive through the golf course to the back of the property, he had no feedback as to how the unit was actually performing. "The Monsoon IQ is an easy choice for those in this situation, providing the end user, manager, or even servicing agent with the benefit of real-time information and the power to make decisions and take actions in the palm of your hand," he says.

Installation of the new Davey system means Michael's equipment should last longer, require less maintenance and ultimately be more cost efficient.

At Davey, we understand no two jobs are the same. That's why we have a team of sales engineers and a specialised production department to tailor the pumpset for your needs.

MonsoonIQ

THE DAVEY SOLUTION

Davey installed a three-pump system using 2x 18kW duty VSDs and a 2.4kW jockey VSD all fitted to existing pumps. A submersible pump takes water from the creek into the dam, from there the irrigation system pumps it out to the golf course.

Davey installed its Monsoon IQ intelligent pump controller to the system, allowing remote monitoring and control of the pumps and Vacon drives. Joel says the installation of the Monsoon IQ has allowed a deeper insight and understanding into the pump and more importantly the system behaviour. "Because the pump is essentially the beating heart of the system, having the real time and historic monitoring of information allows for a finer sensitivity to symptoms that may cause issues later. Straight away we have better insight into pipe work and power supply performance because we are monitoring a central critical point," he says.

The controller uses a 3G modem connection to communicate to the cloud. Data is stored on the cloud that can be accessed by any device by logging into Davey's customer portal my.daveywater.com

KEY ADVANTAGES IN THIS SYSTEM

- > Turn pumps on and off via phone, tablet or laptop from anywhere with internet connection.
- > Chart water and energy usage along with pump pressure, flow, power, voltage etc. and access these charts on the pump, in the office or at home.
- > Configurable SMS alerts if faults occur, i.e. pipe breaks, pump loses prime, unit overheats, sensor failure.
- > Easily turn the pump on/off manually at local touchscreen interface.
- > Easily update settings and parameters at the touchscreen interface.
- Settings, historical data and parameters can be viewed and updated from Davey HQ, reducing service time.

Michael Elijah says he's not an irrigation specialist so gets by with what he knows. "The Davey system has enabled me to have access to the pumpsettings and understand more about the system – upper and lower limits, pressures, power outages etc. There are heaps of benefits, but the fact that I can keep track of my system – when it turns off and on, whether it's behaving correctly – is great. In the past I had no idea what was happening. Also, if I can't make it in to work at some point to check the system I can turn it off from anywhere with internet access, I don't have to rush in."

Michael says he is most impressed with the detailed monitoring and one of the key benefits with the new system is the safety precautions which are in place for his pumps, "It's looking after my pumps a lot more and making them run more efficiently than what it would have been in the past, it separates the pumps and uses them in the correct order so they all get used the same amount, so I'm no longer worried about one pump getting worn out first, so far that's been a big thing - looking after them," he says.

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Photo: The Monsoon IQ Cloud allows you to remotely control, optimise and monitor your system easily from any connected device.



Photo: Michael monitoring pump performance using the Monsoon IQ.

