Rashid Equestrian and Horseracing Club, Kingdom of Bahrain

IRRIGATION DESIGN
M. H. Al Mahroos BSC ©

IRRIGATION CONTRACTOR
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RAIN BIRD PRODUCTS
- Rain Bird® 751 Electric Rotors
- SR2005 Rain Guns
- ESP-LXD Series 2-Wire Controllers
- IQ™ v2.0 Central Control

COMPLETION DATE
April 2015

RAIN BIRD AREA MANAGER
Bashar Omari

"The introduction of the Rain Bird system in April 2015 coupled with a new turf maintenance regime has enabled us to provide a racing surface to be proud of. The flexibility of the Rain Bird system and its consistency of coverage has brought about a complete transformation in the irrigation procedures at the Rashid Equestrian and Horseracing Club, which in such testing conditions as an Arabian summer is a very valuable asset."

-Mr. Neil Mackenzie Ross
Facilities Manager,
Rashid Equestrian and Horseracing Club

PROJECT OVERVIEW:

The Rashid Equestrian and Horseracing Club is a nonprofit organization established in 1977 for the purpose of promoting and regulating the sport of horse racing. The club's two turf racing tracks measure 1.5 miles (2,400 meters) in length, with a .3 mile (600 meter) straight. The club recently replaced the original irrigation system with a new system that uses long-range Rain Bird® 751 Electric Rotors and Rain Bird® Rain Guns, and ESP-LXD 2-Wire Controllers and IQ v2.0 Central Control for remote water management.

CHALLENGE:

The two turf racing tracks each measure 65.6 feet (20 meters) wide, and the rotors needed to be located on the periphery of the tracks. The two parallel tracks intersect at three locations, creating an area that is too wide for typical gear-driven rotors to achieve head-to-head coverage. The installation team faced the additional challenge of installing the new system during the racing season, so the turf track had to be maintained without damage while the new irrigation system was installed.

RESULTS:

The Rain Bird 751 electric rotor and Rain Bird Rain Guns were selected for the project. The 751 rotor has a throw radius of up to 75 feet (22 meters), making it the perfect option for the tracks; meanwhile rain guns, which have a throw radius of up to 180 feet (55 meters) were used where the tracks intersected. The 751 rotors were also chosen for their even distribution of water, durability and easy maintenance features. This combination of rotors and rain guns provided the necessary head-to-head coverage to produce healthy, consistent turf throughout the course.

The irrigation control system consists of four ESP-LXD 2-Wire controllers and IQ v2.0. The ESP-LXD can control up to 200 stations, giving the club the flexibility to add new stations now and in the future. Using IQ v2.0 the facilities manager can fine-tune irrigation schedules and shut off or start a schedule right from the office computer, without having to travel to each controller.

Work at the racetracks was scheduled to avoid horse training times and racing days; also, the team maintained the existing irrigation system and schedules while working to install the new system. The consistency of the turf at the club's tracks has improved, and the scheduling and monitoring flexibility achieved using the ESP-LXDs and IQ v2.0 has been a real asset to the management team.