

## Irrigation in the New Age of Synthetic Turf

Synthetic Turf has undergone quite an engineering journey to get from where it was to where it is today. First generation synthetic turf was developed in the 1960s, and was essentially a grass carpet made from nylon fibres. Due to its water and maintenance saving features, it quickly began appearing in outdoor stadiums, and was used for a variety of sports. The second generation of synthetic turf was developed in the late 1970s and had longer tufts spaced more sparsely with sand spread between fibres to create a more natural look and feel.

These days, synthetic turf is beyond comparison with that of the past. Third generation synthetic turf has much longer fibres, which are spaced significantly further apart. They are usually made of polyethylene, and in-filled with rubber granules and sand. This makes for a softer, more skin-friendly surface, which works especially well for international football pitches due to the amount of sliding or diving involved. The environmental benefits of today's fields are also quite impressive. According to the Synthetic Turf Council, "The synthetic fields installed in North America alone conserve more than 11 billion gallons of water, and recycles over 105 million tires a year."

In the early days, irrigation didn't play much of a role in synthetic turf. Today, irrigation is regularly used with virtually all third generation fields to help clean and cool surfaces to a field manager's liking. With a legacy based on innovation in virtually every corner of the irrigation industry, it should come as no surprise that Hunter Industries is fully embracing the new opportunities with synthetic turf by creating a new and expanding line of rotors and components specifically for ST applications.

The Hunter ST System features gear-driven long-range rotors based on Hunter's legendary rotor technology, a special multi-axis swing joint, low-pressure loss valves and a robust feature-packed enclosure. Hunter ST rotors are reliable and engineered for longevity in high flow and high-pressure conditions. They are currently available in two configurations: the ST-90 and the STG-900.



The ST-90 features a smaller exposed surface area and jar-top access to the riser assembly and is ideally suited for direct burial in the natural turf that is sometimes adjacent to synthetic fields. The STG-900 features a slightly larger exposed surface area and includes through-the-top access to the riser assembly. It is ideally suited for installation within the ST Enclosure that is installed on the synthetic surface. However, it can also be installed in the natural turf that is sometimes adjacent to the synthetic field needing irrigation.

The Hunter ST Enclosure is also another major component of what sets this system apart. It's based on a complimentary blend of features including construction grade fibreglass in the body, a high impact resistant composite plastic on the exposed upper rim, and a near indestructible polymer-concrete cover set. Together, they form a 9,072 kg rated enclosure that is durable yet easy to install at just 48 kg with the covers removed.

The exclusive 50 mm thick three-piece polymer-concrete cover has a perfectly located cast-in hole for the STG-900 rotor on one side. This design allows the rotor to be held perfectly to grade within the hole while the enclosure is back-filled from the exposed opposite side. Quick couplers are a must-have around every synthetic field. The cast-in quick coupler port and cover on the opposite side eliminates the need for separate quick coupler enclosures around the playing field.

The ST Enclosure was designed to be as lightweight and easy to install as possible without sacrificing durability. From a functionality perspective, the three-piece cover, large interior space and total top access to all components make servicing easier, the system less expensive to maintain, and eliminates the possibility of disrupting or excavating the synthetic playing surface in the future.

The ST System was also designed to be compatible with an array of other innovative Hunter products, making a synthetic turf field manager's job as easy as possible. From decoder control or conventional, to indoor mounts and outdoor pedestals, Hunter controllers can meet and exceed expectations. For the ultimate in convenience, a ROAM or ICR handheld remote control can be the perfect accessory. With handheld remotes, the rotors can be activated from the handheld without the need to go to the controller and be familiar with its programming functions.

The goal of Hunter's System is to offer the synthetic turf industry the total irrigation solution it needs once and for all. What sets the Hunter ST System apart is that it is an integrated solution that is easy to specify and install, as well as easy and cost effective to maintain. Hunter is happy to announce that it has been well received by the synthetic turf community at large, and is currently in use in an array of synthetic fields with tremendous results.

