

## **TECHNICAL BULLETIN**

SandSave™, an engineered drainage system for golf course sand traps.

Traditional sand trap drainage systems rely on the passive flow of water through sand, filter media or porous concrete based substrate into a French drain and out to a sump or stream. These systems are costly to install and while they work for some period, over time dirt, fines, dust etc. ultimately make their way into the passive drain system that will eventually clog. This requires a costly and time-consuming repair, usually necessitating the complete removal and redo of the original system.

The unique design of the patented SandSave™ system allows an actual physical drain to raise and lower from below the sand. SandSave™ creates a direct route to the existing drainage piping, eliminating the need for water to slowly percolate through the various sand trap layers. SandSave™ is designed to be powered pneumatically, with air, from the compact SandSave Mobile Controller (SMC) through a quick disconnect coupling.

The SandSave™ system is comprised of three components:

- Drain Box (one per sand trap)
- Coupler Box (one per sand trap)
- Mobile Controller (SMC) (one per golf course)

**Designed, Manufactured  
& Supported In the USA**

**Drain Box** -The Drain Box is a polymer sump box containing the pneumatically powered drain (inlet) and cover mechanisms. All moving parts are encapsulated in a patented elastomer, protecting them from all particle ingress and outside contamination. The Drain Box has an inlet (the drain), a 4" outlet, 4 push-on air connections and an access cover.

**Coupler Box** -The Coupler Box is a waterproof polymer hinged-cover junction box containing the quick-connect (QC) coupling for connecting the SMC to the Drain Box.

**Mobile Controller** -The Mobile Controller is a battery powered portable air compressor/controller. Two toggle valves allow the user to control the complete operation of the SandSave™. The SMC temporarily connects to the Drain Box thru the quick connect coupling in the Coupler Box.

### **Installation**

1. Bury the Drain Box such that the top surface of the drain cover is 4-inches below the top surface of the sand. The drain outlet on the Drain Box can connect to the existing drain piping or routed to any suitable source of drainage.
2. Install the Coupler Box at ground level, outside the sand trap in a convenient location close to the Drain Box.
3. Connect the 4-conductor push-on air lines from the Drain Box to the Coupler Box, then bury them below ground.

### **Operation**

1. Insert the SMC QC coupling into the mating QC coupling in the Coupler Box.
2. Power on the SMC, set the pressure to 100 psi and then press the start button.
3. Raise the drain by flipping the toggle valve to the "RAISE SANDSAVE" position.
4. When the drain is in the full-up position, flip the adjacent toggle valve to the "OPEN COVER" position. The cover will open, and drainage will begin.
5. Disconnect the SMC by uncoupling the QC coupling, allowing servicing of the next sand trap. The drain and cover will remain in position until the SMC is reconnected.
6. To return the SandSave™ to the normal position, reconnect the SMC, power on the SMC, set the pressure to 100 psi and then press the start button.
7. Flip the toggle valve to the "CLOSE COVER" position.
8. With the cover fully closed, toggle the adjacent valve to the "LOWER SANDSAVE" position.
9. When the SandSave™ is in the full lower position, rake the sand trap, and play may resume.