### THE HUNTER ST SYSTEM

Synthetic Turf Cooling & Cleaning

RESIDENTIAL & COMMERCIAL IRRIGATION Built on Innovation®

### **Hunter**°

Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.

Gregory R. Hunter, President of Hunter Industries



**Website** hunterindustries.com | **Customer Support** 760-744-5240 | **Technical Service** 760-591-7383

This brochure was printed on Forest Stewardship Council® (FSC) certified paper with soy inks. The FSC is an international organization established to promote the responsible management of the world's forests.



## TAKE YOUR FIELD TO THE NEXT LEVEL OF PLAYABILITY

Simple to specify, contractor-friendly to install, and easy to service and maintain, the Hunter ST system is the complete package of irrigation products perfectly suited for cooling, cleaning, flushing and preparing synthetic sports fields for play.

The enhanced STK-6V is the first and only cost-effective integrated solution designed to exceed the unique and specific needs of the synthetic turf irrigation market. The ST System features total top access to all irrigation components making maintenance simple while keeping the surface intact, playable and safe.

The exclusive IBS Infill Barrier System accommodates every field surface configuration including infill turf, short non-infill turf, synthetic running track, and

in-concrete installations. The robust and reliable manifold features 3" galvanized ductile iron components with heavy-duty grooved (Victaulic $^{\text{TM}}$  type) fittings.

Also included is a slow-opening, low pressure loss control valve, isolation valve, drain valve, quick coupler valve, and the powerful ST-1600B long-range gear-driven rotor.

### Inside the ST System

Open access to all components for ease of ongoing maintenance



### From the top

Smooth and safe surface area with quick-access ports





### STK-5V/STK-6V FOR APPLICATIONS UP TO 165' RADIUS

Radius: **107' to 165'**Flow: **96.2 to 326.8 GPM** 

Inlet: 2" BSP

### **FEATURES**

- Nozzle choices: 6
- Standard nozzle: #20
- Nozzle range: #16 to #26
- Nozzle trajectory: 22.5°
- Gear-drive: Isolated, grease lubricated gear-drive
- Factory installed rubber logo cap (ST-1600B)
- Arc Adjustment: Moveable stops (left and right) arc adjustment
- Arc setting: 40° to non-reversing 360°
- Ratcheting nozzle turret
- Telescoping rubber infill barrier on riser
- Adjustable speed of rotation: 0 to 65 seconds (180° at 120 PSI)
- Warranty period: 5 year component part
- Internal construction: Brass, stainless steel & ball-bearings

### **OPERATING SPECIFICATIONS**

Radius: 107' to 165'

ST ROTOR

ST-1600-B

ST-1600-HS-B

ST-1600-BR

ST-1600-HS-BR

Model

- Flow: 96.2 to 326.8 GPM
- Operating pressure range: 60 to 120 PSI
- Precipitation rate: 2.25 in/hr approximately

Description

and 6 nozzles

5" pop-up, top service, adjustable arc, stainless steel

High-speed ST-1600-B, up to 65 seconds for 180° at

High-speed ST-1600-BR, up to 65 seconds for 180° at

Riser mount, adjustable arc, BSP inlet threads

riser, BSP inlet threads, and 6 nozzles



# ST-1600B Overall height: 22½" Pop-up height: 5" Diameter: 14" Inlet size: 2" BSP\* \* Adapter to 2" NPT nipple not required. Use BSP t.o.e. nipple adapter P/N 241400 if desired.

### ST-1600BR

Overall height: 8¾" Diameter: 8¼" Inlet size: 2" BSP\*

\* Adapter to 2" NPT nipple not required. Use BSP t.o.e. nipple adapter P/N 241400 if desired.

### KIT CONFIGURATIONS

STK-5V / STK-6V			
Kit Description For specification ease and to ensure the correct product is installed, the ST System is available in kit configurations. Items are ordered individually.	STK-5V ST-1600 Block System (remotely located valve)	STK-6V ST-1600 VAH System (valve adjacent to head)	
ST Rotor: Synthetic turf rotor	ST-1600-B	ST-1600-B	
ST IBS: Infill barrier system rubber cover kit	ST-IBS-1600	ST-IBS-1600	
ST BKT: Rotor vault hanger & elevation adjustment bracket	ST-BKT-1600	ST-BKT-1600	
ST Vault: Vault with 4-piece polymer-concrete cover set	ST-243636-B	ST-243636-B	
ST Manifold: 3" Fittings, isolation valve and drain valve	ST-BVF30-K	ST-BVF30-K	
ST Valve: 3" valve with remote on-off-auto selector	_	ST-V30-KV	
ST Variable Opening Speed Valve: Regulates ST-V30-KV opening speed	_	ST-NDL-K	
ST Support: Adjustable manifold support (2 required)	ST-SPT-K	ST-SPT-K	
ST Inlet Hose: Flexible stainless steel braided alignment hose	ST-H30-K	ST-H30-K	
Quick Coupler Valve: 1" BSP inlet 11/4" outlet for key	HQ-5RC	HQ-5RC	

### **STK-6V** ROTOR AND MANIFOLD ASSEMBLY

### ST-IBS1600 The unique IBS rubber cover kit includes vertical rubber barriers to retain infill material creating a safe transition where the rotor pops up. The IBS can also be trimmed to create a flat exposed surface area. ST Adjustable Hanger Bracket

### \_\_\_\_

ST Infill Barrier System

This bracket supports the rotor within the vault and provides vertical elevation adjustments allowing for a perfect surface transition.

### ST Manifold and Isolation Valve

### ST-BVF30-K

Rated to 500 PSI working pressure, this 3" galvanized ductile iron assembly includes Victaulic™ type grooved connections, a butterfly isolation valve, a point of connection for the quick coupler, and a 1" brass drain valve.

### ST H-Block Manifold Supports

### ST-SPT-K

Adjustable support stands include a large footprint base made from recycled tire rubber and a 2" vertically adjustable support rail (two required under manifold).



### ST Flexible Stainless Inlet Hose

### ST-H30-K

3" ultra-flexible stainless steel corrugated hose with stainless steel support braiding. Provides for minor offset and alignment of sub-mainline to the ST Manifold's inlet connection.

### ST Low-Loss, Slow-Opening Valve

 $\textbf{ST-V30-KV:} \ \ \text{Heavy-duty control valves for STK-6V}.$ 

Valve: 3" Grooved Vic Type

Opening Speed: ST-NDL-K regulates/slows ST-V30-KV opening speed

Pressure Loss: Ultra Low (1.5 PSI at 325 GPM)

Manual Control: Remote On-Off-Auto Selector and Solenoid (not shown)

### ST ROTORS HAVE MANY USES

While ST Rotors are specifically designed for cleaning and cooling synthetic turf sports fields, they are also great for other applications such as pastures, horse arenas, dust control and even casual natural turf areas.



### **ST VAULT** TOTAL TOP SERVICEABILITY

Heavy-duty tapered fiberglass and polymer-concrete construction with pre-cast holes for rotor, quick coupler valve, and remote on-off-auto selector manifold assembly.

The ST-V30-KV valve kit includes a remotely located On-Off-Auto selector and solenoid manifold assembly. These convenient features bring valve manual control functions and solenoid splice connections closer to the surface for easy access.

Quick couplers provide a convenient source of water for washing down spills and water-soluble paint. Integrated in-vault design eliminates the need for additional quick coupler enclosures.

### ST-243636-B: Includes 3" thick 4-piece PC cover set

Main Cover: 24" x 36" Overall Height: 36" Body Weight: 170 lbs. Total Weight: 320 lbs. Base Pad: 42" x 48" **Quick Access Ports: 2** 



Quick Coupler

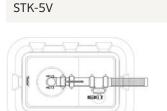


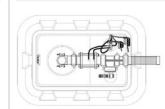


### ST-1600 Rotor in Action



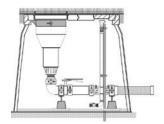
### **INSTALLATION DETAILS**



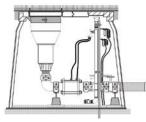


STK-6V

ON FIELD SIDE ON FIELD SIDE



VIEW FROM ON FIELD SIDE



VIEW FROM ON FIELD SIDE

### ST-1600 NOZZLE PERFORMANCE DATA

Nozzle	Pressure	Radius	Flow	Precip in/hr	
	PSI	ft.	GPM		
16 •	60	107	96.2	1.63	1.88
10	75	115	107.3	1.57	1.81
Black	90	121	117.8	1.54	1.78
	105	128	127.3	1.50	1.73
	120	135	137.4	1.46	1.69
18 •	60	112	107.0	1.66	1.91
10	75	121	119.4	1.56	1.80
Black	90	128	131.0	1.54	1.78
	105	133	141.3	1.54	1.78
	120	141	153.2	1.48	1.71
20 •	60	115	144.0	2.10	2.43
20 •	75	128	160.9	1.89	2.18
Black	90	141	176.5	1.71	1.97
	105	144	190.5	1.76	2.03
	120	148	204.2	1.80	2.08
22 •	60	118	171.5	2.37	2.73
22	75	130	191.8	2.20	2.54
Black	90	144	210.0	1.94	2.24
	105	151	226.9	1.84	2.12
	120	157	243.1	1.89	2.18
24 •	60	121	202.1	2.64	3.05
Z4 •	75	133	225.9	2.46	2.84
Black	90	148	247.6	2.19	2.52
	105	156	267.4	2.12	2.45
	120	160	286.4	2.16	2.49
26.	60	126	233.2	2.83	3.27
26 ●	75	136	260.4	2.71	3.13
Black	90	151	284.5	2.40	2.77
	105	160	307.0	2.31	2.67
	120	165	326.8	2.32	2.68

All precipitation rates calculated for 180° operation. For precipitation rate of a 360° sprinkler, divide by 2.

### **ST VAULT COVER OPTIONS**







LONG FIBER INFILL SYNTHETIC TURF



SHORT-PILE NON-INFILL SYNTHETIC TURF









PERIMETER IN-CONCRETE APPLICATIONS

SYNTHETIC RUNNING TRACK APPLICATIONS

The unique IBS rubber cover kit includes a cupped area for attachment of infill-type synthetic turf as well as vertical rubber barriers to retain infill material, creating a safe transition where the rotor is retracted. The IBS can also be trimmed to create a flattened area for attachment of short-pile non-infill turf, running track material, or the new ST-FRP1600 simulated concrete cover. All four options provide a clean and safe installation that is unmatched in the industry.

### **SIMPLE TO SPECIFY** Easy to Install & Maintain

With a single model reference for all components, the ST System is designed as an all-in-one solution that is simple to specify and easy to install and maintain. Clear and specific instructions help ensure that the correct products are installed properly.

Design enhancements include a shorter vault, an adjustable bracket for hanging and adjusting the rotor to grade, adjustable manifold assembly stands, and a new three-inch galvanized ductile iron assembly with heavy-duty grooved fittings for ease of servicing. The isolation valve and point of connection for the quick coupler are now inside the vault and provided with the field-assembled manifold kit. The vault also includes a drain valve for easier servicing and winterization.

All components are contained in a constructiongrade vault for total top service and easy maintenance. Total access to all components allows servicing while keeping the surface intact, playable and safe. The exclusive IBS Infill Barrier System accommodates every field surface configuration including infill turf, short non-infill turf, synthetic running track, and in-concrete installations.

**Learn more.** Visit hunterindustries.com/st or talk to your local Hunter Sales Manager