

STK-6V

ST SYSTEM FOR CLEANING, COOLING, FLUSHING AND PREPARING SYNTHETIC SPORTS FIELDS FOR PLAY

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 / ST-1600-HSB)
- 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 (High speed models, 180° at 120 PSI)
- Internal construction: Brass, stainless steel & ball-bearings
- Optional Infill Barrier System (ST-1600B / ST-1600-HSB)
- Warranty period: 5 year component part

OPERATING SPECIFICATIONS

- Radius: 107' to 165'
- Flow: 96.2 to 326.8 GPM
- Operating pressure range: 60 to 120 PSI
- Precipitation rate: 2.25 in/hr approximately

KIT CONFIGURATIONS

STK-6V				
Kit Description (Components are ordered individually)	STK-6V-B-2P Standard Pop-Up 2" Plastic Valve	STK-6V-HSB-2P High Speed Pop-Up 2" Plastic Valve	STK-6V-B-3M Standard Pop-Up 3" Metal Valve	STK-6V-HSB-3M High Speed Pop-Up 3" Metal Valve
ST Rotor: Synthetic turf rotor	ST-1600-B	ST-1600-HS-B	ST-1600-B	ST-1600-HS-B
ST Infill Barrier System: Rubber cover kit	ST-IBS-1600	ST-IBS-1600	ST-IBS-1600	ST-IBS-1600
ST Bracket: Rotor hanger and elevation adjustment	ST-BKT-1600	ST-BKT-1600	ST-BKT-1600	ST-BKT-1600
ST Vault: 4-piece polymer-concrete cover set	ST-243636-B	ST-243636-B	ST-243636-B	ST-243636-B
ST Manifold: 3" fittings, isolation valve and drain valve	ST-BVF30-K	ST-BVF30-K	ST-BVF30-K	ST-BVF30-K
ST Valve: With remote on-off-auto selector	ST-V20-KVP	ST-V20-KVP	ST-V30-KV	ST-V30-KV
ST Variable Speed Valve: Regulates opening speed	ST-NDL-K	ST-NDL-K	ST-NDL-K	ST-NDL-K
ST Support: Adjustable manifold support (2 required)	ST-SPT-K	ST-SPT-K	ST-SPT-K	ST-SPT-K
ST Inlet hose: Flexible stainless steel alignment hose	ST-H30-K	ST-H30-K	ST-H30-K	ST-H30-K
Quick Coupler Valve: 1" inlet, 1¼" outlet for key	HQ-5RC	HQ-5RC	HQ-5RC	HQ-5RC



ST-1600-B ST-1600-HS-B (High Speed)

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-1600-BR ST-1600-HS-BR (High Speed)

(Riser Mounted Model)
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.

ST Infill Barrier System**ST-IBS-1600**

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-BKT-1600**

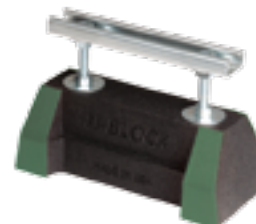
This bracket supports the rotor within the vault and provides vertical elevation adjustments allowing for a perfect surface transition.

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 (Plastic)

For Flows Up to 200 GPM



ST-V20-KVP: Heavy-duty plastic control valve
Valve: 2" Grooved Vic Type
Opening Speed: ST-NDL-K regulates/slow speed
Pressure Loss: Ultra Low (1.5 PSI at 200 GPM)
Manual Control: Remote On-Off-Auto Selector and Solenoid (not shown)

ST Low-Loss, Slow-Opening Valve (Metal)

ST-V30-KV: Heavy-duty metal control valve
Valve: 3" Grooved Vic Type
Opening Speed: ST-NDL-K regulates/slow speed
Pressure Loss: Ultra Low (2.0 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.

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

**SEAMLESS INTEGRATION**

Blends in perfectly with the surrounding synthetic surface



ST VAULTS

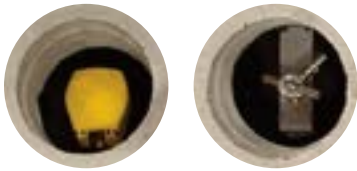
Heavy-duty tapered fiberglass and polymer-concrete construction with pre-cast holes for rotor, quick coupler valve, and remote manifold assembly.

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.

The ST-V30KV 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.

ST-243636B: 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



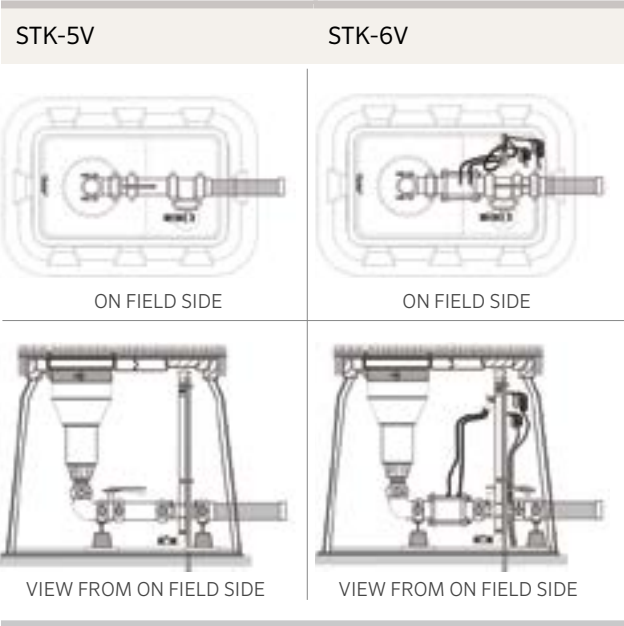
① Quick-Coupler ② On-Off-Auto Selector



ST-1600 Rotor in Action



INSTALLATION DETAILS



ST-1600 NOZZLE PERFORMANCE DATA					
Nozzle	Pressure PSI	Radius ft.	Flow GPM	Precip in/hr	
				■	▲
16 ● Black	60	107	96.2	1.63	1.88
	75	115	107.3	1.57	1.81
	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 ● Black	60	112	107.0	1.66	1.91
	75	121	119.4	1.56	1.80
	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 ● Black	60	115	144.0	2.10	2.43
	75	128	160.9	1.89	2.18
	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 ● Black	60	118	171.5	2.37	2.73
	75	130	191.8	2.20	2.54
	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 ● Black	60	121	202.1	2.64	3.05
	75	133	225.9	2.46	2.84
	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 ● Black	60	126	233.2	2.83	3.27
	75	136	260.4	2.71	3.13
	90	151	284.5	2.40	2.77
	105	160	307.0	2.31	2.67
	120	165	326.8	2.32	2.68

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