

ST-1600 / STK-6V

Radius: **32.5 to 50.3 m**
Flow: **21.8 to 74.2 m³/hr; 364 to 1,237 l/min**

This ST System solution offers cleaning, cooling, and flushing capabilities to prepare synthetic sports fields for play.

KEY BENEFITS

- Nozzle choices: 6
- Standard nozzle: #20
- Nozzle range: #16 to #26
- Nozzle trajectory: 22.5°
- Isolated, grease-lubricated gear drive
- Factory-installed rubber logo cap (ST-1600-B / ST-1600-HSB)
- Movable 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 8 bar, 800 kPa)
- Internal construction: brass, stainless steel, and ball bearings
- Optional infill barrier system (ST-1600-B / ST-1600-HSB)

OPERATING SPECIFICATIONS

- Radius: 32.5 to 50.3 m
- Flow: 21.8 to 74.2 m³/hr; 364 to 1,237 l/min
- Operating pressure range: 4.0 to 8.0 bar; 400 to 800 kPa
- Precipitation rate: 60 mm/hr approximately
- Warranty period: 5 years component part

KIT CONFIGURATIONS

STK-6V		
Kit Description (Components are ordered individually)	STK-6V-HSB-2P High-Speed Pop-Up 2" (50 mm) Plastic Valve	STK-6V-HSB-3M High-Speed Pop-Up 3" (80 mm) Metal Valve
ST Rotor: Synthetic turf rotor	ST-1600-HS-B	ST-1600-HS-B
ST Infill Barrier System: Rubber cover kit	ST-IBS-1600	ST-IBS-1600
ST Bracket: Rotor hanger and elevation adjustment	ST-BKT-1600	ST-BKT-1600
ST Vault: 4-piece polymer-concrete cover set	ST-243636-B	ST-243636-B
ST Manifold: 3" (80 mm) fittings, isolation valve and drain valve	ST-BVF30-K	ST-BVF30-K
ST Valve: With remote on-off-auto selector	ST-V20-KVP	ST-V30-KV
ST Variable Speed Valve: Regulates opening speed	ST-NDL-K	ST-NDL-K
ST Support: Adjustable manifold support (2 required)	ST-SPT-K	ST-SPT-K
ST Inlet Hose: Flexible stainless steel alignment hose	ST-H30-K	ST-H30-K
BSP Inlet Adapter: 3" (80 mm) NPT x BSP	855000	855000
BSP Inlet Adapter: 1" (25 mm) NPT x BSP male (2 required)	855100	855100
Quick-Coupler Valve: 1" (25 mm) BSP inlet, 1/4" (32 mm) outlet for key	HQ-5RC-BSP	HQ-5RC-BSP



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

Overall height: 57 cm
Pop-up height: 13 cm
Diameter: 36 cm
Inlet size: 2" (50 mm) BSP*

* Use P/N 241400 adapter to 2" (50 mm) PVC pipe if needed



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

(Riser-Mounted Model)
Overall height: 22 cm
Diameter: 21 cm
Inlet size: 2" (50 mm) BSP*

* Use P/N 241400 adapter to 2" (50 mm) PVC pipe if needed



ST1600/ST1700 Tool

P/N 517600SP
For gear drive installation and removal



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

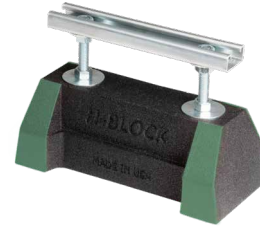
ST-BVF30-K

Rated to 35 bar; 350 kPa working pressure, this 3" (80 mm) galvanised ductile iron assembly includes Victaulic™ type grooved connections, a butterfly isolation valve, a point of connection for the quick coupler, and a 1" (25 mm) 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 50 mm vertically adjustable support rail (two required under manifold).



ST Flexible Stainless Inlet Hose

ST-H30-K

3" (80 mm) 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 45.0 m³/hr; 757 l/min



ST-V20-KVP: Heavy-duty plastic control valve
Valve: 2" (50 mm) grooved Vic type
Opening speed: ST-NDL-K regulates/slows speed
Pressure loss: Ultra-low (0.15 bar; 15 kPa at 45.0 m³/hr; 757 l/min)
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" (80 mm) grooved Vic type
Opening speed: ST-NDL-K regulates/slows speed
Pressure loss: Ultra-low (0.15 bar; 15 kPa at 65.0 m³/hr; 1,082 l/min)
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



Victaulic is a trademark of Victaulic Company.

ST VAULTS

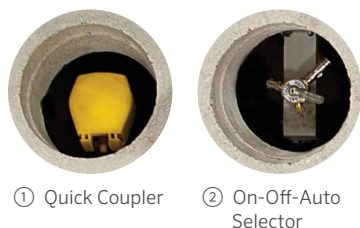
The heavy-duty tapered fiberglass and polymer-concrete construction includes pre-cast holes for the rotor, quick-coupler valve, and remote manifold assembly.

Quick couplers provide a convenient source of water for washing down spills and water-soluble paint. The 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 76 mm thick 4-piece PC cover set

- Main cover:** 61 cm x 91 cm
- Overall height:** 91 cm
- Body weight:** 70 kg
- Total weight:** 138 kg
- Base pad:** 106 cm x 122 cm
- Quick-access ports:** 2



① Quick Coupler ② On-Off-Auto Selector



ST-1600 Rotor in Action



ST-1600 SHORT-RADIUS NOZZLE KIT - P/N 959900 PERFORMANCE DATA

Nozzle	Pressure		Radius m	Flow		Precip mm/hr	
	bar	kPa		m ³ /hr	l/min	■	▲
8	3.0	300	20.4	5.29	88.2	25.4	29.3
	4.0	400	21.3	5.29	88.2	23.3	26.8
	5.0	500	21.9	5.79	96.5	24.1	27.8
	6.0	600	22.6	6.20	103.3	24.4	28.1
	7.0	700	23.2	6.63	110.5	24.7	28.5
10	3.0	300	22.6	7.36	122.6	28.9	33.4
	4.0	400	24.7	8.59	143.1	28.2	32.5
	5.0	500	25.6	9.65	160.9	29.5	34.0
	6.0	600	26.2	10.70	178.3	31.1	36.0
	7.0	700	26.8	11.59	193.1	32.2	37.2
12	3.0	300	25.6	10.49	174.9	32.0	37.0
	4.0	400	28.0	12.24	204.0	31.1	36.0
	5.0	500	28.7	13.74	229.0	33.5	38.7
	6.0	600	29.3	14.92	248.7	34.9	40.3
	7.0	700	29.9	16.31	271.8	36.6	42.2
14	3.0	300	27.7	13.79	229.8	35.8	41.4
	4.0	400	31.4	15.74	262.3	31.9	36.9
	5.0	500	32.0	17.76	296.0	34.7	40.0
	6.0	600	32.9	19.42	323.7	35.8	41.4
	7.0	700	33.5	21.01	350.1	37.4	43.2

ST-1600 NOZZLE PERFORMANCE DATA*

Nozzle	Pressure		Radius m	Flow		Precip mm/hr	
	bar	kPa		m ³ /hr	l/min	■	▲
16 ●	4.0	400	32.5	21.8	364	41.4	47.8
	5.0	500	35.0	24.4	406	39.8	45.9
	6.0	600	37.0	26.8	446	39.1	45.1
	7.0	700	39.0	28.9	482	38.0	43.9
	8.0	800	41.0	31.2	520	37.1	42.9
18 ●	4.0	400	34.0	24.3	405	42.0	48.6
	5.0	500	37.0	27.1	452	39.6	45.8
	6.0	600	39.0	29.8	496	39.1	45.2
	7.0	700	40.5	32.1	535	39.1	45.2
	8.0	800	43.0	34.8	580	37.6	43.5
20 ●	4.0	400	35.0	32.7	545	53.4	61.7
	5.0	500	39.0	36.5	609	48.1	55.5
	6.0	600	43.0	40.1	668	43.4	50.1
	7.0	700	44.0	43.3	721	44.7	51.6
	8.0	800	45.0	46.4	773	45.8	52.9
22 ●	4.0	400	36.0	38.9	649	60.1	69.4
	5.0	500	39.5	43.6	726	55.8	64.5
	6.0	600	44.0	47.7	795	49.3	56.9
	7.0	700	47.0	51.5	859	46.7	53.9
	8.0	800	48.0	55.2	920	47.9	55.3
24 ●	4.0	400	37.0	45.9	765	67.1	77.4
	5.0	500	40.5	51.3	855	62.6	72.2
	6.0	600	45.0	56.2	937	55.5	64.1
	7.0	700	47.5	60.7	1012	53.8	62.2
	8.0	800	48.7	65.0	1084	54.9	63.3
26 ●	4.0	400	38.4	53.0	883	71.8	82.9
	5.0	500	41.4	59.2	986	68.8	79.5
	6.0	600	46.0	64.6	1077	61.0	70.4
	7.0	700	48.7	69.7	1162	58.6	67.7
	8.0	800	50.3	74.2	1237	58.7	67.8

* All radius measurements taken at standard rotation speeds. Slowing rotation to minimum rotation speed will add 3+ metres to radius.