

SYNTHETIC TURF SYSTEMS

Best-in-Class Solutions for Synthetic Turf Irrigation

Hunter[®]



Attain new levels of playability with

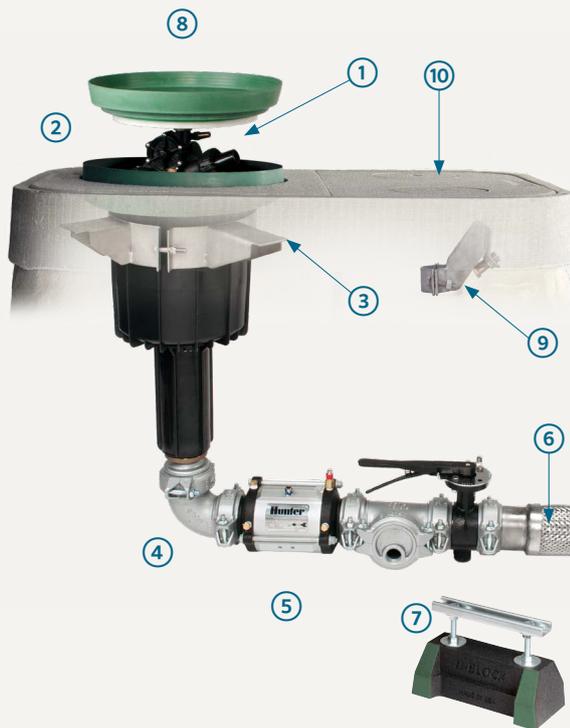
HUNTER ST SYSTEMS



ST-1600 Rotor and Vault System

A Complete Solution for Synthetic Turf Irrigation

The ST-1600 Rotor and Vault System from Hunter Industries is the superior solution for all your synthetic turf irrigation needs. The system brings ST irrigation components together inside one strong enclosure that offers simple access from the top for quick servicing and maintenance. The vault houses a slow-opening, low-pressure-loss control valve, isolation valve, drain valve, quick coupler valve, and a powerful ST-1600 long-range, gear-driven rotor. For large fields, the ST-1600 Rotor can reach a radius up to 50 m. The robust and reliable manifold features premium 80 mm galvanised ductile iron components with heavy-duty, grooved Victaulic™ fittings. ST Systems allow easy access to all components for better serviceability while seamlessly integrating with a variety of surfaces to keep fields intact, playable, and safe.



ST-1600-KIT-B SYSTEM COMPONENTS

1	ST-1600-HSB	Synthetic turf rotor
2	ST-243636-B	Vault
3	ST-BKT-1600	Bracket for rotor
4	ST-BVF30-K	Manifold, including 80 mm fittings, isolation valve, and drain valve
5	ST-V30-KV	80 mm low-pressure-loss metal valve, including on-off-auto selector and solenoid
6	ST-H30-K	Adjustable stainless steel alignment hose
7	ST-SPT-K*	Adjustable manifold support
8	ST-IBS-1600	Rubber Cover Kit with ST Infill Barrier System
9	ST-BKT-QCV	Hanger bracket for HQ-5-RC Quick Coupler
10	HQ-5-RC-BSP	Quick coupler 25 mm inlet with 30 mm outlet for key

* Two required for installation

Victaulic is a trademark of Victaulic Company.

ST-1600 Rotor



Total accessibility with maximum throw and power to spare

The ST-1600 Rotor includes a spacious vault system that makes it the premium solution for synthetic turf irrigation. With a powerful throw radius up to 50 m, the ST-1600 is field-tested and time-proven to be the most reliable gear-driven synthetic turf rotor on the market. It's designed for seamless installation and includes a construction-grade fiberglass shell for easy servicing of all components.

The riser-mounted ST-1600-HS-BR Rotor is perfect for retrofitting synthetic fields. It's also an ideal dust-control solution for horse arenas, corrals, and pastures.



ST-1600-HS-B ROTOR

The exclusive ST Infill Barrier System accommodates every field surface configuration, including infill turf, short non-infill turf, synthetic running track, and in-concrete installations.



KEY BENEFITS

- Proven isolated, grease-lubricated gear drive for consistent top performance
- Flexible arc adjustment from 40° to 360° with left and right movable stops
- Ratcheting nozzle turret for simple setup
- Corrosion- and impact-resistant body for ultimate durability
- Stainless steel and brass internal construction for long-term reliability



ST-1600 SHORT RADIUS NOZZLE KIT P/N 959900

OPERATING SPECIFICATIONS

- Radius: 21.3 to 50.3 m
- Flow: 5.3 to 74.2 m³/hr; 88 to 1,237 l/min
- Operating pressure range: 4.0 to 8.0 bar; 400 to 800 kPa
- Rotation speed adjustable from: 0 to 65 seconds at 180° sweep at 8.0 bar; 800 kPa
- Nozzle trajectory: 25°
- Nozzles 16 through 26 included
- Warranty: 5-year component part warranty

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

Nozzle	Pressure		Radius m	Flow		Precipitation mm/hr	
	bar	kPa		m ³ /hr	l/min	■	▲
8	4.0	400	21.3	5.3	88	23.3	26.8
	5.0	500	21.9	5.8	97	24.1	27.8
	6.0	600	22.6	6.2	103	24.4	28.1
	7.0	700	23.2	6.6	111	24.7	28.5
10	4.0	400	24.7	8.6	143	28.2	32.5
	5.0	500	25.6	9.7	161	29.5	34.0
	6.0	600	26.2	10.7	178	31.1	36.0
	7.0	700	26.8	11.6	193	32.2	37.2
12	4.0	400	28.0	12.2	204	31.1	36.0
	5.0	500	28.7	13.7	229	33.5	38.7
	6.0	600	29.3	14.9	249	34.9	40.3
	7.0	700	29.9	16.3	272	36.6	42.2
14	4.0	400	31.4	15.7	262	31.9	36.9
	5.0	500	32.0	17.8	296	34.7	40.0
	6.0	600	32.9	19.4	324	35.8	41.4
	7.0	700	33.5	21.0	350	37.4	43.2

ST-1600-KIT-B VAULT SYSTEM

1 Vault

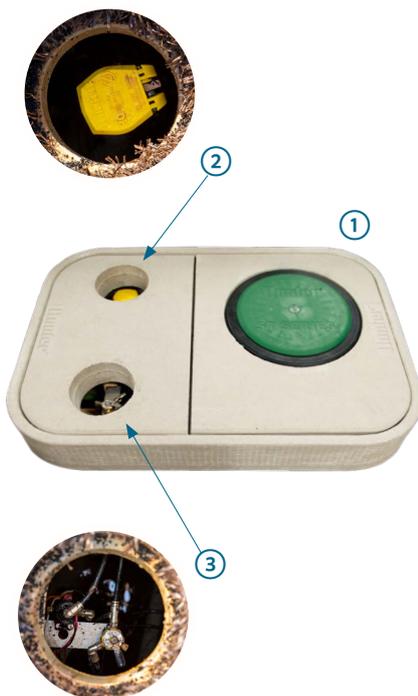
4-piece, thick polymer-concrete vault designed for clean installation and simple servicing

2 Quick Coupler

Quick Coupler Valve provides a convenient water source for washing down the field

3 On-off-auto selector

Valve control functions and solenoid connections are close to the surface for easy access



ST-1600 NOZZLE PERFORMANCE CHART

Nozzle	Pressure		Radius m	Flow		Precipitation 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 Factory- installed nozzle	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	1,012	53.8	62.2
	8.0	800	48.7	65.0	1,084	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	1,077	61.0	70.4
	7.0	700	48.7	69.7	1,162	58.6	67.7
	8.0	800	50.3	74.2	1,237	58.7	67.8

Notes:

All precipitation rates are calculated for 180° operation. For the precipitation rate of a 360° sprinkler, divide by 2. All radius measurements are taken at standard rotation speeds. Slowing rotation to minimum rotation speed will add 3+ metres to the radius.

ST-90 and STG-900 Rotors



Unsurpassed reliability for small to midsize field applications

For smaller field layouts, the ST-90 and STG-900 Rotors provide cost-competitive solutions for radius ranges up to 36 m. The ST-90 is designed for installation adjacent to the synthetic field, while the STG-900 is designed with the ability to install in a vault system located within the synthetic field.

ST-90 ROTOR



STG-900 ROTOR



ST Vault: Construction-grade, tapered fiberglass body shell with a polymer-concrete upper rim and cover, precast with openings to support the ST Rotor and Quick Coupler.



ST Rotor: For vault applications, the STG-900 Rotor is designed to fit perfectly in the vault for easy integration.

Rubber covers enhance safety with a smooth, flat rubberized surface area.

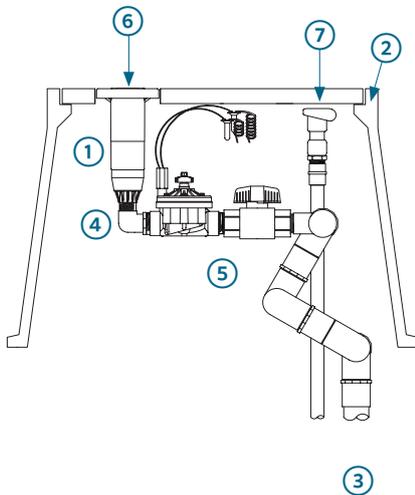


KEY BENEFITS

- Water-lubricated gear drive for reliable operation without clogging
- Flexible arc adjustment from 40° to 360°
- QuickCheck™ Arc Mechanism for easy verification of arc setting
- Optional rubber cover for added safety on the field

OPERATING SPECIFICATIONS

- Radius: 31.4 to 36.6 m
- Flow: 16.9 to 20.9 m³/hr; 282 to 348 l/min
- Operating pressure range: 7.0 to 8.0 bar; 700 to 800 kPa
- Nozzle trajectory: 22.5°
- Warranty: 5-year component part warranty



ST-90 / STG-900 NOZZLE PERFORMANCE DATA

Nozzle	Pressure		Radius m	Flow		Precipitation mm/hr	
	bar	kPa		m ³ /hr	l/min	■	▲
73	7.0	700	31.4	16.9	282	34.3	39.6
	7.5	750	33.2	17.5	291	31.7	36.6
	8.0	800	35.1	18.1	301	29.4	34.0
83	7.0	700	34.1	19.1	319	32.8	37.9
	7.5	750	35.4	20.0	333	32.0	37.0
	8.0	800	36.6	20.9	348	31.2	36.1

Notes:

Requires minimum 7.0 bar; 700 kPa dynamic pressure supplied to swing joint inlet. All precipitation rates are calculated for 180° operation. For the precipitation rate of a 360° sprinkler, divide by 2.

ST-90 MODELS

Model	Description
ST-90-B-73	8 cm pop-up, jar-top cap, adjustable arc, 40 mm BSP inlet threads, 73 nozzle
ST-90-B-83	8 cm pop-up, jar-top cap, adjustable arc, 40 mm BSP inlet threads, 83 nozzle

STG-900 MODELS

Model	Description
STG-900-73	8 cm pop-up, top service, adjustable arc, 40 mm Acme inlet threads, 73 nozzle
STG-900-83	8 cm pop-up, top service, adjustable arc, 40 mm Acme inlet threads, 83 nozzle

STG-900-KIT-B SYSTEM COMPONENTS

1	STG-900-83	Synthetic turf rotor
2	ST-173026-B	Vault
3	ST-2008-VA	Multi-axis vertical alignment swing joint
4	239800	40 mm female Acme x male Acme fitting
5	ST-VBVF-K	Valve kit
6	473900SP	Rubber cover
7	HQ-5-RC-BSP	Quick coupler 25 mm inlet with 30 mm outlet for key



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.

A white, handwritten signature of Gregory R. Hunter is centered on the page.

Gregory R. Hunter, CEO of Hunter Industries

A white, handwritten signature of Gene Smith is centered on the page.

Gene Smith, President, Landscape Irrigation and Outdoor Lighting

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