

SYNTHETIC TURF SYSTEMS

Best-in-Class Solutions for Synthetic Turf Irrigation

Hunter[®]



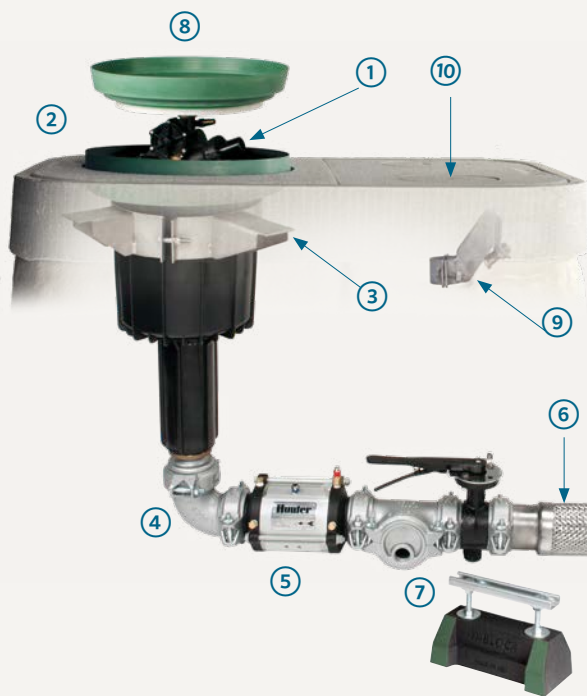
Attain new levels of playability with
HUNTER ST SYSTEMS



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 165'. The robust and reliable manifold features premium 3" galvanized, 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 SYSTEM COMPONENTS

1	ST-1600-HS-B	Synthetic turf rotor
2	ST-243636-B	Vault
3	ST-BKT-1600	Bracket for rotor
4	ST-BVF30-K	Manifold, including 3" fittings, isolation valve, and drain valve
5	ST-V30-KV	3" 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	Quick Coupler 1" NPT inlet, 1/4" 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 165', 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

KEY BENEFITS

- Nozzle choices: 6
- Standard nozzle: 20
- Nozzle range: 16 to 26
- Nozzle trajectory: 25°
- Total-Top-Service (TTS) design provides convenient, no-dig servicing
- Isolated, grease-lubricated gear drive
- Factory-installed rubber logo cap
- Arc adjustment: movable stops for left/right arc adjustment
- Ratcheting nozzle turret

OPERATING SPECIFICATIONS

- Radius: 105' to 157'
- Flow: 92.4 to 259.0 GPM
- Operating pressure range: 60 to 120 PSI
- Precipitation rate: 2.3 in/hr approximately
- Rotation speed adjustable down from 80 seconds (single 180° sweep) at 115 PSI
- Nozzle trajectory: 25°
- Nozzles 16 through 26 included
- Warranty: 5-year component warranty

ST-1600-KIT VAULT SYSTEM

1 Vault

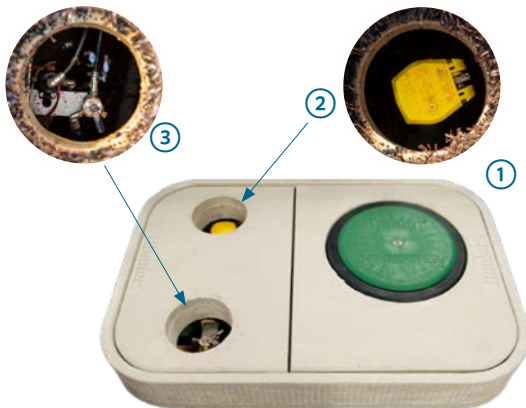
4-piece, thick polymer-concrete vault designed for clean installation and simple servicing

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 SHORT-RADIUS NOZZLE KIT PERFORMANCE CHART: P/N 959900

Nozzle	Pressure	Radius ft	Flow GPM	Precipitation in/hr	
	PSI			■	▲
8	60	70	23.3	0.92	1.06
	70	72	25.5	0.95	1.09
	90	74	27.3	0.96	1.11
	100	76	29.2	0.97	1.12
10	60	81	37.8	1.11	1.28
	70	84	42.5	1.16	1.34
	90	86	47.1	1.23	1.42
	100	88	51.0	1.27	1.46
12	60	92	53.9	1.23	1.42
	70	94	60.5	1.32	1.52
	90	96	65.7	1.37	1.58
	100	98	71.8	1.44	1.66
14	60	103	69.3	1.26	1.45
	70	105	78.2	1.37	1.58
	90	108	85.5	1.41	1.63
	100	110	92.5	1.47	1.70

ST-1600 NOZZLE PERFORMANCE CHART

Nozzle	Pressure	Radius ft	Flow GPM	Precipitation in/hr	
	PSI			■	▲
16	60	107	96.2	1.63	1.88
	70	115	107.3	1.57	1.81
	90	121	117.8	1.54	1.78
	100	128	127.3	1.50	1.73
	115	135	137.4	1.46	1.69
18	60	112	107.0	1.66	1.91
	70	121	119.4	1.56	1.80
	90	128	131.0	1.54	1.78
	100	133	141.3	1.54	1.78
	115	141	153.2	1.48	1.71
20 Factory-installed nozzle	60	115	144.0	2.10	2.43
	70	128	160.9	1.89	2.18
	90	141	176.5	1.71	1.97
	100	144	190.5	1.76	2.03
	115	148	204.2	1.80	2.08
22	60	118	171.5	2.37	2.73
	70	130	191.8	2.20	2.54
	90	144	210.0	1.94	2.24
	100	151	226.9	1.84	2.12
	115	157	243.1	1.89	2.18
24	60	121	202.1	2.64	3.05
	70	133	225.9	2.46	2.84
	90	148	247.6	2.19	2.52
	100	156	267.4	2.12	2.45
	115	160	286.4	2.16	2.49
26	60	126	233.2	2.83	3.27
	70	136	260.4	2.71	3.13
	90	151	284.5	2.40	2.77
	100	160	307.0	2.31	2.67
	115	165	326.8	2.32	2.68

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 10+ feet to the radius.

ST-1700-V Rotor



No-Dig Servicing and Easy Installation For Synthetic Turf Irrigation Management

The long-range ST-1700-V Synthetic Turf Rotor offers high-performance irrigation from the field perimeter while integrating Valve-in-Head (VIH) capabilities and a Total-Top-Service (TTS) design to simplify installation and maintenance.

The rotor's heavy-duty gear drive provides a powerful throw up to 160', and the spacious flange compartment accommodates full-sized, waterproof splice connectors with extra space to house a decoder for two-wire control system applications.

VIH configuration makes installation fast and easy

ST-1700-V ROTOR

Infill Barrier System Rubber Cover Kit (P/N ST-IBS-1700) designed for seamless integration with the field

Includes all the features and benefits of the popular ST-1600 Rotor



KEY BENEFITS

- Nozzle choices: 5
- Standard nozzle: 20
- Nozzle range: 16 to 24
- Nozzle trajectory: 25°
- Total-Top-Service (TTS) design provides convenient, no-dig servicing
- Valve-in-Head (VIH) configuration simplifies installation
- Isolated, grease-lubricated gear drive
- Factory-installed rubber logo cap
- Arc adjustment: movable stops for left/right arc adjustment
- Ratcheting nozzle turret

OPERATING SPECIFICATIONS

- Radius: 107' to 160'
- Flow: 96.2 to 286.4 GPM
- Operating pressure range: 60 to 115 PSI
- Precipitation rate: 1.8 in/hr approximately
- Arc setting: 40 to non-reversing 360°
- Speed of rotation: 80 seconds at 90 PSI (single 180° sweep)
- Warranty: 5-year component warranty

USER-INSTALLED OPTIONS

- Infill Barrier System Rubber Cover Kit: P/N ST-IBS-1700
- Short-Radius Nozzle Kit: P/N 959900
- Optional high-flow swing joint, 3" male inlet to 2" male outlet, 12" length: P/N HSJ-5-3-8-3-12

ST-1700-V NOZZLE PERFORMANCE CHART

Nozzle	Pressure	Radius	Flow	Precipitation in/hr	
	PSI			ft	■
16	60	105	92.4	1.61	1.86
	70	115	100.1	1.46	1.69
	90	121	114.0	1.49	1.72
	100	126	123.8	1.49	1.73
	115	131	134.1	1.50	1.73
18	60	112	106.9	1.65	1.91
	70	120	114.8	1.54	1.78
	90	126	127.0	1.53	1.77
	100	131	137.0	1.53	1.77
	115	138	148.9	1.51	1.74
20 Factory-installed nozzle	60	115	134.1	1.96	2.26
	70	128	151.0	1.78	2.05
	90	134	163.9	1.75	2.02
	100	141	179.8	1.74	2.01
	115	148	193.5	1.71	1.97
22	60	116	153.6	2.18	2.52
	70	128	174.0	2.05	2.36
	90	141	188.8	1.83	2.11
	100	149	205.9	1.78	2.06
	115	154	222.0	1.80	2.08
24	60	121	177.1	2.32	2.67
	70	133	200.9	2.19	2.53
	90	144	221.8	2.05	2.37
	100	154	239.7	1.94	2.24
	115	157	258.7	2.01	2.32

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 10+ feet to the radius.

OPTIONAL SERVICING TOOLS

Model	Description
10000100SP	ST-1700-V Valve Tool - Installation/Removal of Inlet Valve
251000SP	Snap Ring Tool
517600SP	ST-1600/ST-1700 Tool - Gear Drive Installation/Removal

Heavy-duty, internal gear drive provides years of reliable operation



TTS design provides convenient, no-dig servicing without the need to cut into the synthetic surface



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.

Gregory R. Hunter, CEO of Hunter Industries

A white, handwritten signature of Denise Mullikin.

Denise Mullikin, President, Landscape Irrigation and Outdoor Lighting

Website hunterirrigation.com | **Customer Support** +1-800-383-4747