

SPORTS FIELDS & GROUNDS IRRIGATION

Toro irrigation products and services made it really seamless with their incredible distribution network and incredible service.

> **Ryan Moy** Head Groundskeeper Allianz Field

YOUR FIELDS HAVE UNIQUE NEEDS TORO® CAN HELP YOU MEET THEM.

Whether you manage a professional sports field that hosts some of the world's elite athletes, or the baseball diamond at the local park, Toro can help keep your field looking its best with a wide range of irrigation solutions engineered with professional groundskeepers, contractors, and designers in mind. Every field, regardless of size or composition, presents its own unique challenges.





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Attention to Detail



Natural Turf Fields Require a Balance of Attention to Detail and Consistent Care to Ensure:



Turf Health

Maintaining healthy turf that is ready to take center stage on game day in high-use, short recovery window environments.



Playability

Safe playing surfaces that ensure player safety, limit potential liability, and help athletes perform at their best.



Water Use

Keeping the field in excellent condition while using water efficiently and keeping related costs down.

Toro provides a complete line of sports field maintenance products that ranges from mowers and sprayers, to aerators and utility vehicles. Whatever your need, Toro has a solution. Solutions designed to help all sports fields be healthier, play safer, and look their best.

Irrigation Solutions

- Control & Turf Monitoring
- Natural & Synthetic Turf Sprinklers
- Valves & Up-stream Fittings

Service & Support

- Controller Repair
- Product Training
- Field Service



Irrigation Is An Important Aspect of Preserving the Quality and Playability of Your Synthetic Turf Field, As It Supports:



Wash Down

Helps remove and wash away debris, biological matter, and various pathogens to provide a more appealing playing or leisure surface.



Cool Down

Significantly reduces surface temperatures and helps to preserve player safety, especially during midday activities and the summer months.



Preservation

Helps to maintain and compact sand and infill materials, thereby ensuring the surface performs as intended.

Toro wants to help groundskeepers and field managers keep fields at their best. That is why Toro is committed to developing innovative irrigation products that water more accurately, more efficiently, more dependably, and more affordably.

Model Selection Guide





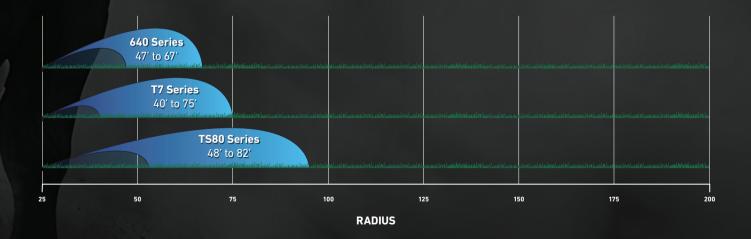
640 Series

With installs as far back as 30 years, there is little that can keep this rotor from meeting your expectations cycle after cycle, year after year. Proven to be durable and dependable, as evidenced in its use across numerous baseball and football fields at both the professional and collegiate levels.

T7 Series

TS80 Series

Provides the ultimate flexibility to meet the precise application needs of any large turf environment with a radius of up to 82 feet and a flow rate range to 45 GPM.



DID YOU KNOW? With a radius capability of 177 feet, one TS170 Series sprinkler is capable of covering the entire width of a traditional football field. Only six TS170 sprinklers are needed to cool and wash down an entire field.

According to the Synthetic Turf Council, there are an estimated 12,000 to 13,000 active synthetic turf sports fields in the United States, with another 1,200 to 1,500 new installations each year.*

Toro's Sports Fields and Grounds sprinkler offerings cover the spectrum of what is required to keep your turf fit for purpose and ready for center stage on gameday, whether it be natural or synthetic.







TS90 Series

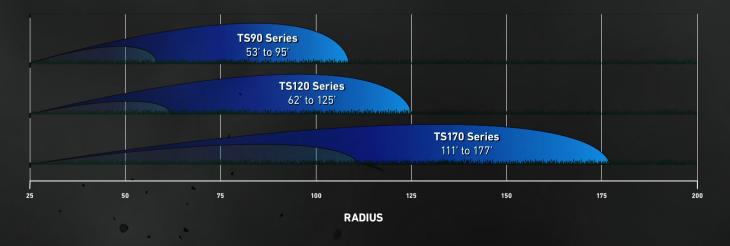
Featuring a Constant-Velocity drive, back nozzle, and patented TruJectory™ adjustment, this rotor can be easily tailored to the specific needs of your field. Capable of meeting the requirements of both Synthetic and Natural Turf fields with low maintenance requirements and VIH control.

TS120 Series

Ideal for the washing down and cooling of Synthetic Turf fields, and capable of radii that allow it to be installed along the perimeter of the field –

away from the playing surface.

TS170 Series



According to a study conducted by Penn State's Center for Sports Surface Research, irrigating Synthetic Turf can reduce the surface temperature by as much as 20°F. Surface temperatures as high as 160°F have been recorded.**

Source: Synthetic Turf Council (www.syntheticturfcouncil.org)

**Source: Penn State's Center for Sports Surface Research. June 2015. The Effect of Irrigation on Synthetic Turf Characteristics: Surface Temperature, Soccer Ball Roll, and Traction – Progress Report.

Model Selection Guide





	640 Series	T7 Series	TS80 Series	
Max Radius	67 ft.	75 ft.	82 ft.	
Type(s)	Hydraulic VIH Block Style	Block Style	Electric VIH Block Style	
Cover Options	Standard	Standard	Standard	
Inlet	1" NPT	1" NPT	1" NPT	
Pop-up Height (Grade to nozzle opening)	3.3"	5"	3.15"	
Drive Mechanism	Gear Drive	Gear Drive	Gear Drive	
Arc	45-360 Degrees	45-360 Degrees	30-360 Degrees	
Trajectory	27°	25°	25°	



TS90 Series	TS120 Series	TS170 Series
95 ft.	125 ft.	177 ft.
Block Style	Electric VIH Block Style	Electric VIH Block Style
Standard Natural TurfCup	Standard Synthetic Cover Natural TurfCup	Standard Synthetic TurfCup™
1" NPT	1 ½" NPT	2" NPT
4"	4"	3"
Gear Drive	Impact	Piston Drive
40-360 Degrees	30-360 Degrees	30-360 Degrees
7° to 30° (Adjustable)	22°	25°

EAGLE[™] PLUS SERIES CONTROLLER

Efficient, High-Capacity Control for Optimized Sports Field Irrigation

The Eagle Plus controller offers an affordable, high-capacity solution for sports fields and grounds, supporting up to 48 stations on conventional wiring or 200 stations with two-wire. Equipped with Flow Managed Irrigation (FMI) technology, the Eagle Plus leverages the iCentral scheduling engine to optimize water usage based on available flow, ensuring efficient irrigation within a designated water window. For added convenience, the ProMax maintenance remote allows operators to activate one or multiple stations.



Now Compatible with iCentral Cloud-Based Control with the ProMax[™] Connect App.

Activate stations and programs from anywhere, anytime. This free, cloud-based remote maintenance tool also allows you to manage rain holds and controller alerts. Additionally, you can view local weather information.

*ProMax Connect app is only available for Eagle Plus controllers on the Ethernet or Premium service plan on iCentral.

iCentral[™] Web Based Water Management System

The patented iCentral water management system is the original web-based landscape control platform. It allows wireless central control for one or more Eagle[™] and Eagle[™] Plus Series irrigation "field" controller(s).

Automatic Schedule Generator (ASG)

Determines the optimal schedule based on seasonality and site parameters: irrigation efficiency, soil texture, plant type, slope, precipitation, etc.

ZipET[™]

- Automatically sends weather information every 24-hours to each controller based local zip code. The controller intelligently modifies scheduled station runtimes by replacing just enough water to maintain plant health
- Mobile friendly website for Smart Phone and Tablet



Intelli-Sync[™]

Monitors changes made at iCentral or in the field.

Smart Alerts[™]

- Sent by text or email for all field alarms generated when a "fault" occurs; text messages are sent to cell phone and email address
- Automatic initiation of "rain shutdown" to each controller if iCentral determines that precipitation in a designated area necessitates a shutdown. (Requires Rain Sensor that can be shared to any number of controllers in an iCentral account.)
- Manually turn on/off any station or program
- Optional flow sensors detect flow violations and when appropriate, shuts off station(s).
 Subsequent programming automatically progresses and alert messages are sent for each affected station

DXI[™] CENTRAL CONTROL SYSTEM

Two Powerful Software Packages. One Advanced Controller Platform.

Looking for a variety of adaptable watering options? DXi[™] delivers with a comprehensive selection. In addition, DXi satellites allow for precision control and water management add-ons, such as the ability to manage multiple flow sensors and master valve pumps. They also support Toro flow and moisture decoders.



Cloud-Based Control with the ProMax[™] Connect App.

Activate single or multiple stations, monitor real-time flow rates, create and activate a one-time program "syringe," and much more with the ProMax[™] Connect app.* This free, cloud-based remote maintenance tool also allows you to manage rain holds, alerts and all-station tests, in addition to viewing local weather information at each satellite.

*The DXi controller must be connected to the Cloud Connect server to use the ProMax Connect app.

Precision Meets Convenience.

Whether it's an upgrade to an existing system or a new build or site, DXi opens up the possibilities for greater precision and control with integrated management software.



Cloud-Based Irrigation Data Management

Operate stations and programs from anywhere, anytime with your mobile device. It's simple with the free ProMax[™] Connect mobile app.



New Precision Irrigation Management Capabilities Harness the power of a range of capabilities, from basic irrigation scheduling to advanced ET calculations, flow sharing and flow management.



Flexibility for Future Updates

The future-ready DXi controller platform is designed to accommodate new innovations and changing site needs quickly and economically.

Soil Moisture Sensing

DXi central control system with WMS software provides precise soil moisture management by allowing up to 16 wired or wireless sensors per controller, enabling individual control over each irrigation program. With customizable high and low thresholds, DXi ensures accurate watering and includes a unique safety feature that prevents dangerously low moisture levels, protecting turf from stress.

SOCCER FIELDS

The Leader in the German National League

Toro professional irrigation systems have been installed at 13 German Bundesliga soccer stadiums.

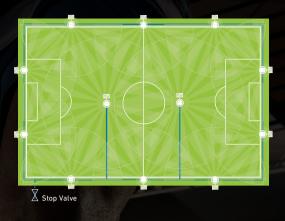






10 + 2 System

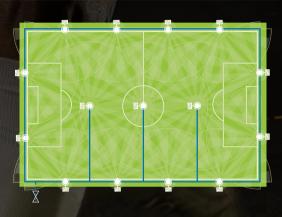
The popular standard is the 10 + 2 system. In this formation, 10 TS120 sprinklers are distributed around the perimeter of the pitch or field while two pop-up TS120 sprinklers work their magic from the midfield area.





12 + 3 system

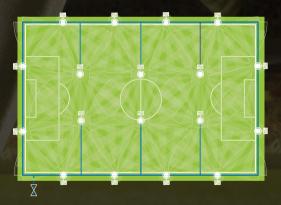
The advantage of the 12 + 3 system and upwards is the fact that a larger amount of water can be delivered in an even shorter amount of time.





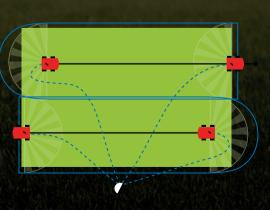
12 + 6 system

The flexible system can be easily expanded in order to overcome any issues and requirements. The best formations involve, for example, up to 12 sprinklers on the perimeter and 6 on the field itself. For sufficient amounts of water within a very short space of time, e.g. during halftime.



RollcarT

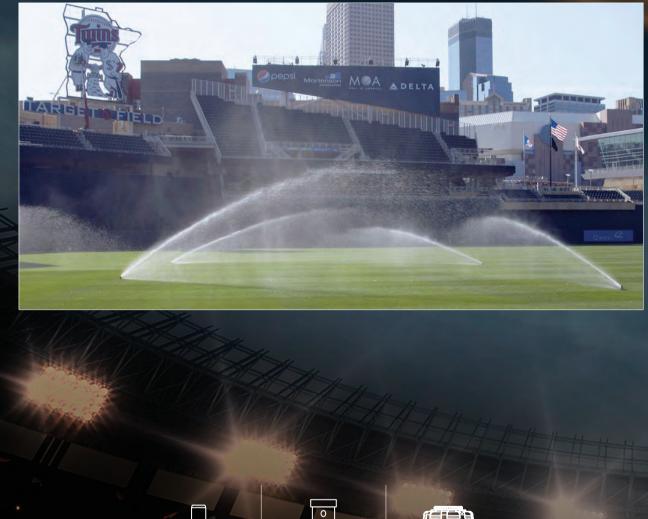
The super-flexible solution without any fixed installation. The RollcarT, which can be on-hand wherever it is needed, is the ideal solution for any situation where a fixed installation would not be cost-effective. It is a great, economical alternative for small clubs or for training grounds.

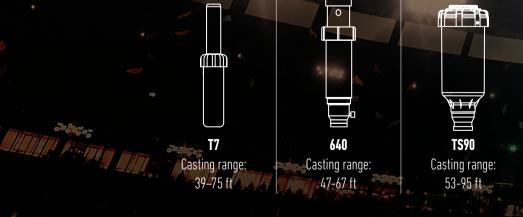


BASEBALL FIELDS

Maximum Safety and Fun at the Ballpark

Our specially designed sprinklers ensure uniform and swift irrigation of synthetic and natural turf.



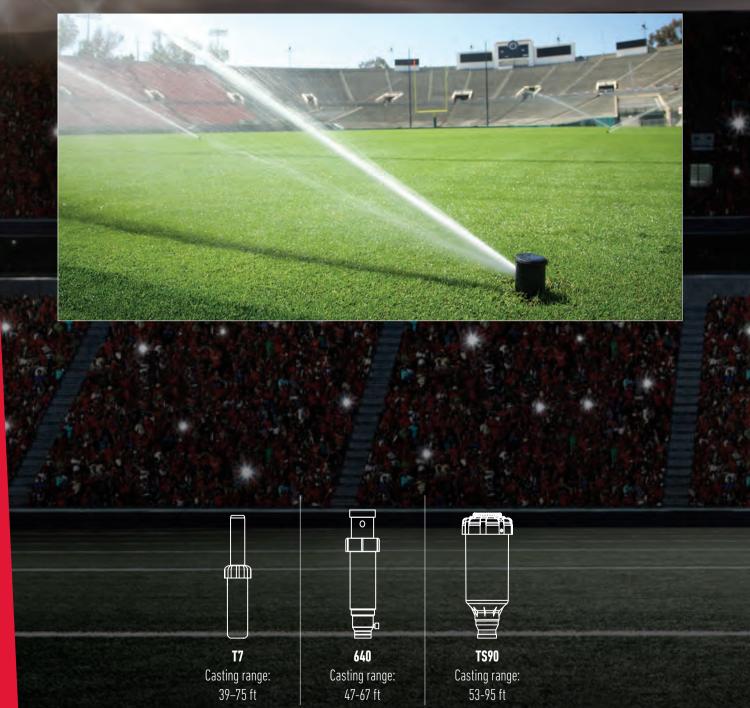




FOOTBALL FIELDS

Game-Changing Irrigation for Every Gridiron

From professional stadiums to the local high school field Toro's state-of-the-art irrigation products enhance performance and durability.





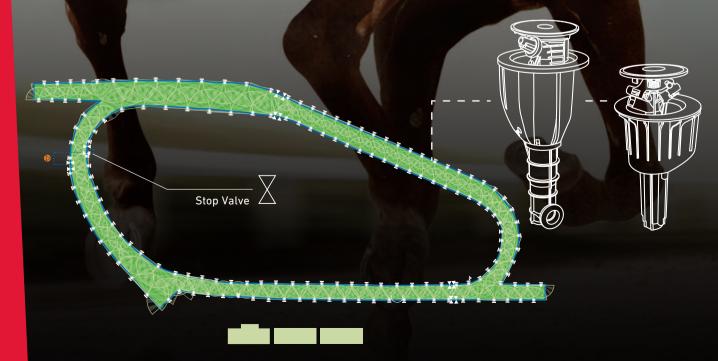
HORSE RACETRACKS

Backing Toro Products: A Surefire Bet

Dust-free with a lush green color – plus consistent, optimal track conditions.



Consistent, optimal track condition is of course essential in horse racing. Toro has the right solution for achieving this, regardless of whether the surface of the track is made from plastic granules, sand or turf. The combination of 3 different types of irrigation technology ensures the perfect system for all eventualities. There is therefore no need for any additional cumbersome mobile linear irrigation systems.



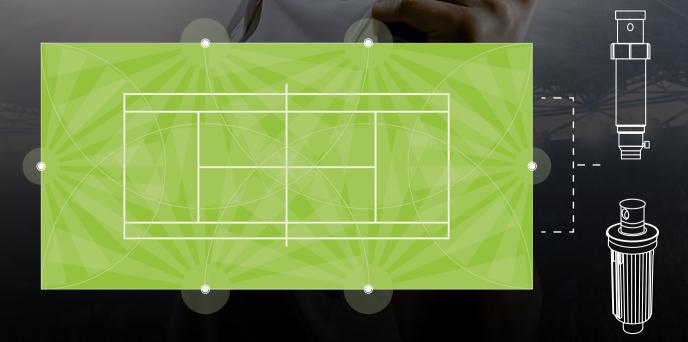
TENNIS COURTS

Our Mixed Doubles for Terrific Tennis

We can ensure that your tennis courts are in tip-top condition, ready for all the players' slices, topspin groundstrokes and drop-shots.



Hot sunny days and fast games may be perfect for the tennis season but an exciting match can quickly turn into a dusty affair if the court isn't irrigated properly. Only the regular addition of moisture to the red stone surface of clay courts will ensure optimal playing conditions and extend the court's service life. Toro sprinklers are available both as swiftly rotating impact sprinklers and as ultra-quiet turbine sprinklers. Once installed, Toro irrigation systems will work their magic for many years without any issues whatsoever.



WE KNOW TURF. AND WE'RE HERE FOR YOU.

From advanced irrigation control, to satellites, valves, sprinklers, and sensors, you can count on us for a comprehensive irrigation system solution. But it doesn't stop there. We're also the only company that can provide a comprehensive irrigation and equipment management solution — which means we understand sports turf like no one else.





TS170 SERIES ROTORS

Minimum Water Turbulence. Maximize Piston Drive System.

TS170

The piston-driven Toro TS170 Series long radius rotor is the irrigation solution of choice for the cooling and washing down of large synthetic turf fields. Capable of achieving a throw of 177 feet, the TS170 Series Rotor can be installed along the outer perimeter of the playing surface, which helps preserve player safety and maintain field aesthetics.

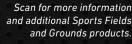
TS170V



Synthetic TurfCup™

Built to withstand the tough environment of the sports field, the Toro synthetic TurfCup has been designed and tested to ensure the highest levels of reliability and durability demanded by the market today.

MANALALA COLORIA



Manue



TS120 SERIES IMPACT SPRINKLERS

Preserve Everything That Makes Your Field Unique.

The TS120 Series Impact Sprinkler is capable of achieving long-range throws of up to 125 feet, making it well suited to meet the needs of both synthetic and natural turf sports fields. Available in Part Circle and Full Circle models, the TS120 can be configured with a factory-installed 4" TurfCup™ that helps to seamlessly blend the sprinkler into natural turf surfaces and preserve field aesthetics.



Scan for more information and additional TS120V

TS121V

Synthetic TurfCup[™]

Built to withstand the tough environment of the sports field, the Toro synthetic TurfCup has been designed and tested to ensure the highest levels of reliability and durability demanded by the market today.





TS80 SERIES GEAR DRIVEN ROTOR

Ultimate Flexibility to Meet the Precise Application Needs.

TS80 Rotor Series is a gear driven pop-up rotor that is the ideal choice for large turf areas like sports fields, public parks, large green areas and recreational spaces, equestrian applications and open parklands.

TS80VP-02-XX



VAC Valve-In-Head

Available with a built-in 24 VAC electric Valve-In-Head body. This allows ON/OFF/Auto control at the rotor and provides individual management of each rotor to ensure that they perform at their highest level of efficiency.



TS90 SERIES ROTORS

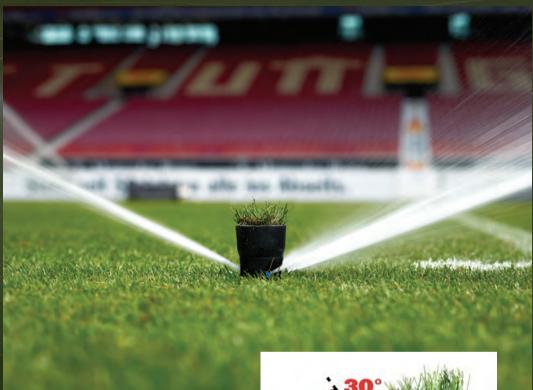
For Big Open Spaces. Unparalleled Performance.

Designed for large turf areas, its radius of 53' to 95' is ideal for parks, sports fields, synthetic turf athletic fields and horse arenas. In addition, Toro patented Trujectory[™] allows for the fine tuning of nozzle spray height from 7-30° to ensure wind resistance and head-to head spacing.

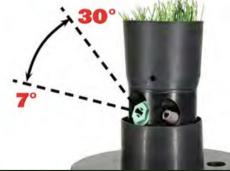


TurfCup[™] for Sports Fields

The optional TurfCup version seamlessly integrates into either natural grass or artificial turf sports fields, enhancing player safety, surface playability and field aesthetics.



Trujectory Adjustment from 7° to 30° Fine tunes nozzle spray height, helps provide true headto-head coverage, and compensates for windy conditions.





T7 SERIES ROTORS

Built Rugged to Handle All Conditions.

It has been designed and tested to ensure the high reliability demanded by the market today. Its extensive customer identified features including a full 5" pop-up height and large radius make it ideal for sports fields, football fields, golf courses, parks and other large turf applications.



Top Arc Indication

Arc setting indicator on top of the rotor allows for easy wet or dry adjustments from 45°-360°.



High Efficiency Nozzles Smart Arc[™] memory safely returns sprinkler to previously set arc if vandalized.



640 SERIES ROTORS

Over 50 Years of Reliability.

Considered the top-of-the line, proven veteran rotor for sports fields and commercial applications. Perfect for large turf areas, 640 Series sprinklers can be installed 1/2" below grade, lessening liability or the potential for player injury.

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Exposed Diameter

Once the 640 Series sprinkler goes in the ground, it stays there. With a stainless steel-encased nozzle assembly and gear drive design.





Valves, Sprays, & Swing Joints

Superior Field Aesthetics

Toro's irrigation product offerings for SF&G settings extend into high-efficiency spray nozzles; pressure-regulated 570Z spray heads; inline low friction loss valves; and high-strength PVC swing joints.



High Flow Valves

Low friction loss valves help keep sprinklers running at optimal performance.

- Toro 220 Brass Series and high-strength P220 Series valves are suitable for most any SF&G system configuration.
- Capable of operating pressures up to 220 psi and flows of up to 300 gpm.

220 and P220 valves feature top-of-bonnet flow control and are EZReg[®] pressure regulator compatible.



Precision[™] Series Nozzles & 570Z Spray Heads

570Z pop-up spray bodies feature a zero-flush wiper seal and easy-to-ratchet stem that keep performing through frequent top dressing applications.

- 570Z pop-up spray bodies are designed to remain level and perform through frequent top dressing applications.
- Patented Precision[™] Spray Nozzles use 1/3 less water while achieving the distance of throw of more conventional nozzles.



Stainless Steel Enclosures

Stainless steel enclosures ensure straightforward and convenient access to sprinklers, valves, and quick couplers. Custom lids for TS170 and TS120 models provide superior sprinkler stability and field aesthetics.

Ductile Iron

The ultimate in flexibility, Toro® Ductile Iron Swing Joints are made specifically to handle any synthetic turf irrigation design requirement. Ductile Iron Swing Joints offer unmatched strength, impact and corrosion resistance, providing surge pressure protection and extra long life.

T-P2 Series Sprinklers

The lightweight and versatile T-P2 Series Sprinklers are capable of achieving radii of up to 226 feet, making them well suited for a wide range of applications, including the cooling and washdown of synthetic turf, maintenance of equine facilities and racetracks, and dust suppression. The sprinkler's integrated handle provides portability where permanent installations are not necessary, and the adjustable rotation speed presents ultimate flexibility. The fully-enclosed, low maintenance piston drive keeps the T-P2 sprinkler operating across a wide range of operating pressures and conditions.

Toro RollcarT™



Toro RollcarT™

The Toro RollcarT offers a cost-effective, easyto-setup solution for irrigating sports fields, golf course roughs, and other large, open turf areas where no underground irrigation system is installed. The RollcarT is hydraulically-powered and travels the length of the field while applying consistent irrigation through the integrated long radius impact sprinkler. The RollcarT travels along its integrated retractable hose reel system, and automatically shuts off the flow of water once it has reached the end of the line.

T-P2 Series Sprinklers







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