

PRODUCT GUIDE



TriEst™
Ag Group, Inc.



www.TriEstAg.com

WHO WE ARE

TriEst Ag Group, a part of the TriCal Group family of companies, is committed to helping growers cultivate healthy, high-yielding crops by promoting optimal soil environments. Guided by a vision to support global food production, TriEst takes a prescription-based approach tailored to each grower's specific crop, region, challenges, and goals. Our comprehensive solutions include pre-plant soil fumigation, soil health programs, precision irrigation design and quality products, grafted plants, plant nutrition, liquid fertilizers, and agricultural equipment. Using data from soil tests, plant samples, and field conditions, TriEst delivers customized, science-based recommendations to enhance farm productivity and long-term success.

We get satisfaction from helping our grower customers overcome problems and achieve their goals. The results are in the field. Contact us today to see how TriEst can provide your farm with healthy fields, and healthy yields.



Corporate Office

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Phone: 844.878.5178

Greenville Branch

(Fumigation & Irrigation)
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Greenville, NC 27834
(800) 637-9466

Clinton Branch

(Irrigation)
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Clinton, NC 28328
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Tifton Branch

(Fumigation & Irrigation)
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Tifton, GA 31793
(800) 872-0644

Palmetto Branch

(Fumigation & Irrigation)
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Palmetto, FL 34221
Ag Services:
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Irrigation Services:
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Arcadia Branch

(Irrigation)
1529 N. Brevard Ave.
Arcadia, FL 34266
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LaBelle Branch

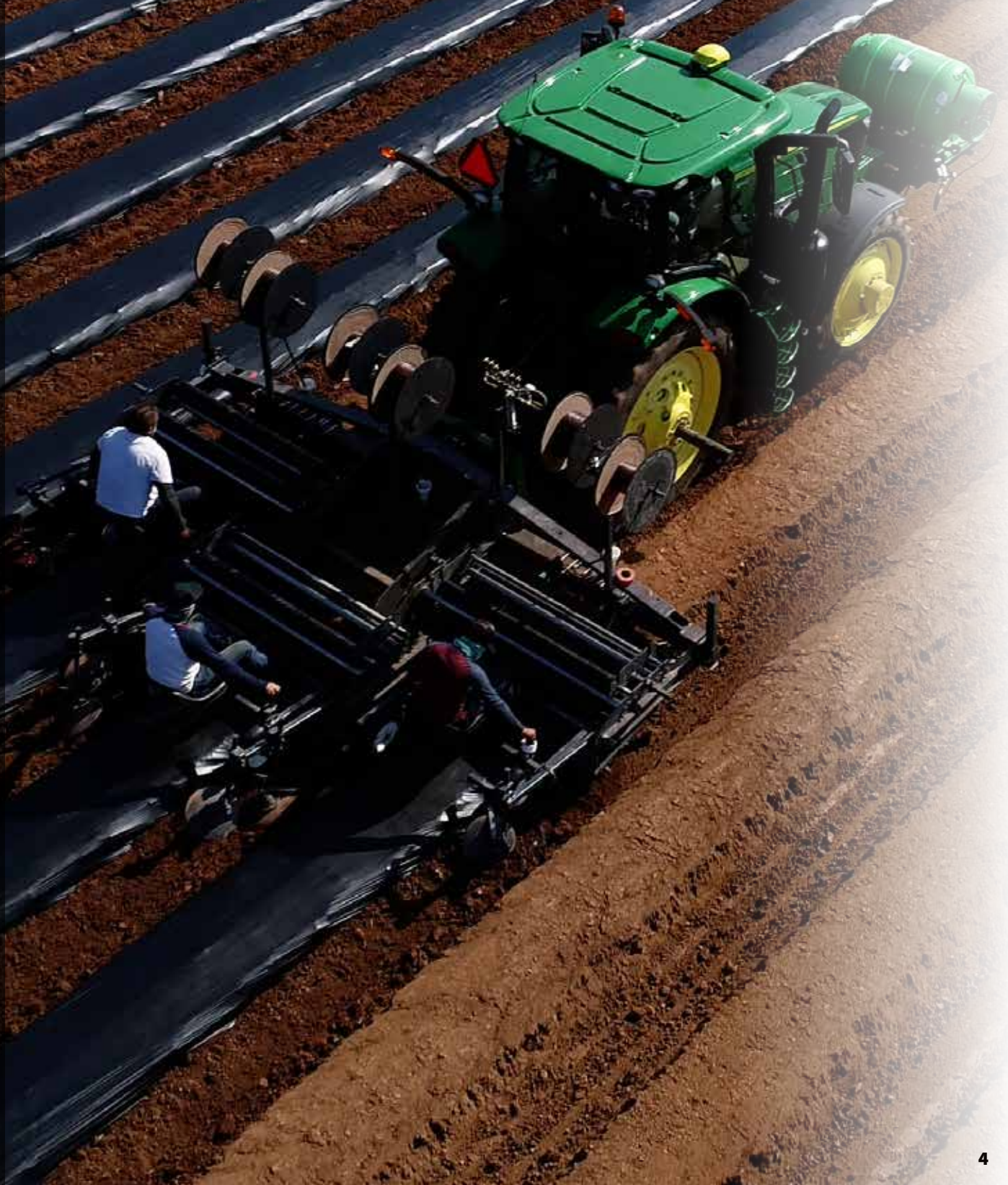
(Irrigation)
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LaBelle, FL 33935
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SOIL FUMIGATION



PROVEN BENEFITS FOR HEALTHIER CROPS

Pre-plant soil fumigation with chloropicrin is a powerful tool for growers looking to protect and maximize their crop investment from the ground up. Chloropicrin targets a broad spectrum of soil-borne pests and diseases, creating a cleaner, healthier environment for plant establishment and early growth. Chloropicrin is a bionutritional fumigant, that breaks down into elements that are naturally utilized by plants: carbon, chlorine, nitrogen and oxygen. It leaves no plant or soil residue behind.

Chloropicrin shifts the soil microbial community through pest suppression, which creates space and opportunity for native beneficial population to thrive. These surges in the microbial community promote early plant growth and establishment, leading to yield gains and harvest efficiency that go beyond just soil borne pest suppression. Used correctly, it can lead to stronger stands, better plant vigor, and higher yields. When applied by a trusted partner like TriEst Ag Group, you gain not just the product—but the full value of precision application and agronomic expertise.

Key benefits of chloropicrin-based soil fumigation include:

- **Superior Disease Management** – Targets and suppresses a wide range of soil-borne pathogens such as Verticillium, Fusarium, Rhizoctonia, and Pythium.
- **Weed Seed Reduction** – Helps reduce weed seed pressure when integrated with other fumigants, promoting cleaner fields and fewer in-season weed challenges.
- **Nematode Suppression** – Effectively reduces harmful nematode populations that damage root systems and limit plant growth when used with TELONE™ by Teleos Soil Fumigants.
- **Broad Spectrum Control** – Chloropicrin, when blended with TELONE™ by Teleos offers broad spectrum pest suppression. Our portfolio of blends ranging from 35% to 80% Chloropicrin offer the flexibility to meet both your agronomic objectives and prescriptive targeting of pests. Chloropicrin, TELONE™ by Teleos, and most blends are also offered in EC formulations, giving additional flexibility in application methods.
- **Enhanced Yield Potential** – By starting with a healthier root zone, crops grow more uniformly, with stronger early vigor and improved marketable yields.
- **Improved Soil Environment** – Promotes balance in soil microbial populations and supports long-term soil health.

Why Growers Trust TriEst Ag Group

We're your full-service partner in soil health and crop production. With decades of hands-on experience, TriEst provides the knowledge, equipment, and support needed to deliver results season after season.

Partnering with TriEst means you get:

- Customized Fumigation Programs tailored to your crop type, soil conditions, and regional requirements.
- Expert Technical Support from licensed applicators and agronomists who understand your operation.
- Precision Application Technology for consistent, safe, and effective treatment.
- Ongoing Compliance Guidance to meet local, state, and federal regulations.
- Integrated Crop Solutions including fertility planning, irrigation support, and full-season consulting.

TriEst Ag Group helps you unlock the full potential of your fields—starting with the soil.

SCAN TO LEARN MORE
ABOUT FUMIGATION



SCAN TO WATCH VIDEOS
ON FUMIGATION



Chloropicrin products are Federally Restricted Use Pesticides. TELONE™ and Teleos Ag Solutions™ are registered trademarks of Teleos Ag Solutions, Inc. TELONE™ by Teleos is a federally Restricted Use Pesticide. Always read and follow label directions.

PLASTIC MULCH

Plastic Mulch can offer growers increased soil temperatures for earlier planting, increased soil moisture retention, enhanced soil structure for planting, improved weed management, decreased soil erosion, and minimized leaching of chemicals and fertilizers.

MULCH FILMS

All available in:

- Widths: 24"–88"
- Lengths: minimum 2,000', standard 4,000'
- Colors: black, clear, white, black-over-white, red, blue, green, olive, and brown

Standard

Designed to control weeds and conserve water. LDPE/LLDPE- Mono-layer or co-extruded polyethylene. This is considered the most standard type of film found in the US.

- Available in Smooth, Taffeta, or Micro Tough embossing.
- Gauge range: 0.6–2.25mils

VIF Mulch (Virtually Impermeable Film)

This mulch provides an intermediate vapor barrier, which encourages a reduction in fumigation rates. This is typically a 5 layer film where the outer two layers are LDPE.

The innermost layer is nylon and it is surrounded by a tie layer on each side.

- Available in Micro Tough embossing
- Gauge range: 1.1–1.5mils

TIF Mulch (Totally Impermeable Film)

The highest vapor barrier film promotes a reduction in fumigant rates and increased fumigant retention, helping to lower emissions for improved effectiveness and work environments. TIF's structure is generally the same as VIF except the center layer which produces the barrier is made of EVOH instead of nylon.



- Embossing
- Gauge: 1.1, 1.25, & 1.5mils
- Width: 24"–88"

Standard sizes in stock. Specialty items available upon request. Contact for availability.

Metalized & Biodegradable Mulch products available.

ROW COVERS

Row covers provide essential frost and freeze protection for vegetables, foliage, nursery stock, citrus, strawberries, containerized ornamentals and turf. There's a row cover for just about any crop or weather condition – they're ideal tools for overwintering, wind break and overall yield enhancement.



ROW COVER DETAILS

Custom sizes - no additional charge
Custom covers to match your field.

Widths up to 51 foot & custom lengths (100 foot minimum)

Available weights

- 0.5 oz - 2 to 4 degree protection, transmits 95% light
- 1.0 oz - 4 to 6 degree protection, transmits 70% light
- 1.5 oz - 6 to 8 degree protection, transmits 50% light
- 2.0 oz - 8 degree protection, transmits 30% light

When ordering please have:

- Desired Width(s)
- Desired Length(s)
- Desired Protection

All orders are custom and take time. Please plan ahead and order early.

Contact us with any questions or help planning out your field needs.

WINFAB GROUND COVERS

WINFAB Woven Ground Cover is an excellent choice for nursery, greenhouse, landscape applications, and other areas where weed growth needs to be controlled without the use of chemicals.

WINFAB's woven ground cover is manufactured using high tenacity polypropylene yarns that are woven to form a dimensionally stable network, which allows the yarns to maintain their relative position. It resists ultraviolet deterioration, rotting, and biological degradation and is inert to commonly encountered soil chemicals.



NETAFIM GROWSPHERE MAX

GrowSphere™ MAX is an intuitive and simple-to-use controller. It is designed to speak the grower's language. The GrowSphere™ MAX regulates water and fertilizer delivery in a precision irrigation system. Managing local and remote devices such as pumps, main valves, field valves, and other hydraulic components, ensuring crops receive the optimal amount of water and nutrients at all times.

Key Features:

- Smart and intuitive interface – simplifies irrigation tasks.
- Advanced control – regulates water and fertilizer delivery.
- Flexible configurations – with or without screen, modular setup.
- Remote management – secure access via cloud integration.
- Real-time alerts – for system performance and maintenance.

- Scalability – supports up to 256 valves, 40 irrigation programs, and 40 dosing recipes

Benefits:

- Increases irrigation efficiency and consistency.
- Reduces water and fertilizer waste.
- Enhances crop yields with precise root-zone management.
- Supports all farm sizes and irrigation complexities.



NETAFIM GROWSPHERE ONE

GrowSphere™ ONE is a stand-alone monitoring unit that can be connected to a wide range of sensors and collect real-time data from the field, enabling optimal irrigation management.

Key Features:

- Sensor Compatibility: Works with soil moisture, plant, pressure, and flow sensors.
- Real-Time Monitoring: Continuously collects and stores field data.
- GrowSphere™ Integration: Visualizes data on the GrowSphere™ workspace.
- Power Options: Available with integrated, external, or no solar panel; includes rechargeable battery.
- Connectivity: Comes with a global SIM card for easy setup.
- Input Ports: 3 analog, 2 digital, 1 serial input.
- Rugged Design: Outdoor-ready (IP65), UV-protected, CE & FCC

Benefits:

- Enables precise irrigation management using real-time field data.
- Simplifies installation and setup with wireless capabilities.
- Supports data-driven decision-making for improved crop performance.
- Operates independently in remote locations with solar or battery power



Together, MAX and ONE provide a complete digital farming solution: control + monitoring for efficient, precise irrigation.

NETAFIM NETACAP

An advanced multi-depth soil moisture and temperature sensor that provides valuable insights to improve both irrigation planning and strategic decision-making.

Key Features:

- High accuracy and reliability
- Cost-efficient, high-level instrument
- Easy installation
- Ideal for all root zones with any soil type

- Additional ambient temperature measurement on top of the probe.



TORO EVOLUTION® AG

The EVOLUTION® AG, built on the award-winning Evolution platform, allows for modular expansion, fertilizer injection, pulse irrigation, propagation and misting schedules, along with the freedom to program valves to your specific needs: from 1 second to 24 hours.



Capabilities

- Program valve runtime from 1 second to 24 hours
- Operate up to 4 valves at one time
- Manage 2 Fertilizer Pumps
- Wireless Valve Remote Control with a 1,000 ft. range
- Precision Soil Sensor
- Wireless Weather Sensor
- Modular expansion: 4-16 stations with 4- and 12-station hot-swappable modules
- 3 program options

TORO EVOLUTION® AG

Model	Description
EVO-4AG	4-Valve Outdoor Controller
A-EMOD-4	4-Valve Expansion Module
A-EMOD-12	12-Valve Expansion Module

TORO TEMPUS-AG SYSTEM

The all new Tempus-AG system from Toro is a modular system that grows with your needs and allows for full control of your field in the palm of your hand. Wireless devices can connect to the cloud via 4G or Wi-Fi base station(s), or directly to your mobile device via Bluetooth.

Capabilities

- Easy hardware installation
- Installation range verification via cell phone app
- Automatic geotagging
- Expansion up to 25 devices on one base station
- Range (Radius) up to 2,600ft on all devices



Toro Tempus-AG System

Model	Description
Tempus-AG-CT	A waterproof battery-powered wireless irrigation controller capable of operating up to 6 latching solenoids.
TEMPUS-AG-WF	A Wi-Fi base station that connects all controllers and devices to the cloud.
TEMPUS-AG-4G	A solar powered (or wall connected) base station that connects all controllers and devices to the cloud.



SCAN FOR FULL DETAILS.

PRIVA WATER & CLIMATE MANAGEMENT

Priva, a global leader in innovative solutions for controlled environment agriculture (CEA) offers customers cutting-edge technology in climate and water management. Priva climate computers allow growers to manage systems and installations reliably and fully integrated, whether it's climate control, lighting, water management or energy management. Their advanced controls ensure the ideal growing conditions for crops.



The Experts' Choice



DAVIS INSTRUMENTS - ENVIROMONITOR GATEWAY

The EnviroMonitor Gateway is the hub of your smart farm monitoring system. Using LTE connectivity, it collects data from field sensors and nodes, then transmits it to the WeatherLink® Cloud for real-time access and decision-making. Designed for reliability and ease of use, it keeps your operation connected and informed.

Key Features & Benefits:

- Reliable LTE Connectivity – Provides long-range, dependable communication without the need for Wi-Fi.
- Central Data Hub – Gathers information from multiple sensors and nodes for a complete field overview
- Cloud Integration – Sends data directly to WeatherLink® for remote monitoring and analytics.
- Expandable System – Easily add more sensors and nodes as your operation grows.

- Durable Design – Built for harsh agricultural environments with weather-resistant housing.
- Improved Decision-Making – Access real-time field data to optimize irrigation, crop management, and inputs.



DAVIS INSTRUMENTS - ENVIROMONITOR NODE

The EnviroMonitor Node connects Davis and third-party sensors to the EnviroMonitor Gateway, creating a flexible and scalable monitoring system. It delivers critical field data to the cloud so growers can make timely, informed decisions.

Key Benefits & Features:

- Flexible Sensor Integration – Connects to Davis and a wide range of third-party sensors.
- Wireless Communication – Transmits data securely to the EnviroMonitor Gateway.
- Scalable System – Add multiple nodes across your operation as monitoring needs expand.
- Rugged, Weather-Resistant Build – Designed for reliable performance in harsh field conditions.
- Actionable Insights – Provides real-time data to improve irrigation, crop protection, and input efficiency.



DAVIS INSTRUMENTS - CABLED VANTAGE PRO2 PLUS INTEGRATED SENSOR SUITE

The Cabled Vantage Pro2 Plus Integrated Sensor Suite (ISS) delivers reliable, continuous weather data for precise on-site monitoring. With a cabled connection to your console or data logger, it ensures fast, interference-free transmission in any environment.

Key Benefits & Features:

- Comprehensive Weather Monitoring – Measures temperature, humidity, rainfall, wind speed/direction, solar radiation, and UV.
- Cabled Reliability – Provides uninterrupted data flow with no wireless interference.
- Durable Construction – Engineered for long-term outdoor performance in tough conditions.
- Accurate Measurements – Trusted Davis sensor technology for dependable decision-making.

- Expandable System – Compatible with Vantage Pro2 consoles and WeatherLink® data management tools.



Davis Instrument monitoring products can be used with a long list of Davis and third-party sensors and probes such as Sentek.

NETAFIM BACKFLUSH CONTROLLER

Features & Benefits

- Modular controller is expandable from 1 to 10 outputs.
- Can be used with automatic disc filters, automatic sand media filters and automatic screen filters.
- Flush cycle is triggered by time or pressure differential and each type of flush cycle is logged by the controller.
- Design flexibility with an embedded pressure differential (PD) gauge or an external PD gauge.
- Detection of continuous backflush cycles causes an alarm to sound.
- User-friendly LCD display and keyboard.
- Flexible settings for pre-dwell, dwell, and flush times allows programming to meet system requirements.

Netafim Backflush Controller

Outputs	Voltage	Model Number
2-10	24VAC	31NBCAC*
2-10	12VDCL	31NBCDC*

* Add number of outputs



ALEXTRONICS F2 BACKFLUSH CONTROLLER

Features & Benefits

- Two (2) stations plus master valve
- Input voltage 115, 230 VAC (optional) 12VDC
- Output selectable to operate 24VAC, 12VDC solenoids
- Pressure differential (PD) gauge included
- Fixed PD delay
- Resettable backwash count
- Resettable alarm
- Plastic outdoor box
- Periodic, manual, or pressure differential (PD) actuated



Alextronics Controllers also available:

- F3 AC/DC/DCL Controller
- FA AC/DC/DCL Controller
- F8 AC/DC/DCL Controller
- F12 AC/DC/DCL Controller

Alextronics Backflush Controller

Outputs	Voltage	Model Number
2	24VAC/12VDC	23AXF2ACDC-D
2	12VDCL	23AXF2DCL-P
3	24VAC/12VDC/12VDCL	23AXF3ACDC-D
4	24VAC/12VDC/12VDCL	23AXF4ACDC-D
8	24VAC/12VDC/12VDCL	23AXF8ACDC-D
12	24VAC/12VDC/12VDCL	23AXF12ACDC-D

NETAFIM DISC FILTERS

Features & Benefits

Plastic rings stack together creating a cylindrical filter element. During filtration, the rings are compressed together effectively filtering the water and protecting the system from clogging.

- Disc Filters- Sizes 3/4" - 6".
- GPM 1-600.
- Mesh sizes 40-200.
- Multiple disc ring design captures and holds debris.
- Greater holding capacity of the rings vs. screen filters means less frequent cleaning.
- Rings are easily removed for fast cleaning without the need for scrubbing.
- Color-coded disc rings for identification.



Mesh/Micron

Mesh	Micron	Disc Color
040	400	Blue
080	200	Yellow
120	130	Red
140	115	Black
200	55	Green

Specifications										
	3/4" Filter	1" Filter	1" Super Filter	1 1/2" Super Filter	2" Dual Lite Filter	2" Dual HP Filter	3" Twin Lite Filter	3" Angle Filter	4" Twin Filter	6" Twin Filter
Flow Range (GPM)	1-12	5-26	10-35	10-52	40-110	40-120	80- 220	80-220	160-450	200-600
Max Pressure (PSI)	140	140	140	140	115	174	115	140	140	140
Filtering Surface Area	25 Sq. In.	49 Sq. In.	78 Sq. In.	78 Sq. In.	147 Sq. In.	147 Sq. In.	294.5 Sq. In.	287 Sq. In.	574 Sq. In.	574 Sq. In.
Filtering Volume	5.8 Cu. In.	27 Cu. In.	36 Cu. In.	36 Cu. In.	75.7 Cu. In.	75 Cu. In.	174 Cu. In.	108 Cu. In.	216 Cu. In.	216 Cu. In.

NETAFIM ALPHADISC™ DISC FILTER

Smart, Scalable Filtration for Demanding Irrigation Systems

The Netafim AlphaDisc™ is a high-efficiency, depth filtration solution engineered to protect irrigation systems using surface water with high organic loads. Featuring a precision disc design and smart controller technology, AlphaDisc™ offers robust clogging protection, reduced maintenance, and a modular structure adaptable to changing system needs.

Key Features

- Precision Depth Filtration: Uniform filtration across all disc layers ensures reliable particle retention and minimal clogging.
- High Dirt-Holding Capacity: Extended filtration cycles reduce backflush frequency and conserve water.
- Low Head Loss: Efficient hydraulic design minimizes energy costs.
- Modular & Scalable: Configurations from 3" single to 8" trio XL accommodate diverse flow rates and system sizes.
- Smart Controller: IP65-rated controller enables real-time monitoring and operational insights.
- Compact Vertical Design: Saves space and simplifies system integration.
- Durable Build: Constructed from anti-corrosive materials for long-term field performance.

Applications

Ideal for primary or secondary filtration in systems irrigating with:

- Reservoirs
- Canals
- Rivers
- Wastewater
- Surface water with high biological or organic content



NETAFIM ALPHAPOLLO™ DISC FILTER

The ultimate irrigation system protection thanks to a combination of precise depth filtration, high dirt-holding capacity and a unique easy-to-scale modular design that covers a wide range of flow rates or water quality needs. Alphapollo prevents clogging and partial clogging, ensuring system longevity, and uniformly irrigated crops leading to better ROI, cost saving and peace of mind.

Key Features

- Very High Efficiency: Unique multi-depth disc design ensures thorough filtration and protection against clogging.
- High Dirt-Holding Capacity: Large filtration area with minimal head loss means fewer backflushes and system disruptions.
- Flexible & Scalable: Modular design grows with your system—adaptable to various flow rates and configurations.
- Cost-Effective: Low head loss and backflush flow reduce operational costs.
- Smart Monitoring: Optional Alphapollo controller with IP65-rated access to real-time filtration data
- Space-Saving: Vertical installation design allows for a smaller equipment footprint.
- Durable: Made from corrosion-resistant polymeric materials for long-lasting performance.

Applications

- Primary or secondary automatic filter for maximum protection in systems irrigating with surface water that contains algae and other organic matter such as reservoirs, canals, rivers and wastewater applications.



Water Quality Maximum Flow Rate (GPM)							
MESH SIZE	80	120	140	MESH SIZE	80	120	140
Alphapollo 3x10				Alphapollo 4x10			
Excellent	1440	1440	1440	Excellent	1920	1920	1920
Good	1296	1260	1224	Good	1728	1680	1632
Average	1152	1080	1008	Average	1536	1440	1344
Poor	1008	900	792	Poor	1344	1200	1056
Alphapollo 5x10				Alphapollo 6x10			
Excellent	2400	2400	2400	Excellent	2880*	2880*	2880*
Good	2160	2100	2040	Good	2592*	2520*	2448*
Average	1920	1800	1680	Average	2304	2160	2016
Poor	1680	1500	1320	Poor	2016	1800	1584
Alphapollo 7x10				Alphapollo 8x10			
Excellent	3360*	3360*	3360*	Excellent	3840*	3840*	3840*
Good	3024	2940*	2856*	Good	3456*	3360*	3264*
Average	2688	2520*	2352	Average	3072*	2880*	2688*
Poor	2352	2100	1848	Poor	2688*	2400	2112
Alphapollo 7x12				Alphapollo 8x12			
Excellent	3360*	3360*	3360*	Excellent	3840*	3840*	3840*
Good	3024	2940	2856	Good	3456*	3360*	3264
Average	2688	2520	2352	Average	3072	2880	2688
Poor	2352	2100	1848	Poor	2688	2400	2112
Alphapollo 9x12				Alphapollo 10x12			
Excellent	4320*	4320*	4320*	Excellent	4800*	4800*	4800*
Good	3888*	3780*	3672*	Good	4320*	4200*	4080*
Average	3456*	3240	3024	Average	3840*	3600*	3360*
Poor	3024	2700	2376	Poor	3360*	3000	2640

*Not recommended due to High Velocity in Manifolds

NETAFIM SCREENGUARD™ AUTOMATIC SCREEN FILTERS

Features & Benefits

- Screen filters sizes: 4", 6", 8" and 10"
- Screen Mesh Sizes: 80, 120, 150, & 200
- Min/Max Operating Pressure: 30/150 PSI
- 3-Layer, 316 stainless steel screen for long life and high performance
- Externally mounted backflush valve for easy serviceability
- Filter Housing: baked epoxy, carbon steel coated
- Control Voltage: DC Latching
- End Connections: Groove



Netafim ScreenGuard™ Automatic Screen Filters

Size	Model Number	Back Flush Flow Rate	Maximum Flow Rate
4"	76ASF4FL-XXX	132 GPM	440 GPM
6"	76ASF6FL-XXX	132 GPM	700 GPM
8"	76ASF8FL-XXX	132 GPM	1,320 GPM
10"	7 6 A S F - 10FL-XXX	396 GPM	2,000 GPM

Replace XXX with Filtration Mesh Selection (80, 120, 150, or 200)

NETAFIM SCREENGUARD™ METAL SCREEN FILTERS

Manual In Line and On Line screen filters offer high corrosion and UV protection with large filtration area which results in better filtration efficiency, excellent irrigation uniformity, and less maintenance.

Features & Benefits

- Available in Manual In Line, Manual On Line, Semi-Automatic In Line, and Semi-Automatic On Line.
- Max Operating Pressure: 145 psi
- Connection Type: Grooved
- Screen Mesh Sizes: 50, 80, 120, 150
- Sizes: 3", 4", 6", 8"
- Filter Housing: Coated with dual layers for better UV and Corrosion protection.



Netafim ScreenGuard™ Automatic Screen Filters

Size	Mesh	Model Number 71980 -	Max Flow Rate
3"	50	000442	230 GPM
	80	000436	
	120	000430	
	150	000424	
4"	50	000464	353 GPM
	80	000460	
	120	000456	
	150	000452	
6"	50	000582	943 GPM
	80	000578	
	120	000574	
	150	000570	
8"	50	000615	1560 GPM
	80	000610	
	120	000605	
	150	000600	

NETAFIM SCREENGUARD™ METAL SCREEN FILTERS (CIRCULATING)

Circulating screen filters offer improved particles separation, supported by large filtration area, in addition to the high corrosion and UV protection which result to better filtration efficiency, excellent irrigation uniformity and less maintenance.



Netafim ScreenGuard™ Automatic Screen Filters

Size	Mesh	Model Number 71980 -	Max Flow Rate
3"	80	000723	342 GPM
	120	000718	
	150	000712	
4"	80	000738	424 GPM
	120	000734	
	150	000730	
6"	80	000768	998 GPM
	120	000764	
	150	000760	
8"	80	000800	1596 GPM
	120	000795	
	150	000790	

Features & Benefits

- Primary filtration for use with well water and/or single use dripperline applications.
- Primary filtration for sprinkler applications.
- Primary filtration for landscaping applications.
- Secondary filtration for media filter systems and sand separators.
- In-field secondary filters for enhanced protection.
- Content of sand and other sediments.

NETAFIM SCAN KLEEN FILTERS

Specifications:

- Screen Mesh Sizes: 40, 80, 120, 150 and 200
- Screen: Stainless Steel
- Maximum Operating Pressure: 120 psi
- Required Minimum Pressure for Flushing: 20 psi (if less than 20 psi, install a manual valve downstream of the filter)
- Flushing Flow Rate: 50 GPM at 30 psi
- End Connections: Flanged

Rated for well water with small amounts of sand or reservoir water with small amounts of algae.

Flow Rate and Screen Area		
Size	Max Flow Rate (GPM)	Screen Area (Sq. In.)
3" Angle	250	194
4" Angle	300	194
4" Twin	500	388
6" Twin	600	388



AMIAD AUTOMATIC SCREEN FILTER- MINI SIGMA SERIES

The Amiad Mini Sigma Series is a small and lightweight yet durable filter; quick and easy to install, simple to operate, and requires minimal maintenance. The Mini Sigma filter was developed to handle low pressure operation, with a capacity of up to 352 gpm and with filtration degrees from 80-500 micron. Inlet/outlet connections are available in 2", 3", and 4" diameter. Filters include a 1.5" flush valve.



Features & Benefits

- Amiad's unique suction-scanner cleaning technology
- Modular design with various installation configurations
- Polymeric filter - corrosion free
- Low water and energy consumption
- Compact design and small footprint
- Easy installation and low maintenance
- Amiad's innovative and user-friendly ADI-P electronic controller, operated by a mobile app for advanced monitoring capabilities

Scan the QR Code to learn more.



AMIAD MINI SIGMA SERIES FILTER

Size	Description	Micron
2	Mini Sigma for up to 110 gpm	80-500
3	Mini Sigma for up to 220 gpm	
4	Mini Sigma for up to 352 gpm	

AMIAD AUTOMATIC SCREEN FILTER- FILTOMAT M100 SERIES

The Amiad FILTOMAT M100 Series are mid-range automatic filters with a water-driven self-cleaning mechanism that doesn't require external power source to operate.

Features & Benefits

- Large filtration area with reliable operating mechanism and simple construction.
- Automatic flushing.
- No interruption of downstream flow during flushing
- Minimal volume of reject water.
- 25-1760 GPM



Amiad FiltoMat M100 Filters

Size	Description	Mesh
M100 750-1500 GPM		
2" 3" 3" 4"	Automatic Filter Automatic Filter CL Automatic Filter CL Automatic Filter	80-500
M100 4500 - 6800 GPM		
4" 6" 4" 6" 8" 10"	M100-4500 M100-4500 M100-6800 M100-6800 M100-6800 M100-6800	80-500

Scan the QR Code to learn more.



TORO FILTRATION YF400 SERIES SENTRY MANUAL CIRCULATING SCREEN FILTER

Features & Benefits

- Screen constructed of 316 stainless steel supported by a PVC cylinder.
- Flow directional plate allows the filter to match system flow rates for maximum efficiency.
- Featuring a large collection chamber for easy periodic flushing.
- Collection chamber flushing works manually or automated with an electric valve and timer.
- Connections: Victaulic, threaded socket, and flange
- Maximum pressure: 145 psi
- Maximum recommended working pressure: 116 psi



Manual Circulating Screen Filter

Model	Size	GPM
YF415	1.5"	13 - 44
YF420	2"	48 - 123
YF430	3"	53 - 172
YF440	4"	80 - 308
YF460	6"	136 - 925
YF480	8"	720 - 1320
YF410	10"	1189 - 2202

TORO SENTRY FILTER - SAND MEDIA FILTERS

Features & Benefits

- All single chamber media filters made with high-quality materials
- Featuring an innovative underdrain design that covers the entire inside diameter of the tank
- Reliable double chamber backflush valve delivers lowest pressure loss through the valve both in filtration and backflush mode, allowing for system flushing at lower pressures
- All Toro Sentry filters include a 12 volt DC latching solenoid and control panel
- **Filter Manifold Sizes:** 15"-48"
- **Screen Sizes Typically:** 200 mesh



TORO-YAMIT SINGLE CHAMBER MEDIA FILTER

Model No.	GPM	Tank Size
YF605	15-22	12"
YF610	23-39	16"
YF620	35-59	20"
YF635	59-88	24"
YF640	88-132	30"
YF650	140-193	36"
YF660L	242-348	48"



NETAFIM SANDSTORM™ SINGLE CHAMBER METAL MEDIA FILTERS

Features & Benefits

- Single chamber filter allows for efficient filtration and backflush uniformity.
- Large top and side access ports make loading media and conducting maintenance easier.
- Two-layer coating (phenolic and epoxy) for industry-leading high corrosion and UV protection – for both the tanks and the manifolds.
- Injection molded PVC under-drain system with mushroom rooms and slots provides cleaning across the entire sand media bed.
- Modular manifolds for simple and flexible assembly and expansion.
- Wide range of tank diameters and configurations to address all application needs.
- Maximum protection and reliability in harsh conditions.

DOUBLE CHAMBER STEEL MEDIA FILTER

# Filters/Size	Flow Range	Model Number
2-16"	42-80	72MFDBS1602
2-20"	70-130	72MFDBS2002
2-24"	105-200	72MFDBS2402
2-30"	155-290	72MFDBS3002
2-36"	220-415	72MFDBS3602
2-48"	400-750	72MFDBS4802



48" Tank



30" - 36" Tank

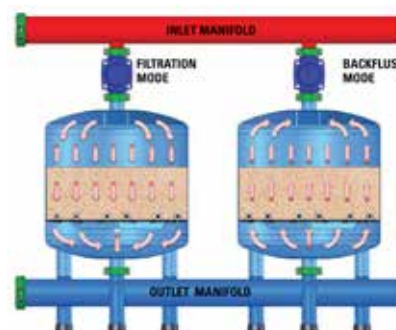
NETAFIM SANDSTORM™ DOUBLE CHAMBER METAL MEDIA FILTERS

Features & Benefits

- Two-layer coating (phenolic and epoxy) for industry-leading high corrosion and UV protection – for both the tanks and the manifolds.
- Modular manifolds for simple and flexible assembly and expansion.
- Wide range of tank diameters and configurations to address all application needs.
- Maximum protection and reliability in harsh conditions.
- Double-chambered filter allows for efficient filtration and backflush uniformity.
- Multiple mushrooms provide four times more open flow area ensuring uniform water collection and backflush.
- Each mushroom produces equal pressure during backflushing cleaning the entire sand media bed.

SANDSTORM™ DOUBLE CHAMBER METAL MEDIA FILTERS

# Filters/Size	Flow Range	Model Number
2-16"	22-52	2SMFDBS1602AAC
2-20"	78-132	2SMFDBS2002AAC
3-20"	117-198	2SMFDBS2003AAC
2-24"	114-192	2SMFDBS2402AAC
3-24"	171-288	2SMFDBS2403AAC



FRESNO SAND MEDIA FILTER- FLOW GUARD FILTER

Features & Benefits

- Effectively removes captured organic and inorganic contaminants from the media bed through backwashing with a stainless steel underdrain.
- Has the ability to filter a wide variety of contaminant to very low levels making it ideal for drip and micro irrigation.
- **Filter Manifold Sizes:** 15"-48"
- **Screen Sizes Typically:** 200 mesh



Fresno Stainless Steel Sand Media Filter

Model No.	GPM	Model No.	GPM	Model No.	GPM
215	45-60	336	420-525	445T	760-1110
218	60-90	245	380-555	545T	950-1390
224	110-160	345	570-835	645T	1140-1665
324	175-240	445	760-1110	448T	850-1250
230	170-245	248	425-625	548T	1060-1565
330	250-370	348	640-940	648T	1275-1875
236	240-350	448	850-1250		

NETAFIM HYDROCYCLONE SAND SEPARATORS

Features & Benefits

- Maximum Protection- Cone shaped separator that accelerates the velocity of the water increasing centrifugal forces and maximizing separation
- Industry Leading - UV and corrosion protection thanks to two layers coating
- Easy Operation - No moving parts or screens
- No Clogging - No head loss build-up or clogging during separation
- Specially Designed - Rubber protection to protect against erosion
- Flushing Frequency Reduction - Large holding capacity of sedimentation tank reduces flushing frequency
- Maximum Anti-corrosion - Protection with durable long-lasting coating materials
- Variety of End Connection - Wide range of end connection and sedimentation tanks capacity

Applications

- For separation of sand and other solid matter from water
- Protection of valves and irrigation systems from damage/abrasion caused by sand and other solid

matter

- Pre-filtering of water with high loads of sand
- For irrigation systems irrigating with well water

Specifications

- Maximum Recommended Working Pressure: 145 psi
- Recommended Head-loss for Effective Operation: 3 – 7 psi
- Water Inlet is Horizontal
- Water Outlet is Vertical in the upward direction
- Hydrocyclone End Connections:
Victaulic grooved or Flanged
 - 2" – 4" are Victaulic grooved
 - 6" & 8" are ANSI Flanged
- Sedimentation Tank Connections:
Victaulic grooved or Flanged
 - 2" & 3" are Victaulic grooved
 - 4" – 8" are ANSI Flanged
- Protective Coating: Polyester Applied Electrostatically and Oven Cured on a Zinc-Phosphate Layer



TORO SENTRY FILTRATION SERIES F700 HYDROCYCLONE SEPARATORS

Features & Benefits

- Tapered shape of the body maintains high velocity of the water and particles during the separation process forcing the particles to the bottom of the hydrocyclone.
- Underdrain – The shape changes the direction of the particles causing them to settle in the chamber, while the valve on the lower chamber allows for easy periodic flushing of the accumulated particles.
- Rubber cone increases the efficiency of the separator by extending the shape of the hydrocyclone down into the lower chamber, and provides protection to the lower neck of the hydrocyclone.
- Multiple Unit Manifolding - The tapered shape of the hydrocyclone allows for close spacing on a manifold, ideal for applications where a number of smaller units are required.
- Maximum recommended working pressure: 10 bars (145 psi).



TORO - YAMIT FILTRATION SERIES F700

Size	Flow Range GPM	Model Number
3"	10.6 - 17.2	F710
4"	15.4 – 26.4	F720
6"	28.6 – 44	F730
8"	48.4 – 83.6	F740
8"	88 – 154	F750VLF
8"	127.6 – 198	F750
12"	198 – 321	F755
16"	264 – 409	F760
20"	409 – 682	F770
24"	638 – 990	F775
30"	880 - 1452	F780

FRESNO SAND SEPARATORS - 1600 SERIES

Features & Benefits

- Hot dip galvanized inside and out for maximum protection.
- Low pressure loss.
- 98% efficiency on 200 mesh (74 microns) and larger.
- Modular design.
- Domed tank end for maximum strength.
- Hydro cyclone action removes high mass sediment.
- Variable flow (gpm) capacity with manifold and valving.
- Automatic purging of sediment tank available.



Fresno Sand Separator

Units	Flow Range GPM	Model Number
1	70-200	3103
2	140-400	3204
3	210-600	3306
4	280-800	3406
1	200-400	4104
2	400-800	4206
3	600-1200	4308
4	800-1600	4408

Filter trailers or the smaller skids are a great mobile options for those who do field rotations as they allow growers to filter multiple sites with just one filter system. The mobile pump and filter styles below are an excellent choice for those who have smaller acreages or growers just getting started. We have links for the filter trailers and skids below.

FILTER SKIDS

Filter Skid Sizes: 80GPM or 120GPM

Includes:

- 1 - 8' x 4' Rackable Plastic Pallet
- 1 - 2-inch Self-Priming Pump Mounted to 5HP Honda for Engine
- 1 - 3" Inline Mini Sigma Filter
- 1 - 1" Air Relief Valve
- 2 - 3" Brass Gate Valve - Full Port or
- 1 - 4" Brass Gate Valve - Full Port on 120GPM
- 1 - 3" PVC Floating Suction Assembly
- 1 - Remco diaphragm pump for fertilizer injection



120GPM FILTER TRAILER

Trailer Includes:

- 1 - Remco diaphragm fertilizer pump

- 1 - 5 x 8 Trailer with wooden deck with 3500lb axle
- 1 - 3-inch Self-Priming Pump Mounted to 8HP Honda for Engine
- 1 - 3" Water Meter, 10 gallon/pulse
- 1 - 1.5" pressure relief valve
- 1 - 3" pressure sustaining valve
- 1 - 3" Chemigation valve with port & air vent
- 1 - 2" x 2 LP Disc-Kleen filters
- 1 - 2 Station back-wash controller
- 1 - 3" Floating Suction PVC Assembly



240GPM FILTER TRAILER

Trailer Includes:

- 1 - Remco diaphragm pump for fertilizer injection

- 1 - 6 x 10 Trailer with wooden deck with 3500lb axle
- 1 - 2-Inch Berkeley Pump, powered by 18HP gas engine and electric start
- 1 - 3" Water Meter, WST 10 gallon/pulse
- 1 - 2" Dorot pressure sustaining valve
- 1 - 3" Dorot pressure sustaining valve
- 1 - 4" Chemigation valve with port & air vent
- 1 - 2" x 4 Disc-Kleen, 120 Mesh, 12VDCL
- 1 - Netafim 12VDCL 2 Station back-wash controller
- 1 - 4" Floating Suction Assembly



NETAFIM FERTILIZER METER

Features & Benefits

- Both meters are light-weight and deliver a high level of accuracy, $\pm 2\%$.
- Only one moving part, the impeller, is in contact with the liquid for minimum wear and the utmost reliability.
- Magnetically driven sealed register is guaranteed not to accumulate moisture or fog.
- Dry contact electrical output driven by a magnetic coupling that activates a reed switch creating a pulsed output for communicating with control and

monitoring equipment.

- Corrosion resistant plastic components.
- PVC body is an angle type multi-jet meter. The multi-jet design assures an equally distributed load on the impeller minimizing wear and maintaining accuracy.
- No straight pipe installation requirements.

Specifications - Plastic

- Size: 3/4"
- Maximum Working Pressure: 72.5 psi
- Maximum Liquid Temperature: 122°F
- Body Material: Polypropylene
- Connections: Threaded
- Pulse Output: 0.1 or 1.0



3/4" Plastic

Specifications - PVC

- Size: 1"
- Maximum Working Pressure: 145 psi
- Maximum Liquid Temperature: 122°F
- Body Material: PVC
- Connections: Threaded
- Pulse Output: 1.0



1" PVC

Reed Switch Registers						
Meter Size	Register Totalizer	Volume Unit	Pulse Output (GALS/PULSE)	Pointer Resolution		
				Pointer 1	Pointer 2	Pointer 3
3/4"	Gallon	Gallon X 10	0.1	x 0.01 Gallon	x 0.1 Gallon	x 1.0 Gallon
3/4"	Gallon	Gallon X 10	1.0	x 0.01 Gallon	x 0.1 Gallon	x 1.0 Gallon
1"	Gallon	Gallon X 100	1.0	x 0.1 Gallon	x 1.0 Gallon	x 10 Gallon

NETAFIM WATER METERS- WST & WT SERIES

WST and WT Water Meters use a double magnetic transmission to drive the register and this unique design enables the meter to handle high loads of sand since only the impeller is in contact with the water. Transmission gears are located in a sealed, dry compartment which has no contact with the water. The impeller, located in the center of the flow, allows for very accurate measurements over a wide range of flows. Built-in straightening vanes in the WST meters reduce the length of straight pipe required before and after the meter.



WST

Specifications:

- 'WST' Sizes: 3", 4", 6" and 8"
- 'WT' Sizes: 10" and 12"
- Maximum Working Pressure: 230 psi
- Maximum Liquid Temperature: 140°F
- Body Material: Cast Iron with Polyester Coating
- Connections: Flange
- Register Options: Reed Switch, Photo Diode or ER Digital
- 'WST' Straight Pipe Installation Requirement: 5 D* upstream and 2 x D downstream
- 'WT' Straight Pipe Installation Requirement: 10 D upstream and 5 x D downstream.

*D = meter size

Performance Data			
Meter Size	Lowest Flow Rate +/- 2% Accuracy	Nominal Flow Rate +/- 2% Accuracy	Maximum Flow Rate +/- 2% Accuracy
3" 'WST'	4 GPM	528 GPM	660 GPM
4" 'WST'	6 GPM	1,013 GPM	1,266 GPM
6" 'WST'	15 GPM	1,145 GPM	1,431 GPM
8" 'WST'	38 GPM	1,980 GPM	2,475 GPM
10" 'WT'	44 GPM	3,300 GPM	4,125 GPM
12" 'WT'	51 GPM	4,400 GPM	5,500 GPM

NETAFIM WATER METERS- IRT SERIES

IRT Water Meters are ideal for moderate to dirty water conditions. The specially designed paddle wheel measuring device provides a free water passage resulting in low head loss and the ability to accurately measure water with high levels of impurities or debris. Accuracy is achieved over a wide range of flows.

Specifications:

- Sizes: 3", 4", 6", 8" and 10"
- Maximum Working Pressure: 230 psi
- Maximum Liquid Temperature: 140°F
- Body Material: Cast Iron with Polyester Coating
- Connections: Flange
- Register Options: Reed Switch or MPE Digital
- Straight Pipe Installation Requirement: 10 x D* upstream and 5 x D downstream



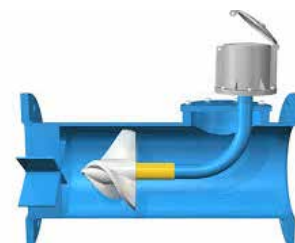
Performance Data			
Meter Size	Lowest Flow Rate +/- 2% Accuracy	Nominal Flow Rate +/- 2% Accuracy	Max Flow Rate +/- 2% Accuracy
3"	45 GPM	400 GPM	500 GPM
4"	50 GPM	500 GPM	688 GPM
6"	65 GPM	1,100 GPM	1,375 GPM
8"	130 GPM	1,980 GPM	2,475 GPM
10"	300 GPM	3,300 GPM	4,125 GPM

McCrometer Water Meters- ML 100 & MF 100

Features & Benefits

- The McCrometer McPropeller flowmeter's self-cleaning design uses a flexible drive shaft running within a curved, stainless steel "ell" that makes it easier to shed debris.
- The positioning of the impeller directly in the flow stream assures full-flow measurement and greater accuracy.
- The McCrometer Propeller flowmeter comes with a standard instantaneous flow-rate indicator and straight-reading totalizer. An optional electronic FlowCom register is also available.

- McCrometer's McPropeller flowmeters install easily and require little maintenance. All their components are easily serviced in the field.



MF 100 Performance Data								
Meter & Nominal Pipe Size (Inches)	2	2 1/2	3	4	6	8	10	12
Maximum Flow (GPM)	250	250	250	600	1200	1500	1800	2500
Minimum Flow (GPM)	40	40	40	50	90	100	125	150
Pressure Rating	150 psi							
ML 100 Performance Data								
Maximum Flow (GPM)					1200	1500	1800	2500
Minimum Flow (GPM)					90	100	125	150
Pressure Rating	75 psi							

MCCROMETER WATER METERS- M0300 BOLT-ON-SADDLE

Features & Benefits

- Long-lasting stainless steel ball bearings.
- Epoxy-coated carbon steel body.
- Straightening vanes for optimum flow profiles. (Option)
- Corrosion-resistant impeller made of durable polymer material, factory calibrated to retain accuracy.
- Magnetic coupling system isolates register and drive system from flow and allows unrestricted impeller



- movement.
- Self-cleaning design that prevents the build-up of solids.

M0300 Performance Data							
Meter & Nominal Pipe Size (Inches)	4	6	8	10	12	14	16
Maximum Flow (GPM)	600	1200	1500	1800	2500	3000	4000
Minimum Flow (GPM)	50	90	100	125	150	250	275
Pressure Rating	150 psi						

NETAFIM SERIES 75 NYLON CONTROL VALVES

Netafim's Series 75 Nylon Control Valves offer a high flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body. It features the 2950M - a multi-functional pilot with wide pressure ranges.



*Optional parts for special chemical resistance
**Wide selection of pressure ranges

Specifications & Materials

- Recommended Operating Pressure (psi): 9 to 175 maximum
- Maximum Water Temperature: 140° F
- Optional Functions: Manual, Electric, Pressure Reducing, Pressure Sustaining or Remote Control and more functions.
- Body and bonnet: Reinforced Nylon (*Optional Polypropylene)
- **Diaphragm: Natural Rubber (*Optional ALD, EPDM)
- Spring: SST 302 (*Optional SST 316)

Series 75 Valve Specifications		
Size	Maximum Recommended Flow Rate (GPM)	Operating Pressure Range (psi)
3/4"	26	13-114
1"	44	13-114
1 1/2"	110	10-145
2"	176	10-145
323	396	10-145
3" SuperGal	440	6-145
343	812	4-175
4"	900	4-175
646	960	4-175

NETAFIM SERIES 80 NYLON CONTROL VALVE

Series 80 Nylon Control Valves have no moving parts and high resistance to corrosive water. The built-in 2-way solenoid has a low power requirement.

Specifications

- Available Sizes: 3/4", 1", 1 1/2", and 2"
- Maximum Working Pressure: 150 psi
- Maximum Water Temperature: 140° F
- Connections: Female Threaded NPT
- Electrical Specifications:
 - » Voltage - Standard 24 VAC, 60 Hz
 - » Inrush Current - .22A
 - » Holding Current - .095A

Materials

- Body and Bonnet: Glass Reinforced Nylon
- Spring: Steel (AISI 302)
- Nuts, Bolts, Washers: Stainless Steel (304)



Series 80 Control Valves - 2 Way

Size	Flow Rate GPM
3/4"	2-26
1"	2-44
1 1/2"	20-140
2"	20 -180

NETAFIM SERIES 80 QR VALVE - QUICK PRESSURE RELIEF VALVE

Features & Benefits

- Pilot-operated valve eliminates sticking, adds the reliability of opening and closing, and offers more flexibility and adjustment.
- Fast opening and slow, regulated closure prevents shattering and secondary surges Leak-proof design ensures zero-leakage in high pressure applications Extreme opening and closing accuracy at the same pressure setting Constructed from rugged, corrosion-proof composite materials.
- Valve is preset at 70 psi Compact lightweight design for easy installation Easy adjustment with a wrench and applying small torque

Specifications

- For surge control at pump and or filter installations in Agricultural or Landscape application
- Size: 2" and 3"
- Operating Pressure: 15-145 psi
- Flow Ranges: 50-885 (GPM)
- Connection - FPT
- Configuration - Angled Valve



NETAFIM SERIES 90 NYLON & PVC VALVES

Specifications

- Recommended Operating Pressure (psi): Nylon - 15 minimum to 145 maximum
- PVC - 7 minimum to 145 maximum
- Maximum Water Temperature: 140° F Optional
- Optional Functions: Manual, Electric, Pressure Reducing, Pressure Sustaining or Remote Control and more functions

Materials

- Nylon Valve Body, Bonnet, Seat: Glass Reinforced Polyamide (GRP)
- PVC Valve Body: uPVC
- Spring: Stainless Steel (AISI 302)
- Nuts, Bolts, Washers: Zinc Coated Steel (BS 5216)
- Diaphragm: Natural Rubber
- Connections: Threaded - ANSI (NPT Female)



Nylon



PVC

Specifications

Size	Max. Flow (GPM)	Cv	Operating Pressure (psi)
1"	44	18	15-115
1 1/2"	110	66	22-145
2"	176	83	22-145
323	264	93	22-145
3"	400	175	9-115
4"	700	250	9-115
6"	1,540	554	7-145

NETAFIM SERIES 100 IRON VALVES

Iron Valves are available in a wide range of sizes and flow rates to cover most applications. The unique design allows a straight flow pattern with low friction loss. A direct sealing diaphragm, the valves only moving part, operates by pipeline or external pressure.



- Spring: Stainless Steel (AISI 302)
- Nuts, Bolts, Washers: Stainless Steel (BS 5216)
- Diaphragm: Natural Rubber

Specifications

- Optional Functions: Manual, Electric, Pressure Reducing, Pressure Sustaining, Hydraulic Remote Control, Quick Relief, Flow Control, Surge Anticipating, Float Control and more
- Maximum Water Temperature: 176° F
- Connections:
 - » Threaded ANSI NPT Female
 - » Grooved ANSI/AWWA C-606
 - » Flanged ANSI CL-125

Materials

- Body and Bonnet:
 - » Cast Iron (ASTM A 125 CLB)

Hydraulic Specifications

Size	Maximum Recommended Flow Rate (GPM)	Operating Pressure Range (psi)
1"	44	17-230
1.5"	110	17-230
2"	176	21-230
323	176	21-230
3"	396	17-230
4"	440	17-230
6"	1,540	21-230
868	1,540	21-230
8"	2,112	10-230
10"	4,268	10-230
12"	6,160	10-230

NETAFIM PRESSURE SUSTAINING NORMALLY OPEN VALVES

Features & Benefits

- Available in a wide range of sizes.
- Changes in flow do not affect the upstream pressure in the valve since the PSNO valve is always installed downstream from the filter.
- Quick reaction time of the PSNO valve. The valve goes into sustaining mode slightly before the filter starts flushing.
- Manual override on solenoid for easy adjustments.
- Max Working Pressure: Iron 230 psi



Netafim PSNO Valves

Size	Flow Range (GPM)
3"	40-400
4"	60-600
6"	130-1,300
3"	40-400
4"	60-600
6"	130-1,300
868	150-1,500
8"	200-2000
10"	350-3,500
12"	480-4,800

TORO 900 SERIES IRRIGATION CONTROL VALVE

The Toro 900 Series Irrigation Control Valves are engineered for high-efficiency performance in agricultural irrigation systems. Featuring a patent-pending valve seat design, these valves reduce pressure loss, lower opening pressures, and support higher flow rates—maximizing irrigation performance with minimal maintenance.

Features & Benefits

- Low Opening Pressure – Enables quicker valve activation.
- Minimal Pressure Loss – Improves overall system efficiency.
- High Flow Capacity – Handles up to 930 GPM depending on valve size.
- No Vibration or Distortion – Ensures consistent performance and reliability.

- Simplified Maintenance – 4-piece construction allows easy servicing.

Specifications

- Valve Sizes: 1.5" to 6"
- Cv Ratings: Up to 318 for maximum flow
- Pressure Range: 6–150 PSI operating range
- Connections: Threaded, Grooved, Flanged
- Pilot Pressure Ranges:
 - Orange: 4–28 PSI
 - Red: 7–80 PSI
 - Blue: 15–120 PSI



BRASS BALL VALVES

Features & Benefits

- Full port brass valve. Quick to operate with ability to see position of the valve.
- Sizing: 1/2" - 4"



PVC BALL VALVES

Features & Benefits

- Ball Valves are quick to operate and allow you to see the position of the valve - open or closed.
- Ends: Slip, threaded, or union
- Sizing: 1/2" - 4"



BUTTERFLY VALVES

Features & Benefits

- Wafer-style design for a seal against two-way pressure to prevent backflow in single-direction systems.
- Stainless disks available.
- Style: Lever Handle or Gear
- Sizing: 1/2" - 12"



BRASS GATE VALVES

Features & Benefits

- Brass Gate Valve with non-rising stem. Valve pressure rating 200 psi/14 bar non-shock cold working pressure.
- Sizing: 1/2" - 4"



NETAFIM PRESSURE REGULATORS

Features & Benefits

- Instant response to variations in pressure assuring that outlet pressure will remain constant regardless of inlet pressure.
- Non-corrosive, high quality plastic and brass bodies withstand commonly used fertilizers and chemicals.
- Sealed regulating unit with stainless steel spring and a screw are field replaceable and easy to maintain.
- Built-in operating indicator visually shows when proper outlet pressure is achieved (except 3/4" low flow).

Plastic
Brass
Brass

2" x 4
2" x 6
3" x 10

22 - 70 GPM
33-105.6 GPM
35 - 175 GPM



Plastic	3/4" low flow	.25 - 4.4 GPM
Plastic	3/4"	4.5 - 17.6 GPM
Plastic	1 1/2"	11 - 35 GPM

Netafim Pressure Regulators

psi	3/4" LF Model Numbers	3/4" Model Numbers	1 1/2" Model Numbers	2" X 4 Model Numbers	2" X 6 Model Numbers	3" X 10 Model Numbers
9	-	32PRV.75-09V2K	32PRV1.5-09V2K	32PRV2-409V2KPL	32PRV2-609V2K	32PRV3-1009V2K
12	-	32PRV.75-12V2K	32PRV1.5-12V2K	32PRV2-412V2KPL	32PRV2-612V2K	32PRV3-1012V2K
15	32PRV.75-LF15V2	32PRV.75-15V2K	32PRV1.5-15V2K	32PRV2-415V2KPL	32PRV2-615V2K	32PRV3-1015V2K
20	32PRV.75-LF20V2	32PRV.75-20V2K	32PRV1.5-20V2K	32PRV2-420V2KPL	32PRV2-620V2K	32PRV3-1020V2K
25	32PRV.75-LF25V2	32PRV.75-25V2K	32PRV1.5-25V2K	32PRV2-425V2KPL	32PRV2-625V2K	32PRV3-1025V2K
30	-	32PRV.75-30V2K	32PRV1.5-30V2K	32PRV2-430V2KPL	32PRV2-630V2K	32PRV3-1030V2K
35	32PRV.75-LF35V2	32PRV.75-35V2K	32PRV1.5-35V2K	32PRV2-435V2KPL	32PRV2-635V2K	32PRV3-1035V2K
43	32PRV.75-LF42V2	32PRV.75-43V2K	32PRV1.5-43V2K	32PRV2-443V2KPL	32PRV2-643V2K	32PRV3-1043V2K
50	-	32PRV.75-50V2K	32PRV1.5-50V2K	32PRV2-450V2KPL	32PRV2-650V2K	32PRV3-1050V2K
57	-	-	32PRV1.5-57V2K	32PRV2-457V2KPL	32PRV2-657V2K	32PRV3-1057V2K
65	-	32PRV.75-65V2K	32PRV1.5-65V2K	32PRV2-465V2KPL	32PRV2-665V2K	32PRV3-1065V2K

HUNTER AGRICULTURAL IRRIGATION PRESSURE REGULATORS

Features & Benefits

- Low hysteresis is important for accurate regulation when working with varying inlet pressures. Hysteresis is the difference in outlet pressure when the inlet pressure is increasing to a certain psi above the regulating pressure, and then decreasing to that same psi.
- Senninger regulators operating at maximum flow experience no more than 4 psi friction loss when fully open. Inlet pressure should be at least 5 psi higher than the outlet pressure to overcome the fully open, maximum flow friction loss.



PRESSURE REGULATORS

PRL	6 - 10 psi	.5 - 5 GPM
	15 - 40 psi	.1 - 8 GPM
PMR	6 - 10 psi	4 - 16 GPM
	15 - 60 psi	2 - 20 GPM
PR-HF	10 - 60 psi	10 - 32 GPM
PRXF	10 psi	20 - 80 GPM
	15 psi	20 - 85 GPM
	20 psi	20 - 90 GPM
	25 psi	20 - 95 GPM
	30 - 60 psi	20 - 100 GPM

Model #	Model #	Model#	Model#
PRL-6	PMR-MF-6	PR-HF-10	PRXF-10
PRL-10	PMR-MF-10	PR-HF-20	PRXF-15
PRL-12	PMR-MF-12	PR-HF-25	PRXF-20
PRL-15	PMR-MF-15	PR-HF-30	PRXF-25
PRL-20	PMR-MF-20	PR-HF-40	PRXF-30
PRL-25	PMR-MF-25	PR-HF-50	PRXF-35
PRL-30	PMR-MF-30		PRXF-40
PRL-35	PMR-MF-35		PRXF-50
PRL-40	PMR-MF-40		PRXF-60
	PMR-MF-50		
	PMR-MF-60		

NETAFIM GUARDIAN AIR VENTS

Features & Benefits

- Ensures vent closure as water fills the system, remains open when air pressure reaches the following:
5 psi for 3/4" and 1" Guardian
10 psi for 2" Guardian
8 psi for 3" Guardian
- Large capacity vents dampen water hammer preventing pipes and fittings from cracking or bursting.
- Made of corrosion-resistant reinforced UV protected composite materials - no metal parts to rust or corrode, no need for spare parts.
- Guardian Air Vent with Shrader Valve is ideal for measuring local line pressure.



Netafim Guardian Air Vents

Air Vent	Model #
3/4" Guardian	65ARIA075
3/4" Guardian w/ shrader valve	65ARIA075S
1" Guardian	65ARIA100
1" Guardian w/ shrader valve	65ARIA100S
2" Guardian	65ARIA2
3" Guardian	65ARIA3

NETAFIM AUTOMATIC CONTINUOUS ACTING AIR VENT

Features & Benefits

- Aerodynamic float design ensures vent closure as water fills the system, remains open when air pressure reaches 12 psi.
- Large capacity vents dampen water hammer preventing pipes and fittings from cracking or bursting.
- Unique rolling seal feature allows gradual opening, closing and self-cleaning.
- Made of corrosion-resistant UV protected nylon - no metal parts to rust or corrode, no need for spare parts.

- 3/4" and 1" Automatic Max Operating Pressure: 240 psi



Netafim Air Vents

Air Vent	Model #
3/4" Automatic	65ARIS075
3/4" Automatic Vacuum Guard	65ARIS075VM
1" Automatic	65ARIS1
1" Automatic Vacuum Guard	65ARIS1VM

NETAFIM PRO AIR VENT

Features & Benefits

- Float and seal assembly are enclosed in a one-piece, easily replaceable unit - independent of the air vent body.
- Sealing assembly, with its unique patented rolling seal feature which allows gradual opening, closing and self-cleaning, is contained in the one-piece float assembly.
- Threaded discharge outlet allows connection of additional piping for venting and drainage.

Specifications

- Working pressure range: 1 - 150 psi
- Maximum working temperature: 140° F
- Available size: 2" NPT female threaded

Netafim Pro Air Vents

Air Vent	Model #
2" Pro	65ARIB2PRO



NETAFIM DYNAMIC AIR VENT

Features & Benefits

- Rolling diaphragm principle allows air to be discharged in a controlled and gradual manner preventing slam and surges.
- Reacts very quickly to vacuum surges by intaking large amounts of air - three times more air than other vents.
- Air vent is normally closed when the line is not operating preventing debris and contaminants from entering the pipeline.
- Light-weight and small for easy installation with simple and reliable operation.
- Built-in outlet connection for surplus water drainage.
- Corrosion-resistant composite materials.

Available Size: 2" & 3" NPT Male Threaded
Max Operating Pressure 150 psi

Netafim Dynamic Air Vents

Air Vent	Model #
2" Dynamic	65ARIDY2
3" Dynamic	65ARIDY3



TORO AIR VENT AND VACUUM RELIEF VALVE

Features & Benefits

- Eliminates air pockets within a system zone
- Releases air from the drip line when the zone is turned on
- Allow air to freely enter the system when the zone is shut down
- Prevents vacuum conditions and stops debris or particles from entering the drip line via the drip emitters or drip line outlets
- Durable, weather resistant and non-corrosive material

ARV-BBK1 -1" Closes at: 5 psi

ARV-BBK1- 1" Max operating Pressure: 80 psi



TORO AIR VENT & VACUUM RELIEF VALVE

Features & Benefits

- Provides both instantaneous and continuous air relief
- Simple design ensures trouble free performance

Working PSI: 225

Available size: 2" NPT



NETAFIM STREAMLINE X SERIES

Features & Benefits

- Exterior Ribbed Surface: Prevents against potential dripline damage during installation and retrieval.
- Interior Ribbed Surface: Prevents against potential dripline damage during installation and retrieval.



Streamline 630

Wall Thickness:	5, 6, 8, & 10
GPH/Emitter Rates:	0.16, 0.24, 0.36
Common Spacings:	8", 12", 18", 24", 30"

Streamline 875

Wall Thickness:	ReGen™, 6, 8, & 10
GPH/Emitter Rates:	0.16, 0.24, 0.36
Common Spacings:	8", 12", 18", 24", 30"

NETAFIM TYPHOON PLUS™ SERIES

Features & Benefits

- Low filtration requirement of 120 mesh.
- Wide cross-section flow path for larger particles.
- Large filter inlets for secondary filtration.



Typhoon 630

Wall Thickness:	8, 10, 13, & 15 mil
GPH/Emitter Rates:	0.11, 0.16, 0.22, 0.36, 0.49
Common Spacings:	12", 14", 16", 18", 20", 24", 30", 36"

Typhoon 875

Wall Thickness:	8, 10, 12, 13, & 15 mil
GPH/Emitter Rates:	0.18, 0.25, 0.36, 0.58
Common Spacings:	12", 14", 16", 18", 20", 24", 30", 36"

NETAFIM DRIPNET PC™ SERIES

Features & Benefits

- Pressure compensating dripline
- Wide regulation pressure range from 6 to 36 psi.
- Injection molded drippers



Inside Diameter:	0.636", 0.875", or 0.990"
Wall Thickness:	13, 15, 18, & 25, mil
GPH/Emitter Rates:	0.16, 0.26, 0.32 & 0.42
Common Spacings:	8", 12", 18", 24", & 30"

TORO AQUA-TRAXX® AZUL™

Toro Aqua-Traxx® Azul™ drip tape offers an innovative emitter design with patented multi-stage filters that protect the labyrinth from debris and maximizes clog resistance and performance. Now you get the same great quality and performance you expect from Aqua-Traxx with even more clog resistance and less worry

Azul™

Tape Diameter:	5/8", 6/8", 7/8", & 1 - 3/8"
Wall Thickness:	5, 6, 8, 10, 12, 13, & 15 mil
GPH/Emitter Rates:	0.07, 0.08, 0.09, 0.10, 0.13, 0.15, 0.20, 0.27, 0.34
Common Spacings:	6"- 24"

Features & Benefits

- Available in nine emitter flow rates ranging from 0.07 gph Ultra Low Flow through 0.34 gph High Flow.
- Enhanced clog resistance with filtration requirements as low as 80 mesh - lowest for any drip tape.
- Greater filtration area with patented multi-stage filters.
- Optimized flow passages further resist clogging.
- Coefficient of variation (Cv) less than 3%.
- Emitter Barb Factor (Kd) = 0.



TORO FLOWCONTROL® SERIES

Toro FlowControl® is the only flow-regulating drip tape available, delivering more uniform output even in the most challenging terrain. The innovative emitter design regulates flow with changes in water pressure. More uniformity can lead to better yields even in longer runs or hilly terrain.

FlowControl™

Tape Diameter:	5/8", 7/8", & 1 - 3/8"
Wall Thickness:	6, 8, 10, 12, & 15 mil
GPH/Emitter Rates:	0.13, 0.20, 0.27
Common Spacings:	6"- 24"

Features & Benefits

- An extra-large Proportionally Balanced Cross-section flow-path design to help prevent clogging.
- FlowControl™ requires just 150-mesh filtration.
- Wide pressure operating range:
 - FlowControl™ 4-25 psi



T-TAPE DRIP TAPE BY RIVULIS IRRIGATION

T-Tape Drip Tape is the most trusted and recognized drip tape in the world and has the most extensive offering of product configurations that include numerous diameters, wall thicknesses, spacings, and flow rates.

Features & Benefits

- Turbulent flow path to resist plugging.
- Slit outlet reduces the ingestion of soil of system shut down.
- Dripper inlet filters
- Available in ultra low flow and low flow rate models.

Product Options

Tape Diameter:	5/8", 7/8", 1 1/8", 1 3/8"
Wall Thickness:	5, 6, 8, 10, 12, & 15 mil
Flow Rate:	• Ultra low to low - 0.15-0.27 gpm/100' • Medium - 0.34 - 0.50 gpm/100' • High - 0.67 - 1.34 gpm/100'
Common Spacings:	4", 6", 8", 12", 16"



TORO BLUELINE® PC SERIES

Features & Benefits

- More resistant to plugging.
- Self flushing diaphragm - patented new design flushes during operation and shutdown, further resisting clogging and providing longer life for your system.
- Anti-siphon feature reduces susceptibility to back siphoning.
- Blue Stripe® of Quality allows for easy of identification of emitters during installation and/or operation.
- Fully pressure compensating from 10 to 60 psi.
- Available in standard and custom emitter spacings.
- Low profile emitter reduces friction loss.

BlueLine® PC

Line Diameter:

Wall Thickness:

GPH/Emitter Rates:

Common Spacings:

0.55", 0.62", 0.71"

45 mil for 16mm and 18mm
48 mil for 20mm

0.26, 0.40, 0.53 & 1.06

12", 18", 24", 30", 36", 42", 48",
54", & 60"



TORO BLUELINE® CLASSIC SERIES

Features & Benefits

- Efficient Emitter Design - The unique "shark tooth" emitter flow path design allows uniform application of water and nutrients in demanding field applications, including long lengths of run or undulating terrain.
- Accurate Flow Rate Between 5 and 60 psi - A wide operating window means less waste and uniform application of fluids to all plants, even at system start up and shutdown.
- Low Profile Emitter Design - Reduced friction loss saves energy and helps ensure uniform application of fluid to all plants.

BlueLine® Classic

Line Diameter:

Wall Thickness: 4

GPH/Emitter Rates:

Common Spacings:

0.55", 0.62", 0.71"

5 mil for 16mm and 18mm
48 mil for 20mm

0.53 & 1.06

12", 18", 24", 30", 36", 42", 48",
54", & 60"



NETAFIM UNIRAM (PC)

Features & Benefits

- Anti-vacuum mechanism prevents suction of dirt into the dripline, providing the critical protection needed against dripper plugging.
- Wide Compensating range maintains a constant uniform flow - longer runs and steep terrains are irrigated with high uniformity.
- Exclusive Non-Leakage (CNL) Mechanism - (Optional) Prevents system drainage when pressure is turned off at the end of each irrigation cycle. Ensures uniform water distribution during pulse irrigation.
- Root intrusion barrier prevents roots from penetrating the dripper's mechanism.

Line Diameter:

Wall Thickness:

GPH/Emitter Rates:

Common Spacings:

0.54", 0.57", 0.62", 0.69", 0.82"

16, 17, 18, 20, & 820 mil

0.26, 0.42, 0.53, 0.61, 0.92, 1.0

18", 24", 30", 36", 42", 48", 60"



NETAFIM DRIPNET PC™

Features & Benefits

- Heavywall solution for irrigating crops with long runs and steep topographies.
- Large filtration area prevents penetration of dirt particles into the dripper.
- Chemical resistant, self-cleaning, self-flushing dripper diaphragm removes debris throughout the irrigation cycle.

Line Diameter:

Wall Thickness: 16, 17, 18, 20, 36 & 60 mil

GPH/Emitter Rates:

Common Spacings:

0.54", 0.57", 0.62", 0.69", 0.82"

0.26, 0.42, 0.53, 0.61, 0.79,
0.92, 1.00

18", 24", 30", 36", 42.25", 48"



NETAFIM ARIES™

Features & Benefits

- Available with a wide choice of dripper spacings, flow rates and wall thickness to tailor-make a system for your varied applications, soils and crops.
- Large dripper filter flushes out large particles for long-term use and efficiency.
- Injection molded dripper construction provides uniform flow.

Line Diameter:

0.54", 0.62", 0.69", 0.82"

Wall Thickness:

45, 48, & 60 mil

GPH/Emitter Rates:

0.26, 0.40, 0.50, 0.79, 1.0

Common Spacings:

18", 24", 30", 36", 42", 48", 60"
(Custom spacing available)



NETAFIM POLYETHYLENE TUBING

Netafim Polyethylene Tubing is made from the highest quality low density polyethylene resin available.

Features & Benefits

- Available in black or white color, standard coil lengths or large diameter reels to meet your specific needs.
- White tubing is opaque to prevent algae growth, withstand heat and harsh chemicals while producing cooler water temperatures.
- UV and acid resistance.
- Available with pre-punched holes at various spacings.

PE Tubing

Hose Diameter(MM): 10.2, 13.2, 14.5, 15.2, 15.8, 17.5, 18.3, 18.8, 20.8, 21.1, 26.9

Working Pressure (psi): 44-75



TORO MICRO-DISTRIBUTION TUBING

Features & Benefits

- Available in a wide range of coil lengths, diameters, wall thicknesses to accommodate required lengths of run, working pressures and terrain. Polyethylene or flexible PE options available.
- Perfect for use across a number of applications as it allows growers flexibility in emitter placement and easily fits on emission devices or barbed fittings.
- Can be used for submain to dripline/tape connections, as well as micro sprinkler, sprayer and emitter connections.

Toro Micro-Distribution Tubing

Tubing Diameter(Inches): 0.128, 0.176, 0.187, 0.188, 0.220, 0.225, 0.272, 0.275, 0.350, 0.375



BOWSMITH PREMIUM PLUS TUBING

Features & Benefits

- Bowsmith Premium Plus+ tubing is manufactured from the highest grades of polyethylene resins.
- Every reel undergoes a series of tests to ensure Bowsmith's high quality manufacturing standards are met.
- Available in a wide range of diameters, wall thickness and coil lengths to accommodate required lengths of run, working pressures and terrain.
- Pre-punched and marked custom spacing are available for easy Fan-Jet® microsprinkler or NonStop® emitter installations.



TORO BLUE STRIPE® ROUND HOSE

Blue Stripe Round Hose is manufactured from high quality linear low density polyethylene resins and is built for tough and dependable operation in the most demanding field applications. Blue Stripe Round Hose is also available in white, ideal for greenhouse and nursery drip irrigation applications.

Features & Benefits

- Available in a wide range of diameters, wall thicknesses and coil lengths to accommodate required lengths of run, working pressures and terrain.
- Round hose available in blue, white or purple stripes for easy irrigation zone identification.
- Also available in white tubing for nursery and extreme climate applications to assist with water temperature control.
- A minimum of 2% carbon black is present to prevent ultraviolet degradation.

BlueStripe® Round Hose

Hose Diameter(MM): 4, 10, 13, 14, 15, 16, 18, 20, 26, & 35

Working Pressure (psi): 46 - 80 psi, depending on wall thickness and diameter.



TORO BLUE STRIPE® OVAL HOSE

Toro Ag Blue Stripe® Oval Hose is made from high quality polyethylene resins. Small diameter models of Oval Hose may be used as lateral lines in permanent crop applications, while large diameter models may be used as submains and mainlines in row crop applications.

Features & Benefits

- Available in a wide range of diameters, wall thicknesses and coil lengths to accommodate required lengths of run, working pressures and terrain.
- Larger diameters available to provide a cost effective alternative to both rigid and flexible PVC pipelines
- A minimum of 2% carbon black is present to prevent ultraviolet degradation.

BlueStripe® Oval Hose

Hose Diameter(Inches): 1/2", 5/8", 3/4", 1", 1 -1/4", 1 -1/2", 2", 3", & 4"

Working Pressure (psi): 21 or 42



NETAFIM OVAL TUBE

Netafim Oval Tube is a durable and reliable round manifold which unrolls for easy installation and rolls up for relocation. Tubing is black in color with orange stripes. Available in 1.25", 1.5", 2", 2.5", 3" and 4".

Features & Benefits

- Retrievable row crop drip systems. Submain or water transfer lines (cost-effective alternative to PVC or layflat tubing).
- Rugged and field-tested for demanding applications
- Flat coil design for easier delivery, handling, and storage
- Quick installation and removal for reuse in other fields
- Secure, leak-proof connections with standard dripperline connectors
- Cost-effective substitute for rigid PVC pipe
- Compatible with Twist-Lock fittings for 630 and 875 Series thin wall dripperlines.
- All fittings require an 8 mm punch

Product Options

- Pressure ratings: 21, 29, and 42 psi depending on mode
- Flow rate vs. friction loss charts available for each size (1.25"–4")
- Coils available in lengths from 130' to 600', with weights ranging from 43 lbs to 70 lbs per coil



KURIYAMA VINYLFLOW® LAYFLAT

Features & Benefits

- Smooth tube provides friction loss.
- Hose lays straight with minimal elongation under pressure. Hose may be punched easily without tearing.
- Ultraviolet inhibitors reduces aging and weather checking.
- All rolls have PVC cores for easier dispensing. Hoses roll flat for easy storage.

VinylFlow® Layflat

Hose Diameter(inches): 1 1/2, 2, 3, 4, 6, 8, & 10

Working Pressure (psi): 35 - 80



PRO-FLAT LAYFLAT BY RIVULIS IRRIGATION

Pro-Flat Layflat is the only PVC Layflat that is designed specifically for drip irrigation systems. The thick walls and strong yarn structure help the product to hold connections and resist bursting. The tension in the yarn structure reduces the amount of rotation and elongation each time the system is pressurized.

Features & Benefits

- Premium resins for durability.
- Strong yarn structure
 - Minimizes rotation and expansion to keep the drip lines in place.
 - Holds connections and resists bursting.

Product Options

Diameters: 1.5" to 8"

Size (Inch)	Max. Op. Pressure	I.D. (Inch)	O.D. (Inch)	Wall (Inch)
1.5	90	1.5	1.7	0.059
2	80	2.1	2.2	0.060
3	70	3.1	3.2	0.067
4	70	4.1	4.2	0.075
6	50	6.1	6.3	0.083
8	45	8.1	8.3	0.090
Roll Length (all): 300 Feet				



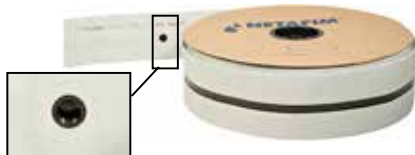
NETAFIM FLEXNET™

FlexNet™ is a high-performance, flexible, lightweight piping solution. It's offered in a wide range of diameters with integrally welded connectors which ensure a leak-proof connection

Features & Benefits

- FlexNet™ is made from durable, environmentally-friendly polypropylene material.
- It is easily laid out and can be recoiled multiple times each year.

- FlexNet™ can be used in surface or subsurface installation.
- FlexNet™ can be recycled at the end of its lifespan.
- Assembly is quick and easy with installed integral welded outlets (1/2" female threaded) which are located at predetermined spacings.
- Each welded outlet can accept a 1/2" male threaded tee or elbow start connector.



1/2" Female Threaded
Integral Welded Outlet

NETAFIM FLEXNET™ (SPECIFICATIONS)

Size	Standard Outlet Spacing	Nominal Diameter Inside	Nominal Diameter Outside	Nominal Wall Thickness
2"	30"	2.0"	2.09"	0.030"
3"	36"	3.1"	3.14"	0.030"
4"	40"	4.0"	4.10"	0.030"
6"	72"	6.4"	6.48"	0.030"
8"	80"	8.2"	8.29"	0.030"

FITTINGS

TLOC-400B06LS-BV	RLOC-CPT06LS
Drip Tape x Oval Hose Connector with Valve. 	5/8 Typhoon - Drip Tape x Drip Tape Coupling 
TLOC-CPT06LS	RLOC-CPT09LS
Drip Tape x Drip Tape Couplings. 	7/8 Typhoon - Drip Tape x Drip Tape Coupling 
TLOC-250B06LS	RLOC-400B06LS
Drip Tape x Oval Hose Connector 	5/8 Typhoon - Drip Tape x Oval Hose Connector 
TLOC-400B06LS	TLOC-TEE06LSB400
5/8 Drip Tape x Oval Hose Connector. 	Drip Tape X Drip Tape X Oval Hose Connector 
TLOC-400B09LS	TLOC-TEE06LSB250
7/8 Drip Tape x Oval Hose Connector. 	Drip Tape X Drip Tape X Oval Hose Connector 
TLOC-FHC06LS-16	PLUG-250 & PLUG-400
Drip Tape x Layflat Connector. 	Goof Plugs  250B - 5/8  400B - 7/8

ON-LINE DRIPPERS, NURSERY, GREENHOUSE, & SUBSTRATE



NETAFIM PRESSURE COMPENSATING (PC) DRIPPERS

Features & Benefits

- Patented pressure differential system maintains uniform flow rate at different inlet working pressures (within the recommended range) ensuring exact distribution of water and nutrients.
- Industry's widest flow path and wider dripper cross section allow large particles through the dripper's short flow path.
- Continuous self-flushing system, even while irrigating, provides improved resistance to clogging.
- The Woodpecker Jr. PC has a CNL feature that is an internal check valve or non-draining mechanism that eliminates refill and drainage effects.

	GPH/Emitter	Operating Pressure
PC	0.5, 1.0, 2.0	7 - 45 psi
Woodpecker PC	0.5, 1.0, 2.0	7 - 45 psi
Woodpecker Jr PC	0.5, 1.0, 2.0	7 - 45 psi



PC
(NON CNL)



Woodpecker PC
(NON CNL)



Woodpecker PC Jr.
(with CNL)

NETAFIM NON-PRESSURE COMPENSATING DRIPPERS

Features & Benefits

- Wide flow path and wider dripper cross section allow large particles through the dripper's short flow path.
- Designed with a barbed base for easy installation into blank polyethylene tubing.
- Several flow rates provide adaptability to many applications.

	GPH/Emitter	Max Operating Pressure
Button Dripper	0.5, 1.0, 2.0	40 psi
Woodpecker Dripper	0.5, 1.0, 2.0	40 psi



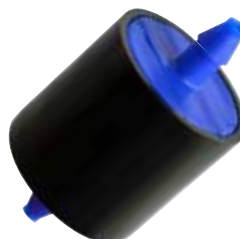
BOWSMITH - NONSTOP DRIP EMITTERS

Features & Benefits

Bowsmith NonStop emitters have demonstrated that the unique NonStop Continuous Self-Cleaning Action (Pressure Cascade Principle) really works, even under conditions that typically clog other emitters. With only 30-mesh filtration (recommended minimum), Bowsmith NonStop emitters have operated successfully with water containing heavy concentrations of sand, silt, iron bacteria, calcium carbonates, even algae and moss.

- Single barb outlet, 0.175" barbs on opposite ends; either can be used as an inlet/outlet.
- 30-Mesh Filtration (recommended minimum)

"SB Series" Model No.	Specifications Nominal flow @ 20PSI	
SB-06	0.6 GPH	Green Insert
SB-10	1.0 GPH	Blue Insert
SB-20	2.0 GPH	Red Insert



TORO - DRIPPERS

Features & Benefits

- NGE® AL offer unique anti-drain feature to overcome drainage problems caused by differences in elevation. Ideal for greenhouse and nursery applications, or any situation that requires precise irrigation of containers or individual plants
- NGE® SF offers unique emitter design that is self-flushing and inhibits siphoning during the emitter's operation and shutdown, giving it added protection from clogging.
- Turbo-SC Plus® PC has a large self-flushing, turbulent flow path for higher resistance to plugging where water conditions may be a problem.
- Turbo-Key Non-pressure compensating emitters have a large turbulent flow path.
- E-2 Emitter (Non-pressure compensating) is an economic emitter for short runs and non-sloped applications.

	GPH/Emitter	Operating Pressure
NGE® AL	0.5, 0.8, 1.0, 2.1	15 - 60 psi
NGE® SF	0.5, 0.8, 1.0, 2.1	8 - 60 psi
Turbo-SC Plus® PC	0.5, 1.0, 2.0	10 - 50 psi
E-2® Emitter	1.0, 2.0, 4.0	0 - 50 psi
Turbo-Key®	0.5, 1.0, 2.0	0 - 50 psi



NGE® AL



NGE® SF



Turbo-SC Plus® PC



Turbo-Key®



E-2® Emitter

NETAFIM PC, NON PC, DRIPPER & MOD ASSEMBLY

Features & Benefits

Eliminate the need for costly hand watering with Netafim Drinker Assemblies—designed to deliver a complete pay-back in the first season through labor savings. Netafim Automated Systems take nursery container irrigation to the next level, providing a slow, consistent application of water that virtually eliminates fertilizer and water run-off.

Built with the highest quality materials, all Netafim products are engineered for long-lasting, day-in and day-out performance you can rely on.

Model	GPH	Pattern	Operating Pressure Range
PC Spray Stakes	3.2 -10.6	Single or Double	22 - 55
Non PC Spray Stake	3, 5, or 7	Single	15 - 25
Dripper Stake Assembly	1 or 2	Single Stake	10 -45
MOD Assembly	1 or 2	2 Way, 4 Way, or Stackable	10 - 45



PC Spray Stake



Non-PC Spray Stake



Dripper Stake Assembly



MOD Assembly

MAXIJET NURSERY POT, GROOVE, & ELBOW STAKES

Features & Benefits

- Nursery Pot Stakes have a 160° low angle spray pattern designed for round pots to reduce over-spray. Spray pattern works well from low to high water pressures and are available in various gallon sizes. There is a side arm shut-off ring to give a watertight seal and keep dirt out of tubing.
- Agriculture Groove Stakes are ideal for long runs or elevation.
- Elbow Stakes are 7" in height in orange or black colors. The flexible vinyl is available in black and blue colors. Elbow Stakes spray jet sprays a 45° downward circle pattern.

NURSERY POT, GROOVE & ELBOW STAKES

Model	GPH	Pattern	Operating Pressure Range
Nursery Pot Stake	3.2 - 10.6	Single or Double	22 - 55
Groove Stake	4.2 - 15	Single	15 - 25
Elbow Stake	1 or 2	Single Stake	10 - 45



Nursery Pot Stake



Groove Stake



Elbow Stake

NETAFIM SPINNET, VIBRONET, & COOLNET PRO

Features & Benefits

• Netafim SpinNet and VibroNet Sprinklers produce high levels of watering uniformity. They are constructed without a “bridge” to retain the spinner, producing drip-less operation. These sprinklers have wide patterns up to 24'. Both types have a check valve above the sprinkler head to ensure that each sprinkler turns on/off at the same time.

• Netafim CoolNet Pro Foggers produce finer droplets allowing quicker evaporation resulting in higher humidity for propagation applications. Each nozzle of the 4-Way Fogger has a flow rate of 2.0 GPH. CoolNet Pro Foggers also have a reliable check valve above each head ensuring all foggers turn on/off at the same time.



VIBRONET/SPINNET/COOLNET PRO

Model	GPH	Pattern	Operating Pressure Range	Wetted Diameter
SpinNet	18.4 - 23.4	6 Different	10 - 35 psi	10 - 38 ft
VibroNet	9.2 - 11.7	Vibrating	10 - 35 psi	10 - 38 ft
CoolNet Pro	8.1	Fogging	45 - 60 psi	6 - 10 ft

PRIMERUS SPOT SPITTERS

Features & Benefits

Primerus Spot Spitters deliver a variety of flow rates and patterns. Exclusive directional indicator allows quick placement.

Available options:

- Standard (4.75"), short (2.75")
- Tall (11") and Down-spray.

PRIMERUS SPOT SPITTERS

Color	GPH	Pattern	Pressure Range	Usage
Black High Flow	12.6 - 17.4	160° Spray	15 - 25 psi	15 - 20 Gallon Pot
Green Medium Flow	9.6 - 13.2	160° Spray	15 - 25 psi	5 - 15 Gallon Pot
Lt. Green Flow	5.4 - 6.6	160° Spray	15 - 25 psi	2 - 7 Gallon Pot
Orange Mini Flow	3.6 - 4.8	160° Spray	15 - 25 psi	1 - 3 Gallon Pot
Brown Mini Flow	5.4 - 7.8	90° Spray	15 - 25 psi	2 - 7 Gallon Pot
Grey Mini Flow	2.4 - 3.6	90° Spray	15 - 25 psi	1 - 3 Gallon Pot
Blue Medium Flow	9.0 - 12.6	360° Spray	15 - 25 psi	36" - 48" Box



NETAFIM NETBOW™

NetBow™ is an innovative, user friendly container irrigation ring with multi-outlet emitters. Featuring Typhoon™, our superior clog resistant emitter for maximum water distribution. Specially designed for irrigating containerized crops.

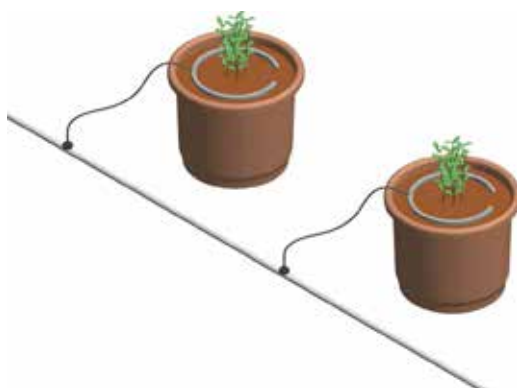
With NetBow™, roots develop in every square inch of the container including the top layer, where root development is critical.

Features & Benefits

- Uniform water distribution, from top to bottom with no blind spots. The flow from each dripping outlet will be determined by the hub dripper, divide evenly by 8 or 4.
- Superior clog resistance - NetBow™ features 8 of Netafim's high clogging-resistant Typhoon drippers that guarantees lower risk of clogging.
- User-friendly device simplifies installation and operation – with NetBow™ is easy to install & connect to micro-tubes, and placement in the container is easy.
- Options for connecting to diverse hub drippers like PCJ, PC, or Uniram™ with Dr. Zip

Specifications

- Compatible with 10 to 60 liters (2-15 gallons) containers
- Diameter: 120 mm (5 inches) , 250 mm (10 inches)
- Outlets: 4 or 8 dripping outlets (Flow is determined by the hub dripper)
- Superb Chemical and UV resistance for extended durability
- Colored light gray for improved light reflection
- Maximum operating pressure: 4.0 bars (58.0 PSI)
- Flow Rate: 4 or 8 dripping outlets with flow of 2.0l/h 0.53 GPH each at 1.0 bar (14.5 PSI)



NETBOW™

Hub Dripper	Flow Rate (GPH)
PC/ PC LCNL	0.53
PC/ PC LCNL	1.06
PC/ PC LCNL	2.25
PCJ/ PCJ LCNL	0.53
PCJ/ PCJ LCNL	0.79
PCJ/ PCJ LCNL	1.06
PCJ/ PCJ LCNL	2.11
PCJ/ PCJ LCNL	3.17
UNIRAM	0.61
UNIRAM	0.92

HARMON SYSTEMS INTERNATIONAL, LLC - SO₂ SULFUROUS ACID GENERATORS

In 1955, D & J Harmon invented and pioneered the technique of amending water and soil with the original SO₂-Sulfurous Acid Generator. Today, with over 2,000 units sold and installed, and over 66 years of experience, we manufacture our units in seven different model sizes, with accessories and control options to fit the exact requirements for virtually any customer, from the most basic setup to full automation and pH control.

Features & Benefits

- Produce on-site sulfurous acid with your own irrigation water.
- Amend the soil/water solution to precisely match the pH preference of your crop.
- Leach salts effectively to prevent salt accumulation and lower E.C.
- Improve water penetration and eliminate run-off.
- Obtain more acidity with less cost.
- Safe to handle and touch
- Clean drip lines & emitters
- Increase crop quality and yields
- USDA approved for organic crop production when using OMRI listed sulfur.



**Harmon
Systems
International, LLC**

We provide solutions that benefit the world



NURSERY, GREENHOUSE, & SUBSTRATE

NETAFIM SUPERNET & SUPERNET JR.

Features & Benefits

- The SuperNet Pressure Regulated Micro Sprinkler has a wide regulating range and floating, self-flushing diaphragm maintains uniform flow across broad pressure range.
- High distribution uniformity - unique nozzle tube prevents negative effects of varying inlet pressure on the wetted diameter.
- Large water passages- resists clogging.
- Drop down "bug-proof" swivel/jet plate prevents entry of insects.

- Everspin bearing has a layer of sapphire material to reduce friction and wear, promoting long-lasting sprinkler performance.
- Bearing keeps the swivel centered during operation and improves start-up.
- SuperNet Jr. Non-Pressure Regulated is recommended for applications where flow regulation is not required.



Specifications

Style	GPM	Pattern	Operating Pressure	Wetted Diameter
SuperNet (SW)	5.3-23.8	Short or Long	25-50 psi	5-23 ft.
SuperNet (j.Plake)	8.2-23.8	6-12ft Stream	25-50 psi	16-18ft.
SuperNet Jr. (SW)	6-50	Short or Long	15-35 psi	4.3-29.5 ft.

SuperNet

Model #	Description
031735	Stream Splitter
03175624	24" Steel Stake
03175648	48" Steel Stake
03173600	Poly Adapter

SuperNet Jr

Model #	Description
031735	Stream Splitter
03175624	24" Steel Stake
03175648	48" Steel Stake
03173700	Poly Adapter

NETAFIM NETJET

Features & Benefits

Netafim NetJet High Performance Spray Jet operates at low pressures. It has wide range of spray patterns and trajectories that help save on energy costs. The NetJet minimizes "misting" reducing water lost to evaporation. The lower operating pressure also reduces wear associated with hard or soluble gypsum.



Specifications

Style	GPM	Pattern	Operating Pressure	Wetted Diameter
NetJet	4.8-28.6	7 Different	10-30 psi	10-34 ft.

NETJET

Model #	Nozzle Color	Flow Rate
037121080000	Black	6.8 GPH
037121780000	Orange	7.6 GPH
037121280000	Brown	8.7 GPH
037121180000	Blue	11.1 GPH
037121680000	Purple	13.1 GPH
03712998	Stream Deflector	-



SPRAY PATTERNS

(A)	(B)	(C)	(E)	(J)	(R)	(V)
12 STREAM 360°	BUTTERFLY STREAM	8 STREAM 210°	22 STREAM 360°	12 STREAM 360°	RECTANGULAR STREAM	10 STREAM 300°

MAXIJET MAX-ONE SPRAY JETS

Features & Benefits

The Max-14 Fill-In Jet was designed for high density plantings and the Max-14 Stream Jet is suited for mature trees with wider spacings. Both the Max-14 Fill-In and Stream are durable one-piece jets with a winged one-arm design, available in 8 different gallon sizes, and have quick locking threads to get the jet in and out of the stake in only 1 to 2 quick turns.

The Max-360 and Max-180 jets are equipped with a down spray stream pattern to keep water off leaves and berries and allow little to no wind deflection. Spray jets will irrigate 90% to 100% of the root zone.

The Max-240 sprays a 10-stream 240° pattern and is designed to be installed near the base of trees spraying out to keep water off of the trunks.



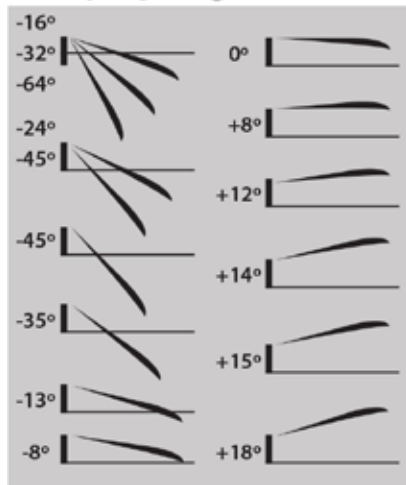
MAXIJET MAX-FLO™ FLOW-CONTROLLED ADAPTERS

Features & Benefits

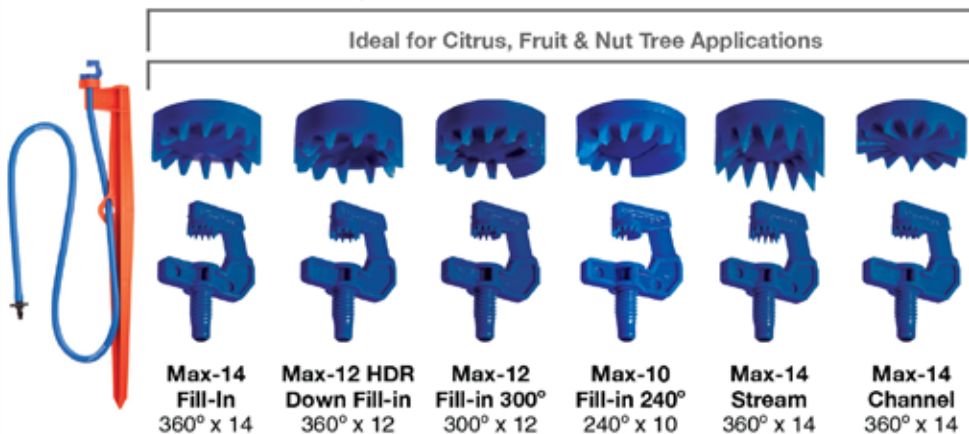
Maxijet MAX-FLO™ adapters connect the poly hose to the jet assembly and allows for a consistent spray pattern on undulating terrain.



Spray Angle Guide



Specification Chart



Spray Angle	+15°	-8°	+15°	+15°	+18°	+18°
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		Orifice	PSI	GPH	Diameter	Diameter	Diameter	Radius	Diameter	Diameter
80 - 120 filtration mesh recommended	Black .03"	15		4.9	7.5'	5.0'	7.5'	4.0'	9.5'	9.0'
		20		5.6	8.5'	5.5'	9.0'	4.5'	10.5'	10.0'
		25		6.3	9.0'	6.0'	9.5'	5.0'	12.0'	11.0'
		30		6.9	9.5'	6.5'	10.0'	5.5'	12.5'	11.6'
	Orange .033"	15		6.7	9.5'	5.5'	9.5'	4.5'	11.5'	11.5'
		20		7.7	10.5'	6.5'	10.0'	5.0'	12.5'	12.0'
		25		8.6	11.5'	7.0'	10.5'	5.5'	13.5'	12.5'
		30		9.4	12.5'	7.5'	11.0'	5.5'	15.0'	13.0'
	Blue .04"	15		8.9	9.5'	6.0'	10.5'	5.5'	14.5'	14.0'
		20		10.5	11.0'	6.5'	11.5'	6.0'	16.0'	15.0'
		25		11.8	12.0'	7.0'	12.5'	6.5'	17.0'	16.5'
		30		12.8	13.5'	7.5'	13.0'	7.0'	18.0'	17.5'
	Violet .044"	15		11.5	12.5'	6.5'	11.5'	5.5'	17.0'	16.5'
		20		13.5	13.5'	7.0'	13.5'	6.0'	18.0'	18.0'
		25		15.0	13.5'	7.5'	16.5'	6.5'	19.0'	18.5'
		30		16.5	14.5'	7.5'	17.0'	7.0'	19.5'	19.0'
50 - 80 filtration mesh recommended	Green .05"	15		14.0	13.0'		13.5'	6.0'	17.0'	17.0'
		20		16.0	14.0'		15.5'	6.5'	19.0'	18.5'
		25		18.0	15.0'		16.5'	7.0'	20.0'	19.0'
		30		19.9	16.5'		17.0'	7.5'	21.0'	19.5'
	Yellow .055"	15		17.1	13.5'		14.5'		19.0'	19.5'
		20		19.8	14.0'		15.5'		21.0'	21.0'
		25		22.21	15.0'		16.5'		22.5'	22.0'
		30		24.2	16.5'		17.0'		24.0'	23.0'
	Red .06"	15		20.2	15.0'		16.0'		20.5'	21.5'
		20		23.5	17.0'		18.0'		21.5'	22.0'
		25		26.5	18.0'		21.0'		24.5'	22.0'
		30		29.1	21.0'		22.0'		28.5'	22.5'
	White .07"	15		32.1	21.0'		18.0'		23.5'	23.5'
		20		37.1	21.5'		21.0'		28.0'	25.0'
		25		41.8	22.0'		22.0'		30.5'	27.5'
		30		46.1	24.5'		23.0'		32.0'	28.5'

BOWSMITH FAN-JET TYPE 2

Features & Benefits

- The Fan-Jet has a twin-wedge post construction, which is durable, low profile, and impact resistant.
- Open design that has no pockets to collect debris or harbor insects.
- The Fan-Jet is made of high grade co-polymer material for limited creep and shrinkage.
- The splash plate, with no moving parts, maintains precise alignment over time.
- 18 Different spraying patterns available.



Bowsmith Fan-Jet Type 2

Nozzle Size	30	35	40	45	50	55	60
Color	Black	Orange	Blue	Violet	Green	Yellow	Red
Pressure	Flow (GPH)						
10	4.4	5.9	7.5	10.0	11.8	13.7	17.0
15	5.2	7.3	9.3	12.2	14.4	17.8	20.8
20	6.0	8.4	10.7	14.1	16.7	20.5	24.0
25	6.7	9.4	12.0	15.8	18.6	22.9	26.8
30	7.4	10.3	13.1	17.3	20.4	25.1	29.4

BOWSMITH FAN-JET SINGLE

Features & Benefits

- Uniform patterns, accurate flow rates
- Large "open mouth" design
- Quick thread for easy installation
- Bulb end helps prevent leakage, easy for retrofits
- Rugged and sturdy, made with UV stabilized acetal resin



Fan-Jet Single J4 - 14 Stream "Fill In"

- Better fill-in pattern
- More water in the first two feet
- Uniform distribution between streams
- Uniform stream lengths

Fan-Jet Single M - 330° Flat Mist

- 10° larger wetted area
- Uniform flat mist pattern

Bowsmith Fan-Jet Single

Nozzle Size	35	40	45	50
Color	Orange	Blue	Violet	Green
Pressure	Flow (GPH)			
10	5.9	7.5	10.0	11.8
15	7.3	9.3	12.2	14.4
20	8.4	10.7	14.1	16.7
25	9.4	12.0	15.8	18.6
30	10.3	13.1	17.3	20.4

TORO MICRO-SPRINKLER VI CLASSIC

Features & Benefits

- Engineered to provide uniform water application for low volume, under-tree and overhead installations
- Deflector plate design maximizes startup torque to ensure reliability of operation in the most hostile environments
- Anti-insect dust-proof spinner retracts to protect nozzle when not in operation
- New snap-fit conical bearing design ensures long life, ease of maintenance and trouble free spinning
- Available in 8 flow rates ranging from 9.1 to 65.1 gph at 20 psi
- Diameter of throw 16.4 to 36.8 feet

Toro Micro-Sprinkler VI Classic

Orifice Dia. (Inch)	0.039	0.041	0.049	0.055	0.065	0.071	0.079	0.091
Color	Black	White	Maroon	Green	Blue	Grey	Yellow	Red
Pressure	Flow (GPH)							
15	7.9	11.8	16.5	21.5	29.2	33.8	41.7	56.4
20	9.1	13.7	19.0	24.8	33.7	39.0	48.1	65.1
25	10.2	15.3	21.2	27.8	37.7	43.6	53.8	72.8



RIVULIS IRRIGATION TORNADO RAY JET STREAM SPRAY

Features & Benefits

- No moving parts to break, jam, or wear out.
- Vortex nozzle which creates a turbulent water flow throughout the large water passage way.
- Wetting pattern options
 - » 180° (8 jet streams)
 - » 300° (10 jets)
 - » 360° (8 or 12 jets)

Operating Guidelines

- Operating pressure range: 22-42 psi



Nozzle (size)	Flow Rate	Wetting Diameter
Inch	gph**	ft ***
Black (0.035)	6.6****	7.9
Blue (0.051)	9	10.5
Green (0.067)	14.5	11.8
Red (0.079)	18.5	13.8

** Inlet pressure: 21.8 psi

*** Upright position, 10" above ground (360° - 12 jet streams)

**** Tornado take-apart: 7.3 gph

RIVULIS IRRIGATION S2000 MICRO SPRINKLER

S2000 Micro Sprinklers can be used in a wide range of applications including irrigation, cooling, and frost protection for orchards and groves. The S2000 Micro Sprinkler delivers a consistent spray pattern at a low angle, avoiding low hanging branches.

Features & Benefits

- Anti-insect device
- Standard or flow Regulated models
- Wear resistant design

Product Options

- Flow Regulated
- Trunk Protector(s)
- Detachable Range Limiter Spinner
- Operating pressure range: 22-50 psi
- Effective wetting area: 3 to 33 feet



Spinner Color	Nozzle	Flow Rate (gph)
BLK	Light Blue	8
BLK	Black	10
BLK	Blue	14
BLK	Dark Blue	16
BLK	Green	20
BLK	Red	26
BLK	White	33

RAIN BIRD MICRO-QUICK SPRAYS

Features & Benefits

- No tools are required to remove and re-install nozzle/deflector on the bayonet mount.
- Nozzle/deflector assembly is easily removed for cleaning.
- The taper bore nozzle design prevents debris from clogging the orifice.
- Upright (upward spraying) or inverted (downward spraying) nozzle/deflector position available.
- The transfer tubing offers maximum flexibility, durability and kink-resistance.
- 7 Different spray patterns available.

Rain Bird Micro-Quick Spray

Nozzle Size	QN-05 (0.026")	QN-08 (0.033")	QN-12 (0.038")	QN-14 (0.044")	QN-17 (0.048")	QN-24 (0.057")	QN-33 (0.068")
Color	Black	Orange	Blue	Lavender	Green	Red	White
Model #	Q1080005	Q1080008	Q1080018	Q1080014	Q1080017	Q1080024	Q1080033
Pressure	Flow (GPH)						
10	3.7	5.6	7.3	9.7	10.7	14.2	17.2
15	4.5	6.9	9.1	11.8	13.3	17.3	21.0
20	5.2	8.0	10.6	13.7	15.5	20.1	25.2
25	5.9	9.2	11.8	15.5	17.4	22.4	27.9
30	6.5	10.0	13.2	17.2	19.1	26.0	30.6



NETAFIM MEGANET™

Features & Benefits

- The MegaNet™ is a balanced sprinkler with two equal water jets - no wobble.
- It has a closed and compact design preventing insect penetration and protecting internal parts.
- The MegaNet has distribution uniformity and can be installed on solid sets or in removable field stands.
- Each unit has an individual filter for nozzle cleanliness and to simplify cleaning.
- It is UV protected materials are durable in all climates and resistant to fertilizers and chemicals.
- The operating psi ranges from 29-45 and the wetted diameter ranges from 42.8 - 52.4 ft.



Netafim MegaNet™

Nozzle Size	Nominal Flow (GPM)	Trajectory	Nozzle Color
0.070"	0.88	High - 24°	YELLOW
0.084"	1.10		PURPLE
0.096"	1.54		GREEN
0.109"	1.98		BLUE
0.121"	2.42		BROWN
0.132"	2.86		ORANGE
0.070"	0.88	Low - 15°	YELLOW
0.084"	1.10		PURPLE
0.096"	1.54		GREEN
0.109"	1.98		BLUE
0.121"	2.42		BROWN
0.132"	2.86		ORANGE

SENNINGER MINI-WOBBLER & WOBBLER

Features & Benefits

- Senninger Mini-Wobblers employ a unique off-center rotary action that provides an extremely uniform distribution pattern over a large area. Their gentle rain-like pattern has very low evaporative loss and is effective for frost protection and salt leaching.
- Mini-wobblers are extremely durable with only one moving part. They are constructed entirely of engineering grade thermoplastics for excellent corrosion resistance.
- The Wobbler provides extremely uniform coverage over a large diameter at low-pressures.
- It produces droplets that resist wind-drift and are applied in a gentle rain-like pattern. The Wobbler is constructed entirely of engineering grade thermoplastics for corrosion resistance and is extremely durable due to having only one moving part.

Specifications

Style	GPM	Trajectory	Operating Pressure	Wetted Diameter
Mini-Wobbler	0.42 - 2.18	0 or 10	15-25 psi	26 - 43.5 ft.
Wobbler	0.78 - 7.64	12 or 24	15-30 psi	29 - 52 ft



Mini-Wobbler	Flow GPM @ psi		
	15	20	25
#4 Nozzle - Light Blue (1/16")	0.42	0.50	0.56
#5 Nozzle-Beige (5/64")	0.64	0.75	0.84
#6 Nozzle- Gold (3/32")	0.95	1.10	1.25
#7 Nozzle - Lime (7/64")	1.30	1.51	1.69
#8 Nozzle - Lavender (1/8")	1.67	1.95	2.18



Wobbler	Flow GPM @ psi				
	10	15	20	25	30
#6 Nozzle - Gold (3/32")	0.78	0.95	1.10	1.23	1.35
#7 Nozzle - Lime (7/64")	1.06	1.30	1.50	1.68	1.84
#8 nozzle - Lavender (1/8")	1.40	1.78	1.98	2.21	2.42
#9 Nozzle- Grey (9/64")	1.80	2.20	2.54	2.84	3.11
#10 Nozzle - Turquoise (5/32")	2.22	2.72	3.14	3.51	3.85
#11 Nozzle - Yellow (11/64")	2.69	3.30	3.81	4.26	4.67
#12 Nozzle - Red (3/16")	3.23	3.96	4.57	5.11	5.60
#13 Nozzle - White (13/64")	3.80	4.65	5.38	6.01	6.59
#14 Nozzle - Blue (7/32")	4.40	5.39	6.23	6.97	7.64

SENNINGER XCEL WOBBLER & IMPACTS

Features & Benefits

- Xcel-Wobblers produce droplets resistant to wind-drift and evaporation, and distribute them in a gentle, rain-like pattern. Provides extremely uniform coverage over large diameters. Only one moving part, which translates to longer product life. Available in high and low angle models.
- The 20 series full-circle impacts are Senninger's most economical sprinklers. These sprinklers work best with low flows between 1.34 to 3.98 gpm. Three models with different trajectories available:
 - 2009 – 9° fights wind drift and evaporation
 - 2014 – 14° ideal for under-tree irrigation
 - 2023 – 23° maximum throw on overhead systems



Xcel - Wobblers	Flow GPM @ psi			
	10	15	20	25
#6 Nozzle - Gold (3/32")	0.78	0.95	1.10	1.23
#7 Nozzle - Lime (7/64")	1.06	1.30	1.50	1.68
#8 Nozzle - Lavender (1/8")	1.40	1.71	1.98	2.21
#9 Nozzle - Grey (9/64")	1.80	2.20	2.54	2.84
#10 Nozzle - Turquoise (5/32")	2.22	2.72	3.14	3.51
#11 Nozzle - Yellow (11/64")	2.69	3.30	3.81	4.26
#12 Nozzle - Red (3/16")	3.23	3.96	4.57	5.11
#13 Nozzle - White (13/64")	3.80	4.65	5.38	6.01
#14 Nozzle - Blue (7/32")	4.40	5.39	6.23	6.97



20 Series Impacts		Flow GPM @ psi				
2009HD Impact	25	30	35	40	45	50
#6 Nozzle - Gold (3/32")		1.34	1.45	1.55	1.64	-
#7 Nozzle - Lime (7/64")		1.84	1.99	2.12	2.25	2.37
#8 Nozzle - Lavender (1/8")		2.42	2.62	2.79	2.97	3.12
#9 Nozzle - Grey (9/64")		3.08	3.33	3.56	3.78	3.98
2014HS	25	30	35	40	45	50
#6 Nozzle - Gold (3/32")		1.34	1.45	1.55	1.64	-
#7 Nozzle - Lime (7/64")		1.84	1.99	2.12	2.25	2.37
#8 Nozzle - Lavender (1/8")		2.42	2.62	2.79	2.97	3.12
#9 Nozzle - Grey (9/64")		3.08	3.33	3.56	3.78	3.98
2023HS	25	30	35	40	45	50
#6 Nozzle - Gold (3/32")		1.34	1.45	1.55	1.64	-
#7 Nozzle - Lime (7/64")		1.84	1.99	2.12	2.25	2.37
#8 Nozzle - Lavender (1/8")		2.42	2.62	2.79	2.97	3.12
#9 Nozzle - Grey (9/64")		3.08	3.33	3.56	3.78	3.98

NELSON R2000 ROTATOR, R2000WF, R33 ROTATOR

Features & Benefits

- The R2000 Rotator uses proven Rotator Technology to provide high uniformity without the riser vibration or splash down associated with impact sprinklers. The simple, snap-apart design is durable, reliable, and easy to repair and clean. Choose from 15 different plate options to achieve optimal trajectory and throw characteristics.
- The R2000WF Rotator - the "Windfighter" - consistently delivers higher uniformity than impact sprinklers. The R2000WF forms a tight wind-penetrating stream that is systematically broken up by a diffuser, filling in the water pattern. Its sweeping action gently distributes water droplets to the ground preventing soil compaction. The R2000LP is a low-pressure version of the R2000WF.
- The R33 Rotator® is an innovation that saves money, saves time, and performs better than the 3/4" brass impact sprinklers it's designed to replace. The R33 uses Nelson's proven Rotator® technology to provide longer throw distance, fight the wind and deliver uniform coverage. While brass sprinklers are prone to damage, clogging, and theft, the R33 is easy to clean, easy to repair, and costs less. The R33LP is a low-pressure version of the R33.

Specifications

Style	GPM	Trajectory	Operating Pressure	Wetted Diameter
R2000 Rotator	0.67 - 3.54	6, 9, 12, 15, or 24	30 - 60 psi	23 - 37 ft.
R2000WF Rotator	1.10 - 5.70	25	40 - 65 psi	44 - 50 ft
R2000LP Rotator	0.88 - 5.00	25	25 - 50 psi	30 - 41 ft
R33 Rotator	1.22 - 91.8	25	40 - 65 psi	35 - 45 ft



R2000



R33 Rotator



R2000WF

R2000	R2000WF	R33LP/ R33
Plate Options	Plate Options	Plate/Nozzle
K2 9° Green	Purple WF12	Gold 18 / (9/64")
K2 15° Yellow	Green WF14	Brown 20 / (5/32")
K3 9° Brown	Red WF 16	Gray 22 / (11/64")
K3 15° Red	Gold WF18	Green 24 / (3/16")
K3 24° Gray	Dark Brown WF20	Maroon 26 / (13/64")
K4 6° Turquoise		
K4 9° Purple		
K4 12° Wine		
K4 15° Gold		
K4 24° Black		
K5 9° Orange		
K5 15° Tan		
K5 24° Blue		

WADE RAIN WR-32

Features & Benefits

Wade Rain WR-32 Brass Impact Sprinkler is a single nozzle sprinkler with an aluminum arm for low gallonage applications. It also comes in an aluminum arm version with a straightening vane for larger wetted diameters.



Specifications

Style	GPM	Operating Pressure	Wetted Diameter
WR-32	1.73 - 5.17	25 - 80 psi	77 - 91 ft
WR-32 W/Vane	1.10 - 5.70	25 - 80 psi	78 - 100 ft.

XCAD USA - AQUA BURST® HF30AL

Features

- Full-circle impact – 26° trajectory
- 3/4" male NPT base
- Single nozzle
- Fits 3/4" series nozzle sizes (NOZ75 series)

Benefits

- Anodized die-cast aluminum drive arm with Precision Channel Spoon™ for smooth Torque-Driven™ operation and reduced splash down
- Cast brass body with triple bridge construction and cored water passage
- Spindle with debris journal to slow bearing wear
- Seal-Lock bearing creates a captive seal
- Stainless-steel fulcrum pin, arm spring, and bearing spring for long wearing reliability
- Suitable for portable, solid-set and row-crop, frost protection and mechanical move systems
- Pre-assembled with XC-33 thread sealant



Aqua Burst® Performance Chart
Normal stream height at 9' above nozzle at normal pressure

Radius - GPM

PSI	1/8" Nozzle	9/64" Nozzle	5/32" Nozzle	11/64" Nozzle	3/16" Nozzle
30	39 - 2.2	41 - 3.0	42 - 3.8	44 - 4.6	45 - 5.5
35	40 - 2.4	41 - 3.3	43 - 4.1	45 - 5.1	45 - 5.9
40	40 - 2.6	42 - 3.5	44 - 4.5	46 - 5.3	46 - 6.4
45	41 - 2.9	42 - 3.7	44 - 4.7	46 - 5.7	47 - 6.7
50	41 - 3.1	43 - 4.0	45 - 4.9	47 - 6.1	48 - 7.2
55	42 - 3.5	43 - 4.3	45 - 5.1	48 - 6.4	49 - 7.5
60	42 - 3.5	44 - 4.5	46 - 5.4	49 - 6.7	49 - 7.8
65	43 - 3.7	44 - 4.7	46 - 5.7	49 - 7.0	50 - 8.1
70	44 - 3.9	45 - 4.8	47 - 5.9	50 - 7.2	51 - 8.4

Operate ONLY between 30 psi (min) and 70 psi (max)

RAIN BIRD LF SERIES & 2045PJ

Features & Benefits

- The Rain Bird® LF Series Sprinkler is built rugged to withstand the harsh conditions in agricultural applications. It has been designed to combine the advantages of an impact sprinkler with stream height flexibility that delivers precise, uniform water distribution, making it a good choice for frost protection.
- The 2045PJ is an impact drive sprinkler. It has a double-weighted arm for slower rotation and increased distance throw. An adjustable spring arm makes for low-pressure and low-gallage operation. The 2045PJ has a precision jet tube to minimize side splash. It also has a powerful reverse action.



LF Series



2045PJ

Specifications

Style	GPM	Trajectory	Operating Pressure	Wetted Diameter
LF Series	0.77 - 1.67	6 - 22	25 - 60 psi	23 - 33 ft.
2045PJ	1.50 - 8.40	6 - 12	25 - 60 psi	22 - 45 ft

LF Series		2045-PJ	
Deflector types		Nozzle types	Nozzle types
6° Yellow	15° Tangerine	White 0.0703"	Red 3/32"
6° Dark Purple	16° Red	Blue 0.078"	Black 7/64"
9° Purple	17° Powder Blue	Orange 0.086"	Blue 1/8"
10° White	21° Olive Green	Purple 0.094"	Yellow 5/32"
10° Lime Green	22° Dark Green	Yellow 0.102"	Beige 3/16"
12° Copper		Green 0.109"	
12° Cyan Blue		Tan 0.117"	
12° Pink		Red 0.1250"	
13° Maroon		Black 0.1325"	
15° Brown		Silver 0.1406"	

HAYGROVE POLY TUNNEL



ABOUT HAYGROVE TUNNELS

Haygrove designs and manufactures field scale commercial polytunnels, substrate, and associated growing systems for many of the best growers in the world. They aim to constantly improve growing systems for the benefit of the customer by understanding the commercial pressures of growing themselves.



FIELD SCALE POLYTUNNELS

PIONEER

Dimensions per tunnel:

- 2.75m (9ft) leg
- 2.5 (8.2ft) to 3m (10ft) leg spacing
- 8.5 (28ft) to 9.6m (32ft) bay



TUNNEL GROWING SYSTEMS

Benefits & Advantages

- Great for
 - Container Growing Systems
 - Bedded Growing Systems
 - Hanging or Post Growing Systems
- Allow for precision irrigation and improved field hygiene
- Help to reduce temperature and humidity fluctuations for advantageous growing conditions
- Have availability in a wide range of bay widths for container, gutter, or row spacing.
- All structures follow the natural contour of the ground, mitigating the need for site leveling or concrete foundations.

SCAN TO
LEARN MORE:



HAYGROVE POLY TUNNELS



CONTAINER



BED



HANGING OR POST

PUMPS & WET WELL ILLUSTRATIONS



END SUCTION CENTRIFUGAL PUMPS

Features & Benefits

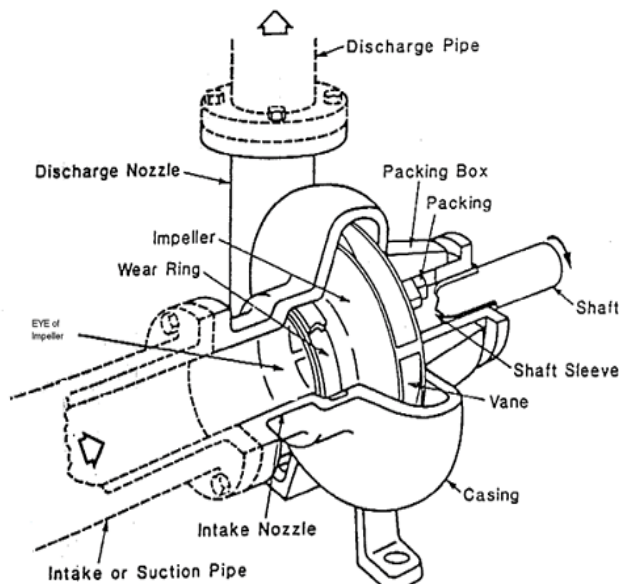
- Simple operation.
- Low maintenance.
- Insignificant excessive pressure build up in casing.
- Impeller and shaft are the only moving parts.
- Wide range of pressure, flow and capacities.

Brands Offered:

- Berkley
- Cornell
- Gorman Rupp
- Rainbow
- Goulds
- Franklin

Types:

- S.A.E. centrifugal pumps are powered by an internal combustible engine.
- Frame Mount centrifugal pumps are designed for a power source suitable for driving through couplings or with belts.
- Close-coupled pumps are electric motor driven and have only one shaft and one set of bearings.



LINE SHAFT TURBINE SUBMERSIBLE PUMP

Features & Benefits

- Generate high head and high discharge pressure.
- Flow rate less variable with pressure changes.
- Eliminate potential issues with suctions and loss of prime.
- Compact design.

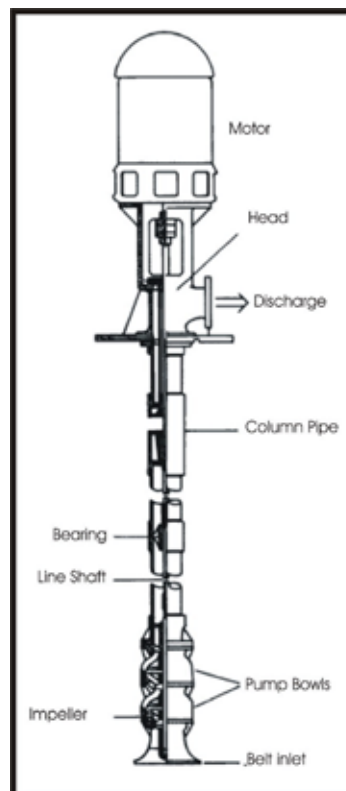
Brands Offered:

- National Pump
- Berkley (submersible only)
- Flowserve
- Goulds

Types:

- Line-shaft Turbine - The motor is mounted above the ground, and the pump unit is mounted below the water surface. A column extends from the pump to a discharge head found just below the motor. A shaft extends on a straight line from the center of the motor to the pump. The pump may be mounted a few feet to several hundred feet away from the motor.
- Submersible Turbine- The entire pump assembly and motor are submersed in the water.

* Examples of pump use on pages 83-84



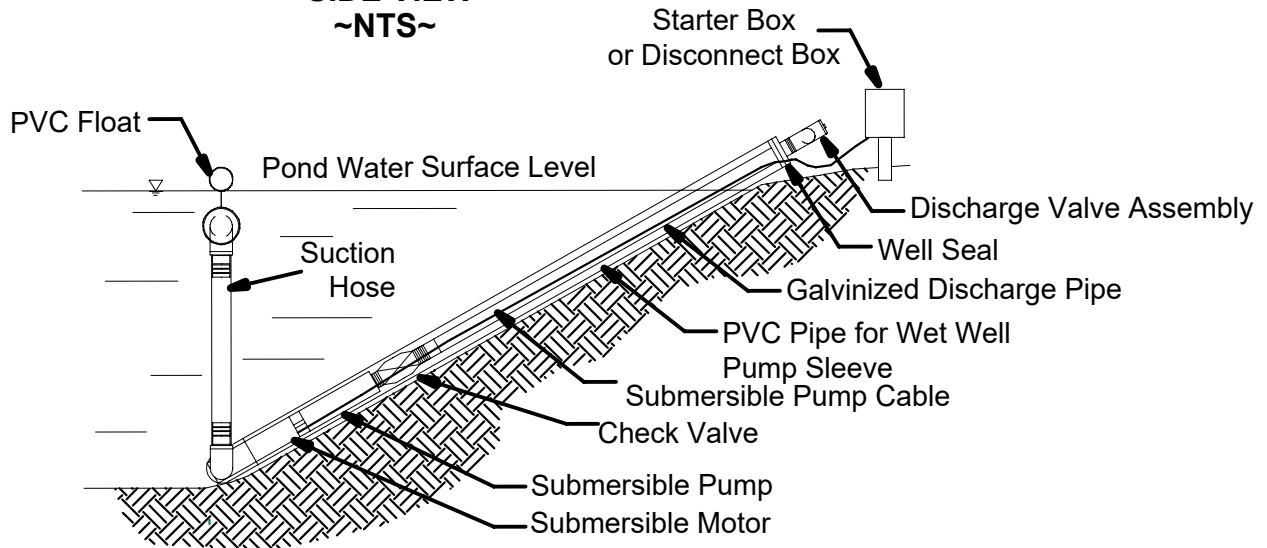
SUBMERSIBLE PVC SLEEVE WET WELL

Both wet well illustrations featured in this product guide are customizable to fit the customers' unique needs.

Wet Well Assembly

SIDE VIEW

~NTS~



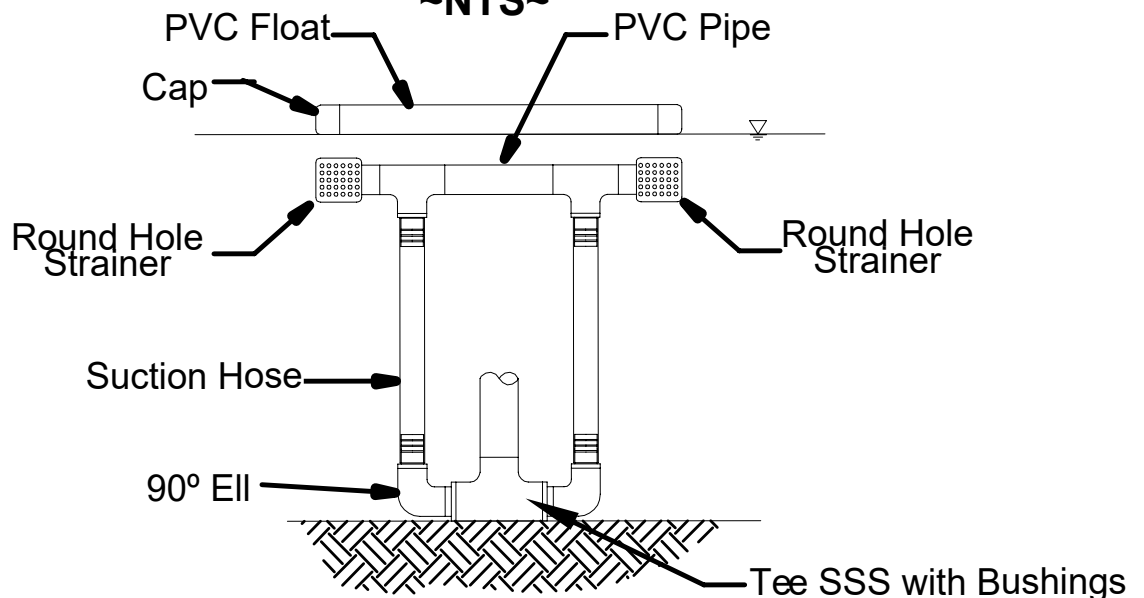
Note: Galvanized pipe is typical.

*Sch 80PVC pipe can be used as discharge pipe.

Floating Riser Assembly for Wet Well

FRONT VIEW

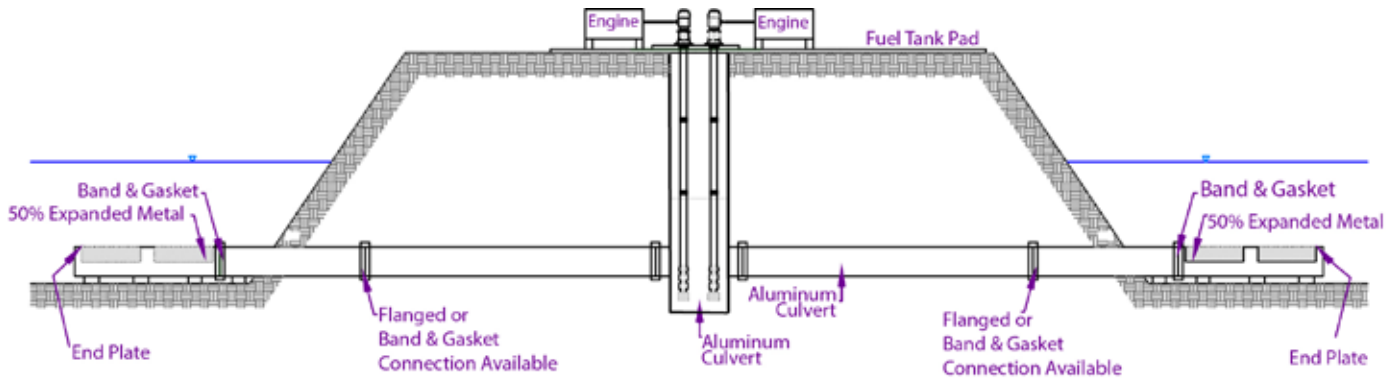
~NTS~



LINE SHAFT TURBINE

A wet well is also regarded as a pump station. Water collected in a hole is moved by pump to another location.

- Twin turbine can wet well featured.
- Single turbine can wet wells available.



Picture of above illustration.

ACCU-TAB® CHLORINATORS

Features & Benefits

- Accu-Tab chlorinators use 3-inch Accu-tablets, have few moving parts, use no proprietary parts, and have no small openings that can clog.
- Accu-Tab offers gravity return systems or pressure return systems.
- Gravity Return Systems (GS models) - where the chlorinator is located at an elevation higher than the point the chlorinated solution is returned to the main water stream.
- Pressure Return Systems (P) - utilizes a centrifugal pump to re-inject the chlorinated solution back into the main water line.



Accu-Tab 2000 Series P

Model	Chlorine Delivery	Tablet Capacity	Unit Footprint
2150 P	10.5 lbs./hr	150	20" x 40"
2300 P	25 lbs./hr	300	31" x 63"

Accu-Tab 2000 Series GS

Model	Chlorine Delivery	Tablet Capacity	Unit Footprint
2075 GS	2.5 lbs./hr	75	20" x 20"
2150 GS	12.5 lbs./hr	150	20" x 20"
2300 GS	25 lbs./hr	300	31" x 50"
2600 GS	35 lbs./hr	600	32" x 60"

Accu-Tab 3000 Series

Model	Chlorine Delivery	Tablet Capacity	Unit Footprint
3012	0.57 lbs./hr	12	9" diameter
3075	2.5 lbs./hr	75	13.375" diameter
3150	12.5 lbs./hr	150	18" diameter
3530	25 lbs./hr	300	24" diameter

PULSATRON C-PLUS SERIES

Features & Benefits

- Four distinct models are available, having pressure capabilities of 80 psiG (5.6 BAR), and flow capacities up to 30 GPD (4.7 lph), with a turn-down ratio of 100:1. Metering performance is reproducible to within $\pm 3\%$ of maximum capacity.
- Viscosity Max CPS: 1000 CPS
- Stroke Frequency Max SPM: 125
- Stroke Frequency Turn-Down Ratio: 10:1
- Stroke Length Turn-Down Ratio: 10:1

- Power Input:
 - 115 VAC/50-60 HZ/1 ph
 - 230 VAC/50-60 HZ/1 ph
- Average Current Draw:
 - @ 115 VAC; Amps: 0.6 Amps
 - @ 230 VAC; Amps: 0.3 Amps
- Peak Input Power: 130 Watts
- Average Input Power @ Max SPM: 50 Watts



PULSATRON E-PLUS SERIES

Features & Benefits

- The Pulsation Series E Plus offers manual control over stroke length and stroke rate as standard with the option to choose between 4-20mA and external pace inputs for automatic control. Twenty distinct models are available, having pressure capabilities to 300 psi (21 bar) @ 3 gpd (0.5 lph), and flow capacities to 600 GPD (94.6 lph) @ 30 psi (2 bar), with a turn-down ratio of 100:1. Metering performance is reproducible to within $\pm 2\%$ of maximum capacity.
- Stroke Frequency Max SPM: 125
- Stroke Frequency Turn-Down Ratio: 10:1

- Stroke Length Turn-Down Ratio: 10:1
- Power Input:
 - 115 VAC/50-60 HZ/1 ph
 - 230 VAC/50-60 HZ/1 ph
- Average Current Draw:
 - @ 115 VAC; Amps: 1.0 Amps
 - @ 230 VAC; Amps: 0.5 Amps
- Peak Input Power: 300 Watts
- Average Input Power @ Max SPM: 130 Watts



AGRIFLOW IRRI-MAX™

Features & Benefits

- IRRI-MAX is a unique and powerful dispersant formulation. It provides reduced emitter clogging and improved water flow. IRRI-MAX is a concentrated formulation that is continually injected into your mainline irrigation.

- Available in by the drum or gallon



MISTER MIST'R®

Features & Benefits

- The Mister Mist'r® uses a four-way spray that instantly atomizes the chemical being injected into the irrigation stream. The result is complete suspension through your entire irrigation system.
- Mister Mist'r also serves as a positive two-way check valve to prevent backflow of water into the system. This also prevents accidental leakage of chemical into the mainline water stream during shutdown.
- Moving parts are continually cleaned by moving water, ensuring a long life.
- Plastic models are suitable for use in 6-12" diameter pipe and can handle up to 110 GPH.
- Stainless steel models are designed for high volume applications of up to 300 GPH. They are also available for use in a wide range of pipe diameters.



REMCO PROFLO SERIES PUMPS

Features & Benefits

3300 Remco ProFlo Series Pumps

- 3 chamber diaphragm pump

5500 Remco ProFlo Series Pumps

- 5 chamber diaphragm pump



3300 Series



5500 Series

Model Number	Description	Max GPM @ 50 PSI *	Max psi	Max AMP
3323-2I1-52D	1.5 gpm REMCO PUMP, 100psi, 115VAC	1.5	100	10.00
5537-1I1-65C	3.4 gpm REMCO PUMP, 100psi, 115VAC	3.4	100	22.00
5537-1E1-82B	3.4 gpm REMCO PUMP, 60PSI 12VDC	3.4	60	22.00
5538-2F1-94A	5gpm REMCO PUMP, 100psi, 12VDC	5.0	100	22.00

* Flow rate is calculated by water.

JOHN BLUE E-Z METER & IN SERIES FULL RANGE

Features & Benefits

- E-Z Meter pumping cylinders can be mounted in parallel for large volume applications or for injection of two non-compatible products. A simple change of stroke length sets the precise flow to be injected.
- Full Range fert pumps have all working parts totally enclosed for maintenance free service. All wetted parts are constructed with corrosion resistant stainless steel to ensure optimum performance over

many years of service. Rates are easily adjusted with the dial pointer located on the side of the pump, which changes the length of the stroke. Depending on the pump model, units are available with 3/4 or 1 1/2 HP motor and gearbox.

CDS Meter	GPH	Power Type	Max Pressure
E-Z Meter (Single Piston)	5 - 100	12V, 110/220 1ph, 220/440 3ph	150 psi
E-Z Meter (double piston)	100 - 200	12V, 110/220 1ph, 220/440 3ph	150 psi
In Series Full Range	1.6 - 470	110/220 1ph, 220/440 3ph	120 psi



E-Z Meter		Full Range Injection Pump	
Power Source	Model	Model	Phase
Belt Drive	01620 01622 01623 01630 01633	IN-11610	Single
	02620 02622 02630 02633		
	10620 10622 10623 11630 10633		
	20620 20622 20623 21630 20633		
	30622 30623 30630 30633		
Honda Engine		IN-11630	Three
110-220 Volt, 1ph		IN-23510-NGP	Single
220-440 Volt, 3ph		IN-23530-NGP	Three
12 Volt DC Motors		IN-47010-NGP	Single
		IN- 47030-NGP	Three

DEMA MIXRITE 500 SERIES, TF10 SERIES, & TF25 SERIES

Features & Benefits

- MixRites are water driven injectors that use water pressure as the power source, not electricity.
- A proportional amount of additive is injected into the water line regardless of flow variation, creating a homogenized solution.
- All seals are designed to withstand harsh chemical additives and the body is made of a chemically resistant nylon-fiberglass body.

Model	GPH	Power	Max Pressure
500 Series	.08 - 11	Water Drive	2.9 - 120 psi
TF5 Series	.88 - 22	Water Drive	2.9 - 120 psi
TF10 Series	2 - 45	Water Drive	14.7 - 120 psi
TF25 Series	4.4 - 110	Water Drive	14.7 - 120 psi

Model Number	Induction Rate	Chemical Shut-off	Available Models
569	.1% to .9%	Yes	CW, CL, PVDF
571	.3% to 2%	Yes	CW, CL, PVDF
574	.3% to 10%	No	CW, CL
TF5-005 ON/OFF	.3% to 2%	No	
TF10-001	.1% to 1%	No	ON/OFF
TF10-002	.2% to 2%	No	ON/OFF
TF10-005	1% to 5%	No	ON/OFF
TF25-001	.1% to 1%	No	ON/OFF
TF25-002	.2% to 2%	No	ON/OFF
TF25-005	1% to 5%	No	ON/OFF



500 Series



TF5 Series



TF10 Series



TF25 Series

DOSATRON D14MZ2, D45RE15, D8R, D20S

Features & Benefits

- Dosatron fert pumps are water-powered and non-electric.
- They are accurate regardless of variations in flow and pressure.

- Dosatron fert pumps are easy to adjust with the ability to change fert injection ratios with just one external adjustment.

Model	GPH	Power	Ratio	Max Pressure
D14MZ2	0.05 - 14	Water Drive	1:500 - 1:50	4.3 - 85
D45RE15	0.4 - 20	Water Drive	1:500 - 1:66	7 - 70
D8R	2.2 - 40	Water Drive	1:500 - 1:50	2 - 110
D20S	5 - 100	Water Drive	1:500 - 1:50	2 - 120



D14MZ2



D45RE15



D8R



D20S

MAZZEI 384, 584, 1078, & 1583

Features & Benefits

- Mazzei's chemigation technology delivers a uniform distribution of chemicals and fertilizers within the irrigation water.
- No electrical connections needed.
- Mazzei Injectors offer the advantages of an easy to maintain non-mechanical system.
- Mazzei Injectors are designed for vacuum transfer of irrigation chemicals, they provide safe chemigation.



Model	Motive Flow GPM	Suction Rate GPH
384	0.7 - 3.5	2.1 - 11
584	2.1 - 10.2	10 - 32
1078	5.5 - 26	2.7 - 94
1583	10.7 - 48	53 - 232

VERTICAL FERTILIZER TANKS

Features & Benefits

Vertical tanks are strong and versatile enough for your bulk storage needs. Available in a variety of styles and sizes from 65 gallons to 16,500 gallons. These vertical tanks feature stable, flat bottoms, maximum drainage siphon assemblies and molded-in tie down lugs. Most standard size is a vertical 2500 gallon tank with a diameter of 90" and height of 107".

Full hook up and suction assemblies available.



TWINE*

Features & Benefits

Polypropylene Twine is great for a wide variety of crops in both field and greenhouse production. 3-lb box, 2100-ft/lb

Specifications:

- Twisted Polypropylene Twine
- UV stabilized
- Standard product 2100 ft/lb white.
- Twine is also rot and mildew resistant and can be safely stored for extended periods.



* Not a stocked item. Order ahead.

STAKES*

A variety of sizes and types of wooden stakes offered.

- Tomato & Pepper stakes.
- Honduran Pine agricultural stakes.
- Untreated or Treated stakes.
- Blunt or pencil pointed.
- Rough sawn.
- String-tied sub-bundles for easy handling.



* Not a stocked item. Order ahead.

PVC PIPE & FITTINGS

PVC Pipe is available for order or pickup at our branch locations in a range of sizes.

- Gasketed & Bell End Styles
- Schedule 40 & Schedule 80 available
- Sizes range from 1/2" - 12".
- Larger sizes available upon request.

TriEst carries Spears & Westlake Pipe & Fittings. Brands may vary by location.



WELD-ON PIPE CEMENTS

- Weld-On® cements have the widest range of high-strength, Low VOC solvent cements for every PVC application, for rigid as well as flexible PVC pipe and fittings.
- Low VOC cements are environmentally friendly with lower emissions and reduced odor, and they surpass the most stringent regulations.
- Available in:
 - Regular, Medium, Heavy & Extra Heavy



ANDROS CAST AGGRESSIVE TIP TAPE LAYER

Features & Benefits

- This Cast Aggressive Tip Tape Layer can be used on tool bars pulling planters and bed-shapers.
- The aggressive tip helps pierce tough soils allowing maximum ground penetration.
- Hi-Chrome construction with a narrow profile.
- 3/4 X 2 1/2 Plow bar.
- Easy access tape shoe inspection.
- 0" - 6" depth.



ANDROS UNIVERSAL COUPLER TOOL

Features & Benefits

- Safe and efficient method for injecting drip tape that has been spliced together with mechanical couplers.
- Allows a coupler to be injected smoothly up to depths of 12 inches.
- Large plastic shoe allows the coupler to make the 90-degree turn into the ground without pinching the tape.



ANDROS COIL RETRIEVAL SYSTEM

Features & Benefits

- The Coil Retrieval System mounts to any tool-bar using standard clamps.
- Available with either open or closed center hydraulics, the coil retrieval option can run in single or multiple head configurations using the tractors auxiliary hydraulics.
- The system has a speed control that allows the operator to control tension and speed of retrieval.



ANDROS MEGA BINDER RETRIEVAL IMPLEMENTS AND TRAILERS

The Andros Mega Binder drip tape retrieval equipment is designed to efficiently retrieve drip tape, heavy wall dripper lines, and agricultural plastics. In addition to the high efficiency, this drip tape binder creates large, dense rolls that are the ideal size for logistics and recycling programs.

- Mulch, greenhouse plastic average roll weights: 1,500 lbs.
- Acres per roll (drip tape): 8-12 acres (depends on density of drip tape in the field)
- Time to create one roll (drip tape): 0.75-1.5 hours

Features & Benefits

- Level-wind system
- Hydraulic system
- Hydraulic dump
- Safety bar – Integrated safety shutoff switch
- Power supply (depends on model)
- Spare tire
- Twine dispenser
- Tilt/rolling bed (LRV Model)
- Hydraulic Jack (LRV Model)
- Gas tank: 7 gallons
- Drip tape roll weights: 750-1,000 lbs.



REDDICK EQUIPMENT COMPANY SINGLE ROW MULCH LAYER LINEUP

RMC-172

The RMC-172 is the flagship of our single row line. This time-tested design recently went through a few manufacturing changes but the basic principles remain the same. It will accommodate up to 60" plastic and can be customized to fit your operation.

RMC-160

The RMC-160 offers all of the same benefits of the larger, classic mulch laying equipment, just in a compact version so that it can be pulled by a smaller tractor. This is great for smaller farms or U-Pick operations.

Features & Benefits:

- Quality manufacturing with precision laser cut components.
- New simplified design for ease of adjustment.
- Available single drip or double drip tape rolls.
- Adjustable gathering blades.
- Adjustable UHMW lined press pan.
- Replaceable sides on the pans.
- Press pan outfitted with bolt-on kick out wings.
- Adjustable four axis press wheels and covering discs.
- Adjustable plastic roll bed to accommodate a wide range of plastic widths.
- Operator seat mounted on the rear for better access to component.
- Floating crown roller to maximize plastic adherence to the bed.



REDDICK EQUIPMENT COMPANY RMC-100 HOLE PUNCH

This plasticulture hole punch is equipped with spiked wheels. The hole puncher goes over the bed to perforate the plastic mulch film before bare root or plug settings.

Features & Benefits:

- Cat. I or II 3-point hitch frame
- 2 to 4 spiked wheels depending on the number of rows
- Different spike size & spacing according to the type of transplants
- Adjustable gauge wheels for proper bed alignment
- Front stands for storage



REDDICK EQUIPMENT COMPANY RMC - 460 WATER WHEEL

The RMC-460 comes standard with a 3-point quick hitch ready, 150 gallon poly tank, two seats, tray racks (18 trays), and one planting wheel.

Standard Sized: 12", 15", 18", 24", 30", 36", 42", 48", & 60"

Additional Options

- Extra 3rd Row Rack (Adds 18 Additional Trays)
- Extra 2 Seat Assembly (To Seat 4 People Total)
- Additional Planting Wheels
- Planting Wheel Guide



REDDICK EQUIPMENT COMPANY RMC-105 MULCH LIFTER

This mulch lifter is designed to lift various sizes of mulch with minimum adjustments one row at a time. The concept is simple. Use the dirt lift the plastic and you decrease the opportunity for tearing. The design allows for minimal tuck ripping, for a better lift, saving you time and money.

We also offer a three-row mulch lifter model, RMC-305. This machine is sold as a 72" center machine, but can be adjusted down to a 60" center operation

Features & Benefits

- Quality manufacturing with precision laser cut components
- Simplified design for ease of adjustment
- Adjustable to varying row spacing
- Cutting coulter to split residue in front shank
- Lifting fingers on rear of lifting blade
- UHMW lined frog on foot for increased lift



REDDICK EQUIPMENT COMPANY RMC-10.5 PLASTIC PULLER

The RMC-10.5 Plastic Puller is designed to reduce the labor cost of removing plastic mulch and drip tape from your field.

After lifting your plastic mulch with our Reddick RMC-105 lifter, removing the plastic from the field is made easier with the RMC-10.5 Plastic Puller.

The hydraulically driven spindles retrieve the plastic as you drive, then swing out to release.



REDDICK EQUIPMENT COMPANY RMC-360 MULCH LAYER

RMC-372R/RMC-360R

These two models are built tough for the grower that wants to get in and get out. These machine takes the efficiencies of the RMC-172 and RMC-160 and multiplies it by three. These are both rigid frame layers that are setup for growers on 72" or 60" centers. These units are paired with the RMC-372PB and the RMC-160PB pre-bedders.



RMC-360R

RMC-372PB/RMC-360PB

These two pre-bedders are used in front of our conventional three row rigid layers to pre-form and incorporate fumigants into the beds in front of the rigid layers. They consist of a tool bar with three sets of gathering blades and three press pans. These usually are outfitted with fumigation knives which are optional. The 372PB is for 72" centers and the 360PB is for 60".



RMC-360PB

RMC-372F/RMC-360F

These models are our float frame three row layers that are setup for 72" and 60" centers. These machines were designed for growers who have undulating land and cannot implement a rigid frame machine. These units are essentially three of our single row machines attached independently to three row tool bar. This design allows each unit to move independently when needed to ensure a proper tuck on the plastic. Unlike the three row rigid machines, these units do have gathering blades and do not require a pre-bedder.



RMC-360F

Features & Benefits

- Quality manufacturing with precision laser cut components
- New simplified design for ease of adjustment
- Available single drip or double drip tape rolls
- Adjustable gathering blades
- Adjustable UHMW lined press pan
- Replaceable sides on the pans
- Press pan outfitted with kick out wings
- Adjustable four axis press wheels and covering discs
- Adjustable plastic roll bed to accommodate a wide range of plastic widths
- Operator seat mounted on the rear for better access to components
- Floating crown roller to maximize plastic adherence to the bed

REDDICK EQUIPMENT COMPANY S5 SPRAYERS

Reddick's legendary S5 Bridge Boom Sprayers offer flexibility in the field with a heavy-duty compact design.

Standard Features:

- Heavy-duty tubular frame fits category II or III quick hitch
- Choice of 200, 300 or 400 gallon capacity poly tank-bridged boom arms. Three pieces of square tubing trussed
- Stiff arm connecting boom arm to back frame
- Boom mounted shock absorbers

- High volume in-line strainer
- Qj300 quick-jet no-drip nozzle bodies with diaphragm checks
- Visiflo nozzles for insecticide and fungicide spraying hydraulic cylinders for boom fold and hydraulic hose package with restrictors



REDDICK EQUIPMENT COMPANY IN-LINE/ SINGLE TUBE SIDE MOUNT TANKS

Reddick's In-Line/Side Mount Tanks are designed to allow the tanks to be mounted parallel to the direction of travel, making the assembly more compact and easier to transport.

Standard Features:

- Straight Frame or 8" Drop Frame Available.
- Component Parts Options
 - Conversion Kit to Mount Existing Saddles & Bands
 - Side Receiver Plates & Braces Only
- Pumps & Control Kit Options



REDDICK EQUIPMENT COMPANY FRONT MOUNT TANK ASSEMBLIES

Reddick's front-mount tank and frame assemblies bolt together to accommodate tractors with different frame widths and designs no longer is it necessary to commit one tractor to front-mount applications. Select from straight or drop frame designs. Then select a tank assembly.

- Front Tank Assembly options from 150 - 300 Gallons
- Pumps & Control Kit Options



REDDICK EQUIPMENT COMPANY 110 GALLON HP 3PTH SPRAYER

Reddick's high pressure fruit and vegetable sprayer with 3-point hitch is designed for disease and insect control.

Standard Features:

- Udor High Pressure Diaphragm Pump
- Adjustable Jet Agitation
- High Pressure Manual Control Valve
- High Capacity Suction Strainer
- Adjustable Pressure Regulator
- Break-A-Way Boom Assembly *
- Liquid Filled Pressure Gauge
- Brass Boom Fittings for High Pressure
- Two Separate Boom Control Levers

- Hi-Volume 1/2" ID, 600psi Boom Hoses
- Frame Mounted Pump w/ Drive Shaft
- Large 10" Fill Well & Vented Lid

* Standard Boom Assembly set-up to spray: 3 Beds on 5-6' Center



REDDICK EQUIPMENT COMPANY DITCHERS

Eliminate most shovel work and cut more uniform ditches with reddick hydraulic drive ditcher. Designed to cut a smooth ditch that can be crossed easily with harvest equipment. Combine headers can remain close to the ground without scooping dirt, as with a plowed, drain furrow. Dig ditches with a single or multiple passes using Reddick's adjustable skid plate. For convenience a built-in parking stand holds the ditcher upright for easy connection to your tractor

Specifications:

- Works with open or closed center hydraulic systems
- Requires 20 gpm hydraulic flow rate
- 18" Cutter wheel with 3 heat treated blades
- Heavy-duty frame with cat. II & 3N hitch pins
- Soil shields for even dirt distribution
- Depth control with rear slide & 3-point hitch center link adjustments





PLANT NUTRITION

LIBERTY ACRES FERTILIZER

Liberty Acres Fertilizer is a leader in the nutrition industry with nearly 30 years of experience in fertilizer production. They take great pride in providing full spectrum plant nutrition solutions for all production systems. They specialize in high value vegetable and fruit crops, turfgrass, and seedling nurseries and offer fertility products directly to the consumer. Liberty Acres Fertilizer's dedication to customer service, quality products, and growing solutions make them a great partner to TriEst Ag Group.

LIQUID FERTILIZERS



Liberty Acres Fertilizer

Fertigation grade liquid fertilizer blends manufactured for use in drip fertigation systems. Every order is custom blended and filtered to ensure the product stays in solution, resulting in a clean blend that is shelf-stable.



Ground Control Fertilizer

Ground Control Fertilizers are designed to provide growers more options and control over their fertility in adverse conditions of heavy rainfall, cool soil temperatures, or crop stages that make fertility applications difficult. The product focuses on providing a complete fertility package as a blended liquid to be used as alternative to traditional liquid nitrogen fertilizers. They can be applied through drip fertigation, direct-to-ground or over the top applications. All Ground Control Fertilizer blends are manufactured to fertigation grade.

Liquid Blends Available in:

275-Gallon totes

Truckload Quantities (half or full load)

We offer bulk and tote storage options as well as utilizing current on-farm storage.

For more information on available standard blends or to create your own blend please contact your local TriEst Sales Representative.

SCAN TO LEARN MORE
ABOUT PLANT NUTRITION:



FOLIAR & ORGANIC NUTRITION

Metalosate® Power by Albion® Technology

Balchem's Metalosate Liquid Foliars and Organic Soluble Powders Powered by Albion® Technology use natural amino acids to chelate the minerals, they are rapidly absorbed, translocated, and metabolized by plants upon application. Balchem's unique patented manufacturing process and formulations ensures your plants will get the most readily absorbable, highest quality nutrition available.

Metalosate Liquid Foliars tank mix well with most crop protection chemicals. Since there are no solubility problems they will not settle to the bottom of tanks or clog screens and nozzles.

ViaTrac Fertilizers

ViaTrac Fertilizers are made of naturally composted broiler litter. The finished product are 3/16 extruded pellets. They are small enough to be utilized in most broadcasting applications, but also hold their shape for a sling factor. Specific density of the pellets is around 48 pounds per cubic foot.

OMRI Certified pelletized broiler litter
Available in 1-ton super sacks in 21-ton loads

Liquid Foliars available:

- 2.5 gallon jugs or 275 gallon totes

Organic Soluble Powers available:

- 44lb bag quantities



GRAFTED PLANTS



Strong Roots. Strong Plants.

Tri-Hishtil is an international partnership of TriEst Ag Group, Inc. in the USA; Israel-based Hishtil, and Italian-owned and operated SIS/Centro SEIA.

Together, they bring decades of worldwide agricultural experience in plant-grafting, production, and soil management.

Tri-Hishtil is devoted to growing high quality grafted plants that offer growers soil borne disease resistance and positive yield effects. They specialize in the greenhouse production of grafted vegetable plants with a focus on watermelons, tomatoes, cantaloupes, peppers and eggplants.

The Advantages of Grafted Plants

- A reduction in crop rotation measures
- Increased vigor of the plants (and subsequently the actual yield)
- A reduction in susceptibility to soil-borne diseases
- The potential to reuse farmland restricted from fumigation use due to regulations

Grafted Watermelons

- Fusarium Wilt Resistance
- Decrease in field rotations
- Decrease in plant population
- Superior plant and fruit quality
- Longer harvesting window
- Positive effects on yield
- Decrease in occurrences of hollow heart
- Nematode resistant (rootstock dependent)

Grafted Tomatoes

- Bacterial Wilt tolerance
- Fusarium Wilt and other soil born disease tolerance
- Nematode tolerance
- Decrease in field rotations
- Increase in fruit size and quality
- Positive effects on yield
- Rootstock varieties available for open field, high tunnel, and greenhouse growers



GRAFTED PLANTS

**SCAN TO LEARN MORE
ABOUT GRAFTED PLANTS:**





PO Box 448
Greenville, NC 27835