



A FULL SERVICE IRRIGATION, WASTE WATER, & DRAINAGE SOURCE



www.irrigation-mart.com

**Buyer's Guide 2021** 

# 2021 Buyer's Guide

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#### **About Us**



Irrigation-Mart was established in 1978 and incorporated in 1989 as Robbins Association/Irrigation-Mart Inc. We are a closely-held company with well-trained employees, including certified irrigation designers, agronomists, landscape horticulturalists, agriculturists, and registered professional engineers. We stock irrigation and related products from well over 200 manufacturers in our 2-acre warehouse. This ensures that orders can be shipped in a timely manner to customers worldwide via UPS, FedEx, USPS, and motor freight. We service the United States, Mexico, and Central and South America. In addition to being a full-line irrigation dealership, we offer plasticulture equipment and agricultural chemicals/fertilizers. We offer complete system design, including operational recommendations. Our strength comes from our in-depth understanding ("SAVVY") of irrigation and related technologies.

# **Helpful Information**

#### **Descriptions:**

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.

It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing.

Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

Characteristics:					
Type:	9254	Ra:	>80		
Tube type:	T3 - 9mm	Current (mA):	105 mA		
Power:	15W	Color:	ALB - CALD		
Base:	E27	Life hours:	8000 ore		
Tension:	230V	Color temperature:	2700K		
Frecvency: 50Hz		Luminuous (Lm):	900 Lm		

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#### **Controllers**









#### **Netafim NMC Pro System Manager**

The NMC Pro System Manager does more than open and close irrigation valves - it integrates all of your control features in one easy-to-use unit. Operate, monitor, and maximize the performance of your irrigation system from one central location.

#### Features & Benefits

Irrigation Programs

Repeat and modify your irrigation schedules as needed - with up to 60 valve run time programs using time or volume based scheduling Irrigation Trigger Programs

Up to 15 external condition programs with programmable parameters for triggering irrigation events

Pump Control Programs

Control multiple pumps, delay start or shut down times between pumps and valves Filter Flushing Programs

Schedules backflush programs eliminating the need for additional external backflush

controllers Fertilizer and Nutrient Injection Programs

A range of dosing options are available - by time, quantity or proportional along with detailed alarm messages

Cooling Programs

Programmable parameters including set points for activating cooling systems Alarm Programs

A range of alarms protects the system by isolating the problem and providing event

#### Specifications:

Up to 256 Control Outputs Up to 32 Digital Control Inputs Up to 22 Analog Control Inputs 15 Irrigation Programs 8 Dosing Channels Flushing up to 24 Filters Coolings Fertigation by Time, Quantity, Proportional Time or Proportional Quantity History of Water and Fertigation Events EC/pH Control PC Communication

#### Optional Kits for Fetilizer Injection and EC/ pH Control

If you are not using an all-in-one injection and dosing unit like the Netafim NetaJet, optional control kits can be used to control fertilizer and chemical injection and monitor and control EC and pH levels through the NMC Pro System

#### **Netafim NMC Junior Pro System Manager**

#### Specifications:

OUTPUTS

15 Flexible Outputs - configured according to the field application Up to 15 valves (irrigation/cooling/misting)
Up to 6 booster pumps Up to 1 main valve Up to 8 fertilizer dosing channels
Up to 3 agitators
Up to 15 backflush filter valves

INPUTS

6 Digital Inputs
For water meter, fertilizer meter or pressure switch
5 Analog Inputs For EC, pH, temperature x 2 and relative humidity x 2

Based on a dosing program, a water runtime program and an irrigation program. The irrigation starts by either time, conditions, VPD sum and radiation sum.

Filter Flushing: Starts according to time and/or delta pressure.

Based on time and the actual temperature and relative humidity sensors.

Misting: Starts at a scheduled time. This program can also be used as a simple timer program.

Automation maximizes your irrigation investment by allowing you to leverage the full capacity of your irrigation system. Research with both permanent and annual crops has shown that irrigation and fertilizer application in a well-managed system provides the highest yield and quality responses. Automation allows you to schedule, operate and log your actions and remain secure in the knowledge that the irrigation and fertigation schedules you set will occur when and how you expect.

The NMC Junior Pro is an economically priced, multi-functional irrigation controller for small and medium applications. It's a modular controller with 15 flexible outputs that operate your entire irrigation system improving irrigation efficiencies and fertilizer injection functions. NMC Junior Pro operates, monitors and maximizes the performance of your irrigation system.

Improves plant response through timely irrigation and fertilization Maximizes nutrient availability (especially in subsurface drip irrigation) by maintaining

appropriate irrigation water pH Achieves high system uniformity through continuous treatment preventing emitter

Reduces and/or optimizes water, energy, labor, chemicals and fertilizer inputs

#### Features & Benefits

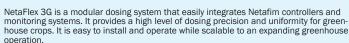
A modular, cost-effective multi-functional controller Operational versatility with local PC software or mobile/web remote control with NMC Air

Precise EC and pH control and monitoring for improved fertilizer availability. Friendly and simple user interface with large graphic LCD display which is easy to read and easy to program.

Real-time and historical records help you evaluate and manage the irrigation system. Removable program memory back-up key keeps all programs safe and secure eliminating reprogramming to restore settings.
Upgrade kit available to convert NMC Junior to NMC Junior Pro.



#### NetaFlex 3G



#### FEATURES & BENEFITS

A modular, cost-effective Nutrigation™ system for soil and substrate applications.

Precise Nutrigation™ based on high accuracy dosing channels with recipes that can be changed quickly and efficiently.

Allows efficient use of water, fertilizers and energy.

Designed for any application where quantitative or proportional Nutrigation™ is required. Venturi operation principle with few moving parts.

Fits into an existing irrigation system and it's easy to install and maintain. EC and pH sensors ensure the most precise and accurate injection rates.

High-quality components and PVC piping with an aluminum, corrosion-resistant frame and adjustable legs

A variety of accessories and peripherals can be integrated into the NetaFlex to enhance its functions

Up to 6 Fertilizer/Acid Dosing Channels pH Regulation with Acid and Alkali Dosing Channels

Dosing Channel Flow Rate: 1 to 158 GPH Up to Two EC and Two pH Sensors Ten Fertigation Recipes – with recipe selection for each irrigation shift

Pre-assembled with Netafim NMC Pro Con-

System Flow Rate: 13 to 282 GPM System Pressure: 29 to 100 psi Optional Remote Access and Monitoring through NMC Air

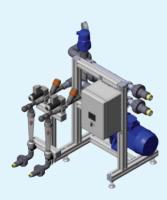


#### Controllers









#### NetafimFertiOne Plus

The FertiOne Plus is a fully configurable, simple to operate two channel fertilizer/acid dosing unit. It's the perfect solution for open field sites fitted with electricity where injection of up to two fertilizer solutions is needed. It ensures the highest efficiency and can be connected to any external 24VAC controller.

Features & Benefits A cost-effective Nutrigation™ system for soil applications with minimal investment.

A cost-effective Nutrigation™ system for soil applications with minimal investment. 
Efficient use of water, fertilizers and energy. 
Venturi operation principle – few moving parts. 
Fits into an existing irrigation system and it's easy to install and maintain. 
Precise Nutrigation™ based on high accuracy dosing channels. 
Made from high-quality components and PVC NPT Schedule 80 with an aluminum, corrosion-resistant frame and adjustable legs. 
Visual flow meters and adjustable needle valves provide accurate dosing control. 
Connection to an NMC Controller or other 24VAC controllers allows advanced Nutrigation control.

Easy to install and maintain. Included Components

Two Venturi operated dosing channels Quick action 24VAC dosing valve Pressure gauge Stainless steel dosing booster

Continuous acting air vent Check valve

Ones walve
Dosing booster switch box with motor protection
Visual flow meters with adjustable needle valves
High-quality components and schedule 80 PVC piping
Aluminum, corrosion-resistant frame with adjustable legs

Applications

Open Field Crops and Orchards

#### Specifications:

Supports up to 80 psi mainline pressure 2 dosing channels up to 158 GPH 24VAC electric dosing channels with manual

440VAC three phase pump with onboard motor protection and 24VAC remote start relay For other technical specifications, contact Netafim USA

#### Netafim FertiKit 3G

#### Specifications:

Up to 4 dosing channels: 13 – 95 GPH Total fertilizer/acid suction capacity; 380 GPH NPT connections for easy assembly. For other technical specifications, contact Netafin

The FertiKit 3G is a fully configurable fertilizer/acid dosing unit. It can accommodate a variety of dosing channels, dosing boosters, NMC Controllers, peripherals and accessories to meet a vast range of applications and infrastructure constraints.

Basic functions include controlled mixing of fertilizers/acids with source water into a homogeneous nutrient solution, EC/pH correction of nutrient solution and water pre-treatment.

Features & Benefits

A modular, cost-effective Nutrigation system for soil and substrate applications with minimal investment.

Efficient use of water, fertilizers and energy.

Unrivaled range of irrigation water capacities. Designed for any application where quantitative or proportional Nutrigation is required.

Venturi operation principle - no moving parts.

Fits into an existing irrigation system and it's easy to install and maintain. Precise Nutrigation based on high accuracy dosing channels with recipes that can be

changed quickly and efficiently. Made from high-quality components and PVC NPT schedule 80 with an aluminum, corro-

sion-resistant frame and adjustable legs. Pre-assembled with NMC Pro Controller and NMC Air.

A wide variety of accessories and peripherals can be integrated into the FertiKit to

enhance its functions.

Field-proven in all environmental conditions.

Operating Principle

The FertiKit doses the various fertilizer and acids into a homogenous solution and injects

it into the irrigation water mainline. The suction of the fertilizers and acid into the dosing channels is based on the Venturi principle. This requires a pressure differentiation – which is created by the FertiKit booster pump.

Operating Mode

SP - Mainline pressure range of 15 to 60 psi





#### **Netafim Backflush Controller**

The Netafim Backflush Controller is a modular, user-friendly Backflush Controller for Automatic Filters. They are available in several options to fit your specific filtration application in both 24VAC and 12VDCL models. Product Advantages

Modular controller is expandable from 1 to 10 outputs. Adding more outputs is quick and

easy - no tools required.

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

Detection of continuous backflush cycles causes an alarm to sound.

User-friendly LCD display and keyboard.

Ability to manage a downstream pressure sustaining valve.

Flexible settings for pre-dwell, dwell and flush times allows programming to meet system requirements.

#### Specifications:

Outputs: 2, 4, 6, 8 or 10 Voltage: 12VDC Latching or 24VAC

Inputs: 1 Analog PD Gauge or 1 Digital PD

Gauge

Power Source DC Model: 12V Battery or 4 'D' Alkaline Batteries

Power Source AC Model: External Power Supply High-Low PD Hydraulic Connectors Operating Temperature: 32 – 140° F Dimensions: Height 9 1/2", Length 5 5/8", Depth 3 1/4", Weight 1.3 lbs

#### **Controllers**







#### Alex-Tronix Backflush Controller

The Alex-Tronix Backflush Controller is available in several options to fit your specific filtration application in both 24VAC, 12VDC and 12VDCL models. Product Advantages

Standard features include a pressure differential switch, flush time setting and dwell

time setting. Quick and easy programming.

Some controllers have counters and alarm settings.

#### Specifications:

Outputs: 2, 3, 4, 8 or 12 Voltage: 12VDC, 12VDC Latching or 24VAC Refer to manufacturer's instructions for



#### **Toro Evolution AG Series Controller**

Number of Stations: 4 to 16 stations with 4- and 12-station hot-swappable modules

Number of Programs: 3

Number of Start Times: 4

Run Time: 1 second to 24 hours

Programming Options: Fertilizer Programming; Pulse Irrigation; Misting & Propogation (Looping)

Surge Protection: Output: 6.0 KV common mode, 3.5 KV normal mode; Input: 7.0 KV common mode 7.0 KV normal mode

Output Power: 24 VAC; 1.0 amps total load

Specifications: Market demands, weather patterns and resource availability change every day, so preci-Power: 120 VAC sion agriculture practices must evolve to stay ahead. Growers want to use their valuable water, labor, & fertilizer resources to their best advantage.

Dimensions: 11 1/4" W x 7 3/4" H x 4 1/4" D

Introducing a simple, intuitive and economical controller that gives agricultural and horticultural growers the features they need now! 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.



#### Weathermatic ProLine

- 1600 model shown; 800, 1600i, 1620, 1624, and 4800 also available
- Expandable zone models as small as 4 zones up to 48 zones (PL4800); fixed-zone
- models available
  4 programs, 8 start times per program; zone time programmable from 1 min. to
  9hrs. 55 min.
- Rain/freeze sensor delay programmable from 0 99 hours Large backlit LCD Display; on-site diagnostic abilities
- Non-volatile memory (no battery required)
- Input: 120VAC/60Hz







#### **Controllers**







#### Weathermatic SmartLine

- 1600 model shown; 800, 1620, 1624, 4800, and 4800PE-PED also available Same basic features as ProLine, except with additional Smart Mode Can connect to weather stations for full environmental status and remote control

Specifications:

Need to fill.



Need to fill

#### Rain Bird ESP-Me

#### Specifications:

- 4 station indoor or outdoor models available; expansion with additional station
- Advanced diagnostics and short detection (LCD screen, LED alert)
- Rain sensor compatible

- Non-volatile (100 year) storage memory Remotely programmable under 9V battery power Input: 120VAC/60Hz (also available in 230VAC and 240VAC models); Output:



Rain Bird ESP-ME



Dongle

Rain Bird LNK WiFi Dongle Compatible with WiFi-enabled controllers (such as ESP-Me and ESP-TM2). Download the Rain Bird app and control your system from your mobile device, anytime, anywhere!

# Weathermatic SmartWire

- Converts any SL1600 to a 48-zone controller; easily add on zones to existing
- Allows for master valve or pump start
  Visual display for easy programming, provides visual troubleshooting diagnostics
  Reduces wiring and related labor costs

Specifications: Need to fill





Lightning Arrestor

#### **Controllers**







#### **Tucor RKD**

- Stand-alone, decoder-based Can support from 1 100 stations (12 simultaneously) and 10 programs concurrently
- Integrated diagnostics tests
  Start methods: Auto, Manual by Program, Manual by Station
  Compatible with Rain Sensors and weather sensors
- Input: 120VAC; Output: 24VAC



Specifications: Need to fill



#### **Galcon Mist AC Controller**

Specifications: •

Easy to install and operate

Need to fill.

- Able to irrigate in seconds using a cycle of pre-set minutes Connected to switch-type sensor for optimal performance Especially suited for greenhouses and misting applications
- Irrigation duration from 1 second to 12 hours



#### **Buckner-Superior Sterling**

- 4, 8, 12, 18, 24, 30, & 36 station models available
- 6 independent programs that can run concurrently
- Station timing adjustable in 1 minute (watering) or 1 second (misting) increments Automatic and manual operation
- Input: 120VAC, 50/60Hz; Output: 24VAC





#### **Controllers**









Need to fill

















#### **Galcon DC Controllers**

- Some models contain Bluetooth or WiFi connectivity; just use the app or computer program to program, operate, and monitor the controller Some models are waterproof
- Easy to install, simple to operate
- Ideal for above ground or hose-end installations (depending on model)
  Weekly or cyclical programming
- Uses one 9V alkaline battery
- Single, Four, & Six Stations Semi-automatic or manual opperation
- Available with rain sensor connection

#### Specifications:

Need to fill.

#### **Faucet/Hose End Timers**

#### Specifications:

- Power Options: Battery powered or mechanical (no battery)
  Battery operated models allow unattended on-off operation for extended periods
  Allows multiple irrigation cycles per day or week
  Accessories available to complement the system

- Inexpensive; simple installation and operation; easy to program







#### **Accessories**













# **Crop Monitoring**

# Tensiometers/Probes/Sensors & Meters/Field Monitoring Systems







#### SR, LT, MLT Irrometers

ment for use in medium to heavy soils. Instrument includes a threaded replace-Instrument includes a threaded replace-able tip as well as reservoir, air free gauge chamber and hermetically sealed IRROM-ETER vacuum gauge with dual scale of centibars and kilopascals (0-100 cb [kpa]

The "LT" (low tension) Irrometer is designed for situations where tensions above 30 cb (kPa) are rarely expected. Ideal for very coarse soils and nonsoil container-media or where rapidly changing soil water status needs to be observed. Instrument includes a threaded replaceable (blue) Quick-Flo tip as well as reservoir, air free gauge chamber and hermetically sealed IRROMETER vacuum gauge with dual scale of centibars and kilopascals (0-40 cb [kpa] range).

The "MLT" (Miniature Low Tension) Irrometer is designed for applications similar to the Model "LT" above. Ideal for use with very coarse soils and non-soil container-media. Its compact size and re-placeable "Quick-Flo" tip make it the best choice for green house applications.





#### Netafim NetBeat

NetBeat™ is the first irrigation and fertigation management system to integrate real-time monitoring, smart analysis, and control - in one closed-loop, mobile

It integrates Dynamic Crop Models™ that follows your crop stages and gives real-time irrigation and fertigation recom-

Cloud-based software enables remote support and upgrade SW and remote access, support and updates.

The main control unit (MCU) of the NetBeat<sup>™</sup> system controls - directly or remotely - valves, pumps, filters and other hydraulic components, and it collects field data. The NetMCU communicates with all remote field devices and with the cloud. It is the center of the NetBeat™

The remoteterminal unit (RTU) transmits field data and activates remote system components such as field valves. Can also be used as a repeater to extend communication range.

#### **Ideal Soil Moisture Content**

Field Capacity is the point when water will no longer drain due to gravity. As soil dries, plants have to use more of their energy to obtain water. Soil moisture monitoring will help eliminate the guesswork, avoid damage to plants, and assist in maximizing plant growth and production.



#### Jain Logic Pulse

Pulse keeps an eye on your sustem to ensure it's performing as expected; highlighting problem areas and reporting water use. Pulse intelligently works in the

background, monitoring the pump and filter station tracking pre and post filter pressures, system flow and irrigation events. If anything needs your attention, Pulse will let you know with flexible alerting for you and your team. Pulse will provide regular reporting of water use, irrigation events, pressure variances and system health and delivers it right into your email box, so you never need to go looking for the information you need.

#### **Watermark Monitor** 900M

Automatically records soil moisture readings. This reading history provides a vivid picture of the soil

profile your irrigation practices have created. The data can be evaluated to determine ways to improve irrigation scheduling for optimum results. Individual sensor readings display on the monitor and can be taken manually at any time The in-field display allows you to make on-the-spot checks for scheduling purposes while periodic readings are automatically taken to record the performance history



# Watermark Handheld

Solid state, hand-held, alternating current resistance bridge meter for reading 200SS WATERMARK sensors. Adjustable for soil temperature variations. Touchpad operating panel with LCD display. One meter reads all sensors. Uses one 9V battery.



#### Watermark Soil Moisture Sensors

Sensors - Fully solid state. Will not dissolve in soil. No maintenance required. Automatically compensates for varying salinity levels. Inexpensive and easy to use.



#### Capacitance Probes

Ability to measure soil moisture content, salinity, and temperature at multiple



# Watermark Cellular **Gateway & Battery**

Mounts outdoors at the Monitor for dedicated cellular connection.

Includes Gateway device, battery pack, 5 Watt solar powered recharging panel, ABS enclosure, aluminum mounting plate, 15 ft (4.5 m) cable.

#### **Crop Monitoring Device** Types

#### Tensiometers

Thought of as "dummy roots" because they sense soil moisture tension just like plant roots. Indicates how much energy plants use to draw water.

Can be used with all methods of drip irrigation in all soil/media types and at various depths.

Can help in understanding how to lower plant stress, limit loss of nutrients and other resources, and provide a sound basis for irrigation scheduling.

One service unit is required to maintain all tensiometers; readings can be gathered and transmitted automatically and electronically using a monitoring station.

Available in the following lengths: 6", 12", 18", 24", 36" or 48"

#### **Probes**

Flexibility for precision monitoring of water and salinity at multiple depths (from 10 cenitmeters to 1.5 meters).

Widely used in all forms of irrigated or dryland agriculture; environmental research, applications, and education; and maintenance of turf, parks and gardens.

Multiple sensors (up to 16 in one probe).

Full serviceability, flexible connectivity.

#### Sensors & Meters

Electrical resistance of the sensors changes with soil moisture content.

Easy to use. No maintenance required; accurate for all soil temperatures (not affected by freezing temperatures); portable.

Senors have 5ft. or 15ft. lengths of lead wire (custom lengths available).

Only one digital meter is required to read all sensors; data can be gathered and transmitted automatically and electionically using a monitoring station.

Field Monitoring Stations
Automatically collects and transmits realtime data at set time invervals.

- On-board computer (reliable, relays via cellular or radio signal)
- Weather station (reports local condi-
- tions in & above the crop canopy) Pressure switch (tracks irrigation events)
- Soil monitoring probes
- Solar panel (allows flexibility in station

Irrigation-Mart offers field monitoring stations for sale or lease. For more information, please contact us at 800-SAY-RAIN.





# Filters & Injectors

# Screen, Media, & Disc Filters/Canister, Proportional, & Venturi Injectors















#### Screen Filters

Used to remove inorganic materials. Typically used on well and municipal systems that are relatively clean or downstream of other filters. Options include self-cleaning, various mesh sizes, & choice of stainless steel or polyester screens. Most styles include a quick drain/flush valve.







Strainer











Gravity Screen Filter

Fresno Series 1300 Stainless Steel SYS Filter

#### Media Filters

Used fo rremoval of all types of soilds and organics. Required on micro-irrigation systems that use surface water and/or when significant levels of organics are present. Easy to install and maintain; modular units may be stacked vertically. Automatic backflushing optional and recommended; blackflush water recovery system is also available.

Used for water sources that may contain some organics (like algae); NOT for inorganics (sand). Typically used on clean streams and open bodies of water (such as ponds). Easy to clean; automatic backflushing is optional; many mesh sizes available. Many include portsfor attaching optional pressure gauges.



#### Disc Filters





LP Disc Kleen

**Sand Separators** 

Used as a "pre-filter" to remove heavy particles for a specific range of flows. Installed on the line before other filters when lerge amounts of sand or silt are present. Flow rates from 9GPM; typically produces pressure drop of 7-15 PSI.





320C Injector



12" Cannister 24" Cannister

E-Z Flo 3/4

#### **Proportional Pumps**

Simple installation, loading, and operation. No moving parts (requires less maintenance). Typically used for lawn, garden, and orchard systems. Powered by water flow/pressure. Minimum pressure loss or flow reduction. Corrosion resistant materials. Uses both liquid and water soluble fertilizers. Available in many sizes and capacities.

#### Injector Pumps

Easy to install (requires minimal plumbing work). Motor options range from 12VDC to 120/220VAC, and 1PH or 3PH. Gasoline powered. No pressure loss or flow reduction. May be automated. PUmping rates from 1 GPH. Pump options include diaphragm, piston, or centrifugal. Allows high injection rates when long-duration irrigation is not needed.

#### Venturi Injectors

Water-driven injector (no additional power source needed). Inexpensive to operate. No moving parts = fail safe, reliable operation. High quality thermoplastic construction is chemical-resistant. Versatile and suitable for sprinkler and drip systems. Venturi Injector kits are available (includes all parts needed to instal an injector loop to a mainline). Requires pressure loss.









Mazzei

Savvyject 2

# **Kits**

# Garden/Orchard



#### **GK100-RV**

Includes 100 ft of 1/4" drip tubing (pre-installed emitters) and fittings (valves included) for up to 5 rows. Good for raised beds and small gardens/ landscape areas.



#### GK1000-RV

Includes 1000 ft of drip tape and fittings (valves included) for up to 10 rows.



#### GK2000-RV

Includes 2000 ft of drip tape and fittings (valves included) for up to 20 rows.



#### GK4000-RV

Includes 4000 ft of drip tape and fittings (valves included) for up to 40 rows.

#### Garden and Orchard Kits

Irrigation-Mart's Garden and Orchard Kits include everything needed to hook up to an existing garden faucet or standard water hose. Kits are modular and can be customized as needed. Additional items may be added or substitued upon request including, controllers, injectors, flow meters, pressure gauges and more.

All of our kits come with full assembly and operation instructions. For customization, information, or assistance, please call 800-SAY-RAIN (729-7246) to speak with one of our knowledgeable associates.



Hose End/Figure 8 Closure: Slide closure onto hose. Fold hose over; fit end of hose through other side of closure.





#### Orchard Kit -S

Includes 100 ft of LLDPE poly hose and 25 drip emitters.



#### Orchard Kit -M

Includes 500 ft of LLDPE poly hose and 50 drip emitters.



#### Orchard Kit -L

Includes 1000 ft of LLDPE poly hose and 100 drip emitters.

# **Kits**

# Mist/Propagation

#### Mist/Propagation Kits

Irrigation-Mart's Mist and Propagation Kits include everything needed to hook up to an existing garden faucet or standard water hose. Kits are modular and can be customized as needed. Additional items may be added or substitued upon request including, controllers, injectors, flow meters, pressure gauges and more.

Options include: leak prevention devices (LPD) to prevent system drain down; automation; hanging tubes and weights; injectors; flow meters; sensors; pressure gauges; and more. Kits are modular and may be customized. For more details on each kit, please visit www.irrigation-mart.com.



Includes 100 ft of LLDPE poly hose and 16 foggers.



KIT-FOG-JR Need description.



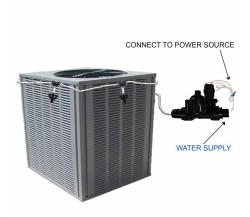
KIT-MIST-LPD Includes 100 ft of LLDPE poly hose, controller, and 15 misters with LPDs.



Need description.



KIT-MIST-DC Need description.



#### KIT-SMART-AC

Smart-AC kit is an automatic misting kit for air conditioning units. The foggers of the kit spray a fine mist of water into the air. The evaporating water cools the air passing across the AC condensing coils.



KIT-SMART-AC-JR

Need description.



KIT-SS

Includes 100 ft of LLDPE poly hose and 50 spray stakes.

#### **Drip Tape**











#### Netafim Streamline™ X

Streamline™ X is the best choice for seasonal row crop irrigation since it offers seamless construction, a low filtration requirement and flap outlet protection which deters soil ingestion and root intrusion.



#### Toro Agua-Traxx®

Aqua-Traxx Proportionally Balanced Cross-Section (PBX) design that optimizes flowpath turbulence to effectively manage water flow, deliver uniform distribution, and reduce clogging.

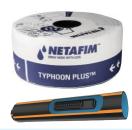


#### Jain Chapin BTF

Chapin has the largest selection of flow rates, wall thicknesses and inlet filtration options available today. The extraordinary reliability and performance of Chapin Tape is attested to by long term Chapin Tape users world-wide.

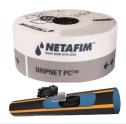


Rivulis T-Tape
Recommended for high value crops and long-term, subsurface irrigation. Designed with an integrated emitter, T-Tape enables closer dripper spacing for more uniform water distribution, a seam for extra strength during retrieval and a slit outlet to help prevent soil ingestion.



#### Netafim Typhoon Plus™

Typhoon Plus drip line set a new standard in clog resistance and enhanced performance. TurbuNext™ technology provides lower flow rates with a large filtration area while maximizing internal water turbulence for superior clog resistance even with challenging water conditions.



#### Netafim Dripnet PC™

The DripNet PC combines the best of both worlds - a pressure compensating dripper in a thinwall tubing. Together these advanced technologies allow irrigation of row crops over hilly terrain with quarter-mile or longer runs at an affordable price.





#### Toro FlowControl®

FlowControl provides you with the flexibility to increase or decrease flow while maintaining a uniform output across changing elevations. Now you have more control over how much water your crops get, especially in long runs or hilly terrain, where water pressure can vary throughout the run.



#### Jain Cascade

Cascade's flat emitters are designed and manufactured using The Cascade Labyrinth Technology, which guarantees higher clogging resistance and superior performance.

#### Why use Drip Tape?

Drip tape slowly, uniformly, and efficiently delivers water and nutrients directly to the root zone. This method mazimizes plant growth and production by limited plant stress, pest problems, weed growth, and erosion. It also conserves energy, water, plant nutrients and pesticides.

#### Things to Consider

Run Length: A low flow drip tape typically reaches farther than medium and high flow drip tapes. Zone Size: More area can be watered with low flow than with high flow; fewer/larger zones usually reduce cost. Determined by pumping rate of the source and by discharge rate of the tape. Pressure: With non-pressure compensating tape, the pressure throughout the system must be



#### Jain Chapin Deluxe

Chapin has the largest selection of flow rates, wall thicknesses and inlet filtration options available today. The extraordinary reliability and performance of Chapin Tape is attested to by long term Chapin Tape users world-wide.



#### Rivulis RoDrip

Drip tape with a unique expanding vortex flow path labyrinth that expands with increased pressure for easy cleaning. If you are new to drip irrigation, or have very poor quality water, Ro-Drip is the answer.

# **Drip Tape Charts**









#### Chart on this page

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.

Characteristics:	
Type:	9254
Tube type:	T3 - 9mm
Power:	15W
Base:	E27
Tension:	230V
Frecvency:	50Hz
Ra:	>80
Current (mA):	105 mA
Color:	ALB - CALD
Life hours:	8000 ore
Color temperature:	2700K
Luminuous (Lm):	900 Lm

# **Drip Line & Accessories**









#### Why use Drip Line?

Drip line is hose with emitters built inside during manufacturing. It is a permanent system with savings in product cost, labor and installation time. Other benefits include: Reduced mechanical damage: There's nothing exposed on the outside of the hose, emitters are pre-installed.

Easy installation: Simply unroll and hook into your system.

Wider applications: Often used with permanent subsurface irrigation (such as orchards). Since it is a permanent use product, drip line is more suited to a larger number of applications.

#### Things to Consider

Hose Size (Diameter): The size of the tubing will determine the maximum length of run of each drip

Emitter type: Flow/discharge rate is selected based on soil conditions, crop/field requirements, plant spacing and flow of water source.

Spacing: The spacing of the outlets

depends on factors such as run length, discharge/ flow rate, water supply flow rate, field slope, soil type and

permeability, plant rooting and growth, etc. In general, a 24" emitter spacing will fully meet a crops requirement. Some orchards with larger trees may require more than one dripline lateral per row. Pressure Compensating (PC) vs. Non-Pressure Compensating: Pressure compensating means that the discharge rate (GPH) is consistent over a wide range of pressures, is well-suited for larger zone application, and is not affected by slope.



#### Netafim Aries ®

Ideal for subsurface drip, orchards, vineyards and field crops in permanent irrigation systems.



#### Netafim Dripnet PC™

Pressure-compensated - ideal for orchards and vineyards.



#### Netafim Uniram™

Designed to handle low water quality and the most difficult environments and topographies.



Jain Turbo Cascade Available in PC, PCNL and PCAS. All purpose versatile product. Suitable for undulating areas.



#### Jain TurboLine PC ®

Ideal for irrigation of closely spaced row crops. Suitable for surface and sub-surface irrigation.



#### Rivulis D900

Thin wall drip line that maximizes run lengths. Solution for single season crops.



#### Rivulis D1500

Outstanding clogging resistance due to its extralarge flow path design.



#### Toro BlueLine® PC

Provides greater resistance to plugging, unmatched durability, and superior flow accuracy.



#### Toro BlueLine® Classic

Provides superior drip irrigation performance, durability and economy in extreme conditions.

# **Drip Line Charts**









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Tube type:	T3 - 9mm
Power:	15W
Base:	E27
Tension:	230V
Frecvency:	50Hz
Ra:	>80
Current (mA):	105 mA
Color:	ALB - CALD
Life hours:	8000 ore
Color temperature:	2700K
Luminuous (Lm):	900 Lm

# **Micro Irrigation**

# **Micro Sprinklers & Micro Jets**













#### Advantages of Micro Sprinklers

- Used in fields, orchards, and nurseries.
- Engineered to provide slow, uniform water application for various location
- Used for irrigation, frost protection, propagation, dust control, temperature
- Typically contain a spinning device that throws water for maximum
- Made from durable plastic to withstand harsh environments.

#### Available Options

- Low angle of throw and large droplet size (maximizes under-foliage penetration and less distortion by wind).
- Anti-insect feature to seal off nozzle when not in operation.
- Available in non-PC, PC (pressure compensating), or CNL (non-leak).
- Break-off deflector tabs that will reduce wetted diameter (can be removed as tree matures).

#### Call or visit our website to see more options

Irrigation-Mart offers many other options and brands. For product-specific technical information please visit our website. Call 800-SAY-RAIN for customized recommendations and designs.

# **Micro Sprinklers**

#### Jain - Modular Group

- Modular Components
- Upright or Inverted
- 9.2 79.3 GPH flow rate @ 30 PSI
- 2.6 34.4 ft wetted diameter
- 4/7" Barb, Quick Thread, 1/2" MPT, 3/8" MPT with adapters
- May be configured as jet or mister

# Nelson

- Slow rotation for greater throw distances
- Upright; some can be inverted
- 9 126 GPH flow rate @ 25-50 PSI
- 14 64 ft wetted diameter
- Connection Options: 1/2" MPT, 3/8" MPT, Quick Change, Female Acme, etc.
- Available with pressure regulation & drain prevention



#### Netafim SuperNet

- Upright, with hanging hook
- 5.3 50 GPH flow rate @ 25 PSI
- 2.3 29.5 ft wetted diameter
- Barb, Quick Connect Thread, 3/8" MPT
- Available in PC

#### Toro

- Upright, with hanging hook
- 7.9 72.8 GPH flow rate @ 20 PSI
- 15.7 36.8 ft wetted diameter
- 3/8" MPT
- Optional removable tabs to increase throw distance
- Available in PC







#### Micro Jets

#### Antelco Single Piece Jets

- Winged base with "quick" thread for rapid and easy installation
- No tools required
- Choice of three spay pattens 360, 180, 90
- Four color coded flow rates

- Upright
- 6 24 GPH flow rate @ 20 PSI
- Eighteen spray patterns available
- Quick thread connection

#### Maxijet

- Some modular units; Upright or inverted
- 9 126 GPH flow rate @ 25-50 PSI
- Multiple spray patterns available; fan spray
- Quick thread connection
- Tree clip configuration available

#### Toro Snap-Jet

- 6 24 GPH flow rate @ 20 PSI
- Eight spray patterns available
- Quick thread connection
- Improved easy grip snap fit deflector plate for easy pattern change and maintenance

#### Toro

- Upright, with hanging hook
- 7.9 72.8 GPH flow rate @ 20 PSI
- 15.7 36.8 ft wetted diameter
- Optional removable tabs to increase throw distance
- Available in PC

#### Misters

- Modular components
- Low operating pressure (<30 PSI) means lower cost of operation
- 7.9 GPH flow rate
- Anti-leak device (hanging system)
- Requires only 150 mesh filtration
- Great for propagation, humidification, and cooling

#### Foggers

- High distribution uniformity
- Propagation, humidification, cooling
- 40 60 PSI operating pressure
- 1.8, 3.6, & 5.4 GPH flow rate Anti-leak device (hanging system)
- Requires only 150 mesh filtration

#### Sprav Stakes

- No run-off (prevents waste); precise application of water and chemicals
- Great for use with top-dressing fertilizers
- Optional pressure regulating assembly
- 3 15 GPH flow rates available

















# **Sprinklers**

#### **Ag Sprinklers**







#### **Wobbler Sprinklers**

Constructed of high-impact grade thermoplastic, the Wobbler gives high uniformity even at low pressures. It is ideal for frost protection, fighting wind, irrigation, limiting evaporation, and providing 360° coverage at all times. Available in low flow, mini, inverted, and low vibration X-cell models.



#### Large Volume Sprinklers

Ideal for use in large fields, lumber and log yards, wastewater distribution systems, and with hard hose travelers. Irrigation-Mart carries brand names such as Komet's Twin series and Nelson's Big Guns.



#### **Nelson Rotator Sprinklers**

Nelson's line includes controlled rate of rotation to maximize the radius of throw. They offer highly uniform distribution patterns, reduced cost, low maintenance requirements, and lessened riser vibration. A modular design, the rotators can be easily customized to the specific requirements of your orchard, vineyard, or field.



#### Brass Impact Sprinklers

Manufactured with heavy-duty brass, bronze, and stainless steel, part- and full-circle impact heads perform reliably for multiple seasons, even under harsh weather conditions. Speed of rotation can be specified, changed, or varied.



#### Plastic Impact Sprinklers

Available in part- and full-circle models, multiple flows, and varied radius of coverage, plastic impact sprinklers are a quick, reliable, and economical way to get water flowing. A wide range of nozzle/ vane combinations gives options for excellent distribution at all pressures. Most plastic impact sprinklers can be mounted directly into a pressure regulator, a check valve, an on/off valve, a saddle, or a pre-engineered plastic female fitting.



#### Sprinkler Accessories

Irrigation-Mart stocks the accessories needed for your sprinkler system, including risers, shields, regulators, controllers, valves, quick keys, swivels, and stands.



#### Blank Poly Tubing and Additional Optional Accessories

Another option is on-line emitters that are manually installed on blank hose. Available in non-pressure-compensating or pressure-compensating (PC). They also may include the CNL feature, which prevents "leak-down" after the irrigation cycle ends; the emitter opens at approximately 10 PSI, and will close near 3 PSI. Available from 0.3 GPH to 6.6 GPH.



#### Polyethylene/vinyl tubing Multiple Outlet Drippers (MOD) and hanging assemblies; small, flexible, transfer tubing



**Netafim WPCJ** (nipple outlet)



Netafim **WPCJ** (barb outlet)



Antelco AgriDrip



Toro NGE (nipple outlet)



Toro E2



Toro TurboKey



#### Angle and Straight Tubing Stakes

For securing the distribution tubing into place and directly applying irrigation to a subsurface area.

# **Hose, Pipe, & Fittings**

# Aluminum, Cam-Loc, Lever-Loc & Pin Lug









#### **Aluminum Pipe Fittings**







Line Reducer









45° Elbow



Valve Opening Elbow



Insert Adapter



End Plug



Ring Lock Clamp













90° Elbow





45° Elbow







Insert Adapter (male)

**Cam-Loc Fittings** 

For quick and easy hose connections. Available in Aluminum, Poly, Brass, and Stainless Steel.





Type B (CLFxMPT)





Type D (CLFxFPT)



Type DC (CL CAP)



Type DP





Type F (CLMxMPT)



Type AA (CLMxCLM)



#### Lever-Loc & Pin Lug Fittings

Used on suction and discharge hoses to make quick, leak-proof, air-tight connections.



Male w/Lever (MPT)



Female x MPT









**EPDM** Gasket



Pin Lug Coupler

# **Hose, Pipe, & Fittings**

# Hose Clamp, Hose Loc, Loc-Eze, Compression, & Tape-Loc Fittings









#### **Hose Clamps** Used to secure hoses to barb/insert fittings.

















**Hose-Loc Fittings** 

Reusable, easy to install, no tools required. Used with LLDPE hose.











Fitting Series Acceptable I.D. Wall Thickness 0.500" - 0.580" 0.035" - 0.055" 55 0.520" - 0.620" 0.045" - 0.055" 0.025" - 0.055" 60 0.580" - 0.675" 70 0.665" - 0.765" 0.035" - 0.055" 80 0.790" - 0.845" 0.045" - 0.065" 1.035" - 1.075" 0.062" - 0.075"

**Loc-Eze Fittings** 

For use on poly hose or drip line. Available in 10mm, 15mm, or 16mm.







Tee x FHS



Male Hose Adapter



Elbow x Slip



MPT Adapter

Used to transition from PVC to LLDPE, or for making hose fittings from PVC fittings.











Compression Fittings







Female Hose Adapter



End with Auto Flush



End Fitting







Compression Adapter (glueable)

Tape Loc Fittings

For use on drip tape.





Barbed Tee







Lavflat Adapter



Female Hose



Coupler











PVC Adapter



End Cap



Male Pipe Thread



Coupler with Valve



Miscellaneous Fittings

Varied; for use on drip tape, drip hose, layflat, or LLDPE supply hose.





















Barbed Coupler

Adapter

Auto Drain

End Cap

Drip Tape End

PVC Pipe Grommet

Mistake Hole

Layflat Rubber Plug

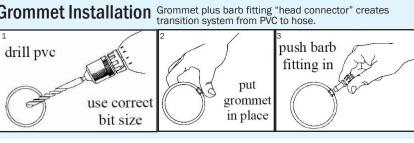
Fittings

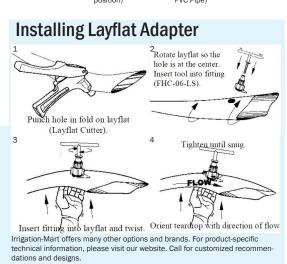
# **Hose, Pipe, & Fittings**

# **Metal, PVC Insert Fittings & Accessories**









# **Geotextiles**

# Woven Ground Cover/Frost Protection/Shade Cloth/Etc.

#### **Woven Ground Cover**

- Guide stripes to help with plant alignment.
- Keeps weeds out; permeable by air and water.
- Resists tearing and puncturing.
- UV stabilized for long life. Tree Squares available (3ft & 4ft).
- Staples used to secure edges.

#### Frost Protection Row Covers

- Protection from frost, freezing temperatures, & insects.
- Lengthens growing season.
- Aids in preventing wind & rain damage. UV stabilized; resists tearing; reusable.
- Custom sizes available.
- Lavs directly over hoops or on plants.
- Sandbags used to secure edges.
- 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.

#### Shade Cloth

- Shades sensitive plants, livestock, and pets; helps to provide wind and erosion control.
- Light blocking percentages available (ranging from 30%
- Different colors available (black, white, aluminet, etc.).
- UV stabilized to hold up under solar radiation.
- Used as anti-insect and anti-pest nets.

- Silt Fencing
  Erosion control for residential and commercial construc-
- Available with or without stakes, in 100 ft rolls.
- Bottom 6" should be buried to prevent sediment from escaping.
- Stakes are 42" tall, spaced 8 ft.
- Stakes should be placed on downside of slope. Can be joined for longer runs.

#### **Double Net Straw Blankets** & Erosion Control Mats

- Used in low-flow channels and on moderate slopes. Stitched and bound with photodegradable polypropylene netting.
- Consists of 100% agricultural straw fiber. Netting has openings of 3/8" x 3/8".

- Degrades in +/- 1 year. 8 ft x 112.5 ft rolls (100 sq yd).

# Deer Fencing & Bird Netting Polyethylene mesh netting. Safe, humane alternative to wire.

- Discourages animals from destroying gardens and
- UV stabilized to hold up under solar radiation.
- Attaches easily to metal or wooden stakes.
- Many sizes available.







Staples available in multiple quantities.





















# **Plasticulture & Hard Hose Travelers**

## Rain-Flo/CropCare Plasticulture Equipment

Picture to be replaced and text to be formatted



#### 2600 Series II Raised-Bed Mulch Layer

- Min: 64" bed centers; 70HP FWD.
- Lays 3 ft 5 ft wide mulch
- Adjustable bed height 5" 9"
- Operator seat
- Poly-lined bed press
- Adjustable row markers & dirt shields
- Spring-loaded shovels on sides loosen soil for cover disk Options include drip tape roll carriers; crowned bed; Auto
- Cat II hitch



#### 2550 Series II Raised-Bed Mulch Layer

- Min: 60" bed centers; 60HP FWD
- Lays 3 ft 4 ft wide mulch
- Adjustable bed height 3" 7'
- Operator seat
- Poly-lined bed press
- Adjustable row markers & dirt shields
- Spring-loaded shovels on sides loosen soil for cover disk Options include drip tape roll carriers; crowned bed; Auto
- Cat II hitch



#### 2400 Series II Raised-Bed Mulch Layer

- Min: 58" bed centers; 40HP FWD Lays 4 ft wide mulch
- Adjustable bed height 3" 5"
- Adjustable tension brake on plastic roll carriers
- Includes water tank to allow weight of layer to be adjusted Compact for high tunnels; Cat I & II hitch



#### 345 Series II Flat-Bed Mulch

#### Layer

- Min: 58" bed centers; 35HP FWD
- Lavs 3 ft 5 ft wide mulch
- Adjustable row markers
- Extra plastic roll carrier; full open back for fast reloading
- Large independent disk, press wheels, & dirt shields Independent leveling blade helps eliminate low spots in beds
- Compact design; Cat I hitch



#### 1800 Mulch Lifter

- Min: 55HP FWD
- Lifts 3 ft 5 ft wide plastic mulch Two spring-loaded vine cutting disks
- Removable center disk
- Heavy shanks have 5/8" safety shear bolts
- Auto-reset option



# 1600 Series II Water Wheel Transplanter Min: 60" bed centers; 50-70HP FWD Row spacing 8" - 36"

- Up to 25 tray carrying capacity (optional)
- Includes 1 quick-change planting wheel, expandable up to 4
- Two adjustable operator seats
- Two 80-gallon tanks; positioned so driver can see riders
- Cat II hitch

Irrigation-Mart proudly sells mulch layers, mulch lifters, and planters from quality manufacturers such as Rain-Flo, Nolts, Cropcare, and Mechanical Transplanter. Please call our experienced sales staff for further information on specific implements, custom recommendations for your fields needs, and orders of non-standard items or replacement parts.



#### 1200 Series II Water Wheel

- Transplanter

  Min: 62" bed centers; 35-60HP FWD

  Row spacing 8" 16"
- Up to 15 tray carrying capacity (option available)
- Includes 1 quick-change planting wheel, expandable up to 2
- Two adjustable operator seats
- Two 50-gallon tanks
- Cat I/Cat II hitch



#### CropCare PR2500 Plastic Mulch Lifter-Wrapper

Combines the lifting and wrapping of plastic mulch into ONE EASY PASS. As it splits and lifts the plastic, it rolls the dirt, vines, and trash to the side and wraps the plastic neatly into rolls that are easy to

- Heavy-duty powder coated steel frame & components
- Easy-to-operate thumb controls
- Attaches to category 1 or 2 three point hitches

# **Plasticulture & Hard Hose Travelers**

#### **Nolts Plasticulture Equipment/Kifco Water Reels**







# RB448 Raised-Bed Mulch Layer RB436 Raised-Bed Mulch Layer LIF250 Mulch Wrapper Min: 30-35HP Min: 25-30HP Min: 25-30HP Min: 20" - 30" wide bed LIF250 Mulch Wrapper 24" wide reel Holds up to 1200 ft plastic tape/mulch

- Lays 3 ft 4 ft wide mulch
- Crowned bed (higher in center)
- Poly-lined press makes smooth seed bed with no pot holes
- Adjustable tension on roll; independent spring-loaded press wheels: dirt shields standard
- Independent spring-loaded cover disks; fully adjustable

- Lays 3 ft wide mulch
- Crowned bed (higher in center)
  Poly-lined press makes smooth seed bed with no pot holes
- Adjustable tension on roll; independent spring-loaded press wheels: dirt shields optional
- Independent spring-loaded cover disks; fully adjustable

- Hydraulic control Removable end plate

- Layer Optional Features
  Ro-Trak (Automatic Steering Correction) Available on Model
  2600 Series II, Model 2550 Series II
  Single or Double Drip Attachment Compatible with all mulch
- Crowned Bed Feature Available on Model 2600 Series II,
- Crowned Bed Feature Available on Model 2600 Series II, Model 2550 Series II Bed Center Fillers Available on Model 2600 Series II, Model 2550 Series II, Model 2400 Mini Layer 400lb Stainless Steel Ground Driven Fertilizer Hopper Available on Model 2600 Series II, Model 2550 Series II

Irrigation-Mart also offers a wide range of planter optional features. Call our experienced sales staff for availability or custom orders of non-standard items.



#### Kifco Water Reels

Kifco's Water Reels are hard hose travelers that are versatile, mobile, and easy to use. Used to irrigate crops, water gardens, maintain athletic and sports fields, suppress dust, dispose of slurry waste, and beautify commercial or residential property. Kifco has a portable, reliable, simple, and affordable Water-Reel to meet any need. Water reels may operate unattended, have variable pull speeds, and can be tailored to specific application requirements. A common option is a gasoline-powered pressure boosting pump.



#### **Electric Drive**

- Booster Pump options 1 HP, 5 HP, 9HP
  DC motor moves sprinkler
  Can irrigate from 0.4 to 2.0 acres per run/pull; up to 449 feet

- per run/pull Flow rate range 3 to 80 GPM



# Bellows Drive Models B110, B140

- Booster Pump options 1 HP, 5 HP, 9HP
  Bellows move sprinkler
  Can irrigate from 0.2 to 1.5 acres per run/pull; up to 449 feet
- per run/pull
- Flow rate range 4 to 80 GPM



#### Turbine Drive

- Various chasses and tube length/diameters available Water flow through turbine moves sprinkler Turbine is precision machined from aluminum or composite
- material for longevity and resistance to corrosion



Enginge Drive Idea for sports field solutions, including chemical cleaners for artificial turfs.

- Model E200SST shown
- Gasoline powered engine moves sprinkler
  Can irrigate paths from 105 to 198 feet; up to 419 foot run/pull
  Flow rate range 52 to 168 GPM
- Multiple booster pump options available



**Ag Rain**Ag-Rain Water Reels are a versatile solution to your agricultural, turf, or waste disposal needs.

Various chasses and tube length/diameters available
Turbine or Engine Driven
Can irrigate from 2.8 to 11.6 acres per run; over a quarter mile

- long reach (maximum) Flow rate range 74 to 695 GPM

# **Valves & Components**

# Need to add text and logos here

Air Vents/Air Vacuum Relief Valves Size based on system flow rate. AVR's help prevent back siphoning, air pockets, collapsing lines, water hammer, and other problems associated with air in irrigation systems.

Kinetic Exhausts air at system start-up; allows air into system





and continues automatic air relief during operation; allows air into the system at shut-down. Venting not as quick as for other types.



Exhausts large volumes of air at system start-up and during operation; allows air into system at shut-down.



Foot Valves & Suction Screens Size based on system flow rate and water quality. Foot valves are screened to protect pumps from large items and to keep













Connection Styles: Threaded, Glue, Flange, and Compression Body Material: Stainless Steel, Cast Iron, PVC, Aluminum, or

Brass Custom options: Self-cleaning screens, self-cleaning foot valves, multiple sizes of screen mesh.

Check Valves & Backflow Preventers Size based on system flow rate. Used to protect water supplies and prevent backflow in irrigation systems at pump stations, filters, and injectors















ressure Vacuum Breaker Backflow

Double-Check Assembly Backflow

#### Manual Valves Size based on system flow rate.





Butterfly











**PVC Ball** (FPT or Socket)

Poly Ball

Automatic/Hydraulic Valves Size based on system flow rate. Used throughout water systems to provide control.













Activation styles: Electric Solenoid (AC/DC), motor (AC/DC), and Hydraulic or Pressure.

Control options: On-Off, pressure reducing/sustaining/relief, surge anticipating, back flush, auto control.

Connection styles: Threaded, Glue (PVC), Grooved, Flanged.

#### **Pressure Gauges & Instruments**







Used to monitor pressure in irrigation systems. All pressure gauges sold by Irrigation-Mart are lead-free and available in



Non-liquid filled





Foot Clip



multiple ranges

Schrader Valve



Brass Adapter (gauge not



Schrader Cap



Pocket Gauge



Gauge Stake

Pressure Regulators Used to reduce pressure to a set value. Assures application uniformity and system protection, even if source pressure fluctuates or terrain is uneven. System pressure must be greater than desired operating pressure. Ranges from 0.1 - 175 GPM.







**PMR** 









6-Port (Netafim) 10-Port (Netafim)

2-Port (Netafim) 4-Port (Netafim) Pressure Relief Valves Used to quickly discharge water to relieve excess pressure on a system. Generally installed after a pumping station to prevent damage. Most models are adjustable, multiple sizes and optional side discharge are available. Ranges from 0 - 235 PSI.







Bronze (1"-2")



Bronze (1/2"-3/4")





AA-60D (Large)

# Plasticulture (Picture to be replaced)

# **Plastic Mulch**

Most common mulch sizes:

Widths ranging from 24" - 96' Thickness ranging from 0.6 mil - 2.0 mil. Lengths ranging from 2400 ft - 6000 ft.

#### Tunnel plastic also available.

Promotes early growth and increased yields; protects against light frost; vent holes help control temperature. Comes in 60" or 72" sizes; requires metal hoops every 4-6 ft for support.



#### Why use plastic mulch?

Early and improved cropping

- Black colored mulch heats the soi
- ~ White/silver colored mulch prevents soil heating
- ~ Allows for increased growing environment control

- ~ Enhances & maintains soil structure
- ~ Regulates & conserves soil moisture
- ~ Minimizes leaching of chemicals and fertilizers
- ~ Decreases both horizontal and vertical erosion

- ~ Maintains a good root zone
- ~ Controls weeds and competition
- ~ Deters pests; increases pesticide efficiency
- ~ Keeps fruit clean and suppresses ground rot

Virtually Impermeable Film (VIF), Totally Impermeable Film (TIF), and metallized products available.

#### What to look for:

Thickness

Ranges from 0.6 mil to 2.0 mil. When a quality blend of polyethylene is used, 1 mil is often the choice.

Smooth or Embossed. Embossed lays easier, hugs the soil bed better, and resists damage.

**Non-Degradable Option** Must be removed after harvest. Should be chosen to keep integrity until time of removal.

**Degradable Option** 

Allows normal field operations without removal. Will degrade differently depending on conditions (light, temperature, humidity, wind, etc.) Pieces may remain for years. Not all degradable plastic mulch is biodegradable; photo & bio-degradable options available.

#### **Colors Available**

Plastic Mulch is available in several blends of polyethylene resins. (Linear, low density, high density, etc.)



Clear (natural) - Heats soil more than black, but allows weed growth.



Black (Standard) - Warms soil for earlier growth. Opaque, excludes all light to prohibit weed growth.



Silver- or White-On-Black -Co-extruded, opaque; keeps bed cooler for summer planting. May be beneficial for insect (thrip) control. Special order item.



Infra-Red Transmitting (IRT) May enhance photosynthesis. Differences in plant response seem to be greater in northern latitudes. Available in multiple colors; cost is nearly twice of black; special order item.



#### Wooden Stakes

- Treated Honduran Pine; may be used for multiple
- Dense, tight-grain wood to prevent warping
- Multiple lengths and sizes, ranging from 3 ft 6 ft tall and from 0.75" - 1.25" thick
- Bundles of 25; pallet quantities depend on size of
- Recommended spacing: 3 ft 4 ft, depending on stake size and crop requirements.

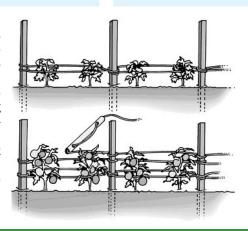


#### Tomato Twine

- High, dependable tensile strengths
- Minimum stretch, excellent uniformity
- UV stabilized for field use
- Resistant to rot, mildew, and insects
- Smooth and easy on the plant
- Easy to work with; holds knots well
  - Loop slots for attaching to belt for easy dispens-



A typical row of tomatoes using stakes and twine looks like the diagram to the right. Stakes are placed every 3 - 4 ft, and the twine is wrapped on alternating sides of the stakes, supporting the plant on either side. Additional lines of twine at higher levels may be added later to help support the plant as it grows.



Note: Plastic Mulch, Wooden Stakes, and Tomato Twine are items seasonally in high demand. While Irrigation-Mart tries to keep stock, items can go on backorder when demand is high. Please allow plenty of time for ordering and shipping. Call our experienced sales staff for availability, pricing, or custom orders.

# **Drainage**

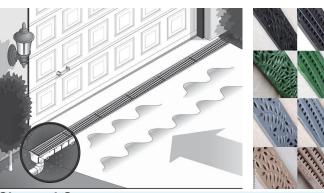
# Basins/Vavle & Meter Boxes/Channel Grates/Pipe/Culverts



Irrigation-Mart offers a full line of drainage products including high density polyethylene (HDPE) pipe, steel and plastic/composite channel grates, and drainage basins for consumer and commercial applications.



inlet/outlet options, colors, and styles.



#### Channel Grates

Used to collect surface water around pools, driveways, yards, etc. Available in different inlet/outlet options, sizes (widths and lengths), colors, and styles. Decorative styles









Valve/Meter Boxes
Used to protect valves and meters from UV damage sustained while in direct sunlight. Available in a wide variety of sizes, colors, and designations.



Single Wall Corrugated HDPE Pipe: Ideal for projects where flexibility, light weight, and low cost are important. Comes in rolls and straight lengths (3" - 24" diameters).

Double Wall Corrugated HDPE Pipe: Provides superior corrosion and abrasion res alternative to reinforced concrete. Corrugated exterior wall, smooth interior v for heavy-duty gravity flow drainage applications. Available in 4"-60" diam

> SDR 35 (PVC) Pipe: May be used for municipal suitable for sewer, drain, irrigation, water service in perforated or non-perforated lengths.



# Lighting

# Up & Accent/Path & Spread/In-Ground & Well/Step & Brick/Etc.







Up & Accent: Spotlights, uplights, floodlights, backlights



In-Ground & Well: Uplights, floodlights, spotlights



**Specialty:** Hanging fixtures, wall-mounts, underwater, scaping



**LED Lamps** 



Irrigation-Mart is a proud distributor of high-quality landscape and architectural lighting systems. Call our experienced sales staff for styles, pricing, and availability.

Path & Spread: Walkways, ground cover, garden beds



Step & Brick: Steps, decks, walls



Transformers: Dimming, auto-timers, zone control; can be









**Low Voltage (12V, 24V):** Compliments landscapes of all types and sizes. Variety of fixture styles, finishes, lamps, and mounting options available. Most fixtures can be custom-fitted and are available in aluminum, brass, copper, stainless steel, or industrial composites.

Line Voltage (120V, 230V): Best suited for lighting of plantings, signage, architectural features, pathways, and more. Impressively designed for maximum efficiency and easiest ongoing maintenance. Variety of styles, finishes, lamps, and mounting options available.

# **Hose & Pipe (Pic to be replaced)**

Oval/Flat/Layflat/PVC/Rubber/Polyethylene Hose & Aluminum/PVC/Poly Pipe



#### **Oval/Flat Hose**

Used as header line for low-pressure (drip) systems; typically used in surface systems Connection options: Standard insert, barb Durable; inexpensive to repair; easy to install Also known as "PE Discharge Hose" 21 PSI and 42 PSI rating available

#### PVC & Rubber Hose

Used on suction side of pumps; can be used on discharge side if pressure rating allows Rigid/reinforced wall (prevents collapse) Connection options: Standard barb, quick-connect Available in custom lengths and diameters PVC or steel reinforcement

Used for water transfer from supply to irrigation location Connection options: Standard insert, barb, quick-connect May be used as header line for drip irrigation

Durable; easy to move or roll up Also known as "Vinyl Discharge Hose"

#### Polyethylene Hose

Linear Low Density Polyethylene; durable; resists stress cracking, ag chemicals, solar (UV) radiation Used as distribution hose (emitters/micros) and as supply for drip tape

May be buried (subsurface), laid on surface, hung on

Available in wide range of sizes (1/8" - 1") Non-glueable; glueable polyvinyl available



#### Aluminum Pipe

Semi-permanent installation Durable, long lasting Irrigation-Mart offers new and used aluminum pipe in multiple diameters and lengths With outlet for sprinkler or mainline



IPS (Iron Pipe Size): Most common, used in high pressure and small systems

PIP (Plastic Irrigation Pipe): High volume, economical

SDR 35: Gravity systems such as septic and drainage

#### Polv Pipe

Simple installation Lay in shallow furrow Use volume control gates

or punch holes at desired intervals

Accessories include plugs, valves, punches, and cutting tools

Typically single-use

#### **Aluminum Pipe Fittings**

#### Ring-Lock Assembly



Line Reducer







90° Elbow



45° Elbow



Valve Opening Elbow



Insert Adapter



End Plug



Ring Lock Clamp

#### **Hook & Latch Assembly**





Line Tee



Line Reducer





90° Elbow



45° Elbow



Insert Adapter



Insert Adapter (male)

#### **Cam-Loc Fittings**

#### For quick and easy hose connections. Available in Aluminum, Poly, Brass, and Stainless Steel.



(CLMxFPT)



(CLFxMPT)



(CLFxI)



Type D (CLFxFPT)



Type DC (CL CAP)



Type DP (CL PLUG)



(CLMxI)



Type F (CLMxMPT)



Type AA (CLMxCLM)



Type DA

#### **Lever-Loc & Pin Lug Fittings**

Used on suction and discharge hoses to make quick, leak-proof, air-tight connections.



Male w/Lever (MPT)



Female x MPT



Female Shank

Male Shank

**EPDM Gasket** 



Pin Lug Coupler

# **Pumps (Pic to be replaced)**

#### **Pump types**

# **Pumps Self-Priming Electric**

Typically use smaller horsepower motors Good for turf or small agriculture projects Will "Self-Prime" when water is added to pump casing



Typically use larger horsepower motors Used for commercial turf or large agriculture projects



540 or 1000 RPM Gear Box Drive Various pressures & flows



Semi-trash, Trash, & Effluent Uses May be used with or without auto float device



4", 6", 8" Models Typically installed in wells Can be used in open water sources with a flow sleeve

## **Gasoline Engine-Driven**

Available in self-priming and non-self-priming Honda, Briggs-Stratton, Robin Subaru engines Used for water transfer, semi-trash, and trash pumping



John Deere, Isuzu, etc. Trailer or skid-mounted Used in large agriculture applications

Irrigation-Mart offers multiple brands and sizes. We also design custom pumping stations. For more specific technical information, or for custom recommendations, please call our sales team at 800-SAY-RAIN.



	Series	Manufacturer & Series	Drive Options	Power (HP)	In x Out	Flow Rate Range (GPM)	Pressure Range (PSI)
ectric		Goulds Irri-Gator	Electric, 115/230V 1PH	3/4 - 3	1-1/2" x 1-1/2"	20 - 110	20 - 40
ming El		Sta-Rite D Series	Electric, 130/230V 1PH 230/460V 3PH	3 - 5	1-1/2" - 2-1/2"	120 - 220	Up to 75
Self-Priming Electric		Munro LP Series	Electric, 115/230V 1PH 230/460V 3PH	3/4 - 5	1-1/2" - 3"	18 - 155	20 - 75
		Franklin WSP Series	Electric, 115/230V 1PH	3/4 - 2	2" x 1-1/2"	12 - 90	10 - 50
Suction		Berkeley B Series	Electric, 230V 1PH 230/460V 3PH	Up to 200	1" - 10"	Up to 5000	Up to 250
		Berkeley B Series	SAE/Frame	Up to 200	1" - 10"	Up to 5000	Up to 250
End Suc		Cornell W, Y, R, H Series	Electric, 230V 1PH 230/460V 3PH	Up to 350	1" - 10"	Up to 7000	Up to 250
		Cornell W, Y, R, H Series	SAE/Frame	Up to 350	1" - 10"	Up to 7000	Up to 250
PTO		Caprari Water Series	540/1000/2000 RPM	10 - 90	2" - 8"	50 - 1400	40 - 140
	d 0	Caprari Slurry Series	540/1000/2000 RPM	30 - 150	6" x 4"	200 - 800	70 - 230

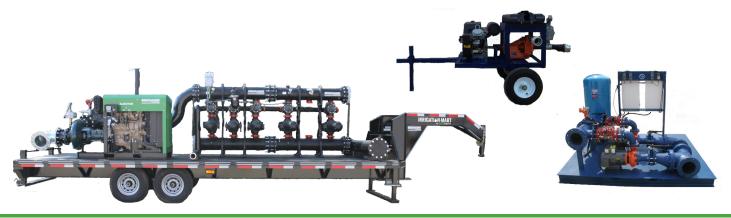
# **Pumps**

Pumn Tynes							
	Series	Manufacturer & Series	Drive Options	Power (HP)	In x Out	Flow Rate Range (GPM)	Pressure Range (PSI)
Sump		Munro POND Series	Electric, 110V 1PH	1/7 - 1/3	5/8" - 1-1/4"	21 - 47	10 - 15
		Franklin Little Giant	Electric, 230V 1PH 230/460V 3PH	1/4 - 1	1" - 2"	Up to 150	Up to 30
rsible		Franklin Water Horse	Electric, 115/230V 1PH 230/460V 3PH	1/2 - 125	2" - 6"	5 - 1000	40 - 250
Submersible		StaRite Berkeley	Electric, 115/230V 1PH 280/460V 3PH	1/2 - 200	2" - 8"	5 - 1900	40 - 250
ren		Franklin Electric FACGF Series	Gasoline - Honda or Briggs & Stratton	5-1/2 - 18	2" - 2"	Up to 250	Up to 110
		Franklin Electric FNSGF Series	Gasoline - Honda or Briggs & Stratton	5-1/2 - 9	2" - 2-1/2"	Up to 150	Up to 90
Engine-Driven		Honda/Briggs Semi-Trash	Gasoline	1-9	1" - 4"	Up to 350	Up to 40
Engi		Franklin Electric FBSGF Series	Gasoline - Honda or Briggs & Stratton	3-1/2 - 9	2" - 3"	Up to 300	Up to 45
		John Deere / Isuzu	Diesel	75 - 600	1" - 10"	Up to 7000	Up to 250

#### **Exhaust Primer Protek Pump Accessories Pressure Tanks Hand Primer** Cycle Stop Valve **Manifold Primer Control Panel Float Valve**

# **Power Units & Pump Stations**

Irrigation-Mart offers multiple types, brands, and sizes of power units. Please visit our website for more listings; contact us for customized recommendations.



# **Fertilizers & Ag Chemicals**

# **Fert and Ag Chem Types**



# Fertilizers & Ag Chemicals



#### **Fertilizers**

#### Water Soluble

Capable of being completely dissolved in water. Good for root fertilizing; some formulations are gentle enough to be sprayed onto foliage.



Concentrated product typically applied foliarly for rapid results and easier coverage.



Granular or powdered; spreadable; can be natural or synthetic. Used for root fertilizing over broad areas. Some are slow release.



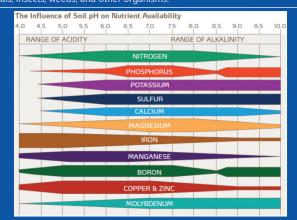
Minerals or vitamins that are only needed in very small quantities (such as Boron, Chlorine, Copper, Iron, Manganese, Molybdenum, and Zinc), but are vital for plants in deficient soil

Most informational labels with specific product information are available on our website.

Irrigation-Mart also sells chemicals used to control plugging of microirrigation systems. We also design fertilizer/chemical schedules. Call our experienced sales staff for a custom

#### **Ag Chemicals**

Used to prevent, destroy, repel, or mitigate pests, including animals, insects, weeds, and other organisms.



#### Yara North America

#### YaraLiva™

- Calcium Nitrate
- Fully water soluble
- Fuels high quality, fast-acting growth; helps reduce plant stress and disease

YaraVita™

Specific nutrient mix (in-

cluding micro nutrients)

Either water soluble or

Easy, safe, convenient

#### Miller

#### **Water Soluble**

- Fully water soluble
- Macro- and micro-nutrient packages available
- Specialty types available for specific crop needs



# SOM

#### UltraSol™

- 10-5-40 Finisher
- 20-20-20 Feed
- 15-5-19 Blueberry
- 30-10-10 Hi-N
- 10-52-8 Starter

# Haifa Chemicals Ltd.

#### MultiCote™

- Controlled-release (dry)
- Minimal leaching, no contamination of groundwater or dependence on irrigation
- Multiple series for nurseries, agriculture, and turf





#### Liquid

- 4-0-24 Finisher
- 10-10-10 Feed
- 6-24-6 Starter
- Calcium
- Boron



#### YaraMila™

- NPK (Nitrogen, Phosphate, Potassium) and micro nutrients
- Granular or prill
- Highly efficient; accurate and balanced



#### Multi-K<sup>TM</sup>

- Potassium Nitrate Fully water soluble
- Non-volatile; efficiently absorbed by plants



## **Agrium**

# Super Rainbow™ **F**

- Granulated (dry)
- Customized mixes available for specific crop
- Uniform spread, homogenous product



# **Turf Sprinklers**

#### Pop Up/Rotor Sprinklers & Turf Nozzles



#### **Pop Up Sprinklers**

- Commonly used to distribute water in landscape irrigation
- Retract to provide a virtually invisible system and to prevent mechanical damage by equipment
- Options include different heights, check valves to prevent drainage to low areas, and purtop to indicate reclaimed water
- "Funny pipe" fittings optional for connecting to PVC pipe
- Available nozzles (sold separately) give many options in desired application/precipitation rate and patterns of coverage

#### **Rotor Sprinklers**

- Commonly used to distribute water in turf/landscape irrigation
- Retracts to ground level to provide a virtually invisible system, prevent mechanical damage by equipment, and for safety in open areas such as sports fields
- Changeable nozzles for desired application/precipitation rate, pattern
- Optional check valve to prevent drainage to low areas
- "Funny pipe" fittings optional for connecting to PVC pipe





We offer a wide selection of turf nozzles to meet the unique and diverse needs of your landscape. Turf nozzles are designed to provide uniform coverage, ensuring that your lawn is green throughout, with no dry or brown spots.









#### **VAN Nozzles** •

- Can be adjusted to the exact pattern of your lawn, ensuring your landscape will be precisely watered
- ldeal for odd-shaped corners and smaller grassy areas around sidewalks and driveways
- Can also be used for watering flowerbeds or shrubs
- Irrigation-Mart offers a complete line, covering ranges from 4 18 feet

#### **MP Rotators** •

- Features a unique, multi-trajectory rotating stream with water-conserving results (when compared to traditional sprays)
- Delivers multiple streams of water at a steady rate (rather than simply "spraying" onto landscapes)
- Slower application rate allows water to gently soak the soil; achieves even water distribution
- Can be installed onto any conventional spray head body or shrub adapter; creates high uniformity, low
  precipitation rate sprinklers with matched precipitation at any arc and any radius



# **Hardscapes, Tools & Equipment**













#### **Pavers, Retaining Pavers**

Durable and stylish, Belgard pavers offer a range of patterns and textures for your driveway, walkway, patio, and more.

Not all products are stocked regularly. Call for specific quotes, colors, and availability.

#### **Retaining Walls**

**Outdoor Rooms** 

appealing styles and sizes. Custom orders only.

As beautiful as they are functional, retaining wall systems take your style to new levels of interest and refinement.

Pre-built components allow for simple installation, yet come in an array of











Segmented retaining wall systems for residential, commercial, and public works

Not all products are stocked regularly. Call for specific quotes, colors, and availability.











steel landscape edging and galvanized nursery sign holders. Accessories also available.

Not all products are stocked regularly. Call for specific quotes, colors, and availability.



Irrigation-Mart stocks a variety of tools to help you get the job done. Call our sales staff or visit our website for availability and sizes.



# RRIGATION-M

800-SAY-RAIN | www.irrigation-mart.com

200 South Service Road East | Ruston, LA 71270 | P: 318-255-1832 | F: 318-255-7572 | sales@irrigation-mart.com

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MAILING ADDRESS LABEL HERE

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Web: www.irrigation-mart.com mail: sales@irrigation-mart.com

Baton Rouge Office 13799 Airline Highway Baton Rouge, LA 70817-5924 Phone: (225)755-3447

# San Juan Office

701 East Expressway 83 San Juan, TX 78589 Phone: (956)781-6651

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