

EFFICIENTLY PULLING IT ALL TOGETHER

# Drip Irrigation and Installation

The Conservigation™ Process from Netafim and Vermeer



## Drip irrigation is now three times more cost-effective.

Drip irrigation has been shown to reduce water usage by as much as 70 percent. But up until recently, it required so much time to install a drip irrigation system that many found it cost-prohibitive.

*That's why Vermeer and Netafim have teamed together to develop the Conservigation™ Drip Irrigation and Installation process, a new way to install dripperlines.*

With the Conservigation process, you can use the Vermeer multi-blade plow to install up to three lines at a time, compared to previous one-line installation methods. This three-line method causes minimal damage to the soil profile. So whether you're installing an irrigation system or wastewater drip dispersal field, you can get the job done faster and conserve water.



*Conservigation installation — three blades, three times faster, three times more cost-effective.*

## If you're ready to conserve time, money, and water, take advantage of the Conservigation process.

### The applications are virtually limitless:

- Residential
- Commercial
- Turf and sports turf
- Wastewater
- Golf courses
- Parks and recreation
- Highways and medians
- Institutional
- High-traffic areas where faster installation is needed
- Areas using reclaimed or recycled water





## Here's how the Conservigation™ Drip Irrigation and Installation process works.

Start by attaching a multi-blade plow to the Vermeer LM42 lawn plow or the Vermeer RT450 or RTX450 tractor, then add an easy-access tubing rack equipped with your choice of Netafim dripperlines.

The plow blades use high-frequency vibration to open up three narrow slits, the tubing rolls easily into place, and the lines are then covered by the packer wheels. The multi-blade plow provides flexibility, allowing the user to manipulate row spacing from 10" (25.4 cm) to 24" (61 cm) and burial depth from 2" (5.1 cm) to 12" (30.5 cm).

There is minimal post-installation clean-up work. And since you're installing three lines at once, you can finish the job faster.





## Netafim dripperlines: Superior performance.

Netafim dripperlines are pressure-compensating, continuously self-flushing, and ideal for both on-surface and subsurface applications. In addition, they boast unique design features that are particularly well-suited for subsurface installation in turfgrass, gardens, and wastewater drip dispersal.

Netafim dripperlines can be installed easily in irregularly shaped and segmented areas to take full advantage of available space, and, unlike above-ground systems, they won't disrupt the landscape.

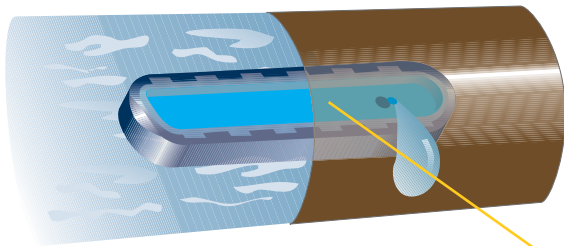


Available in a variety of flow rates and dripper intervals, these high-quality dripperlines also come with built-in check valves for additional water management savings.

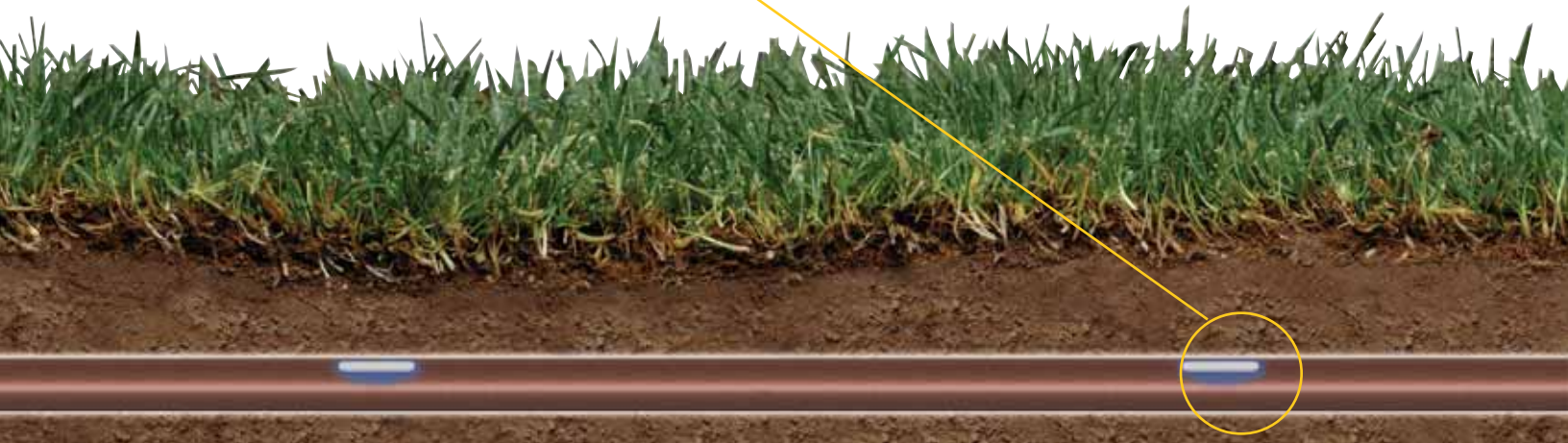
## About Netafim

*Based in Israel with offices on five continents, Netafim has been a global leader in drip irrigation for nearly 50 years. The company's drip irrigation technology has led to countless solutions for agriculture, horticulture, and landscaping — and contributes to water conservation and environmental awareness every day.*

*Always committed to your success, Netafim has a distribution network located throughout the United States. To find the Netafim location nearest you, visit [www.netafimusa.com](http://www.netafimusa.com).*



*The emitter is welded to the inside of the dripperline. The water or effluent is discharged evenly from the drippers thanks to their pressure-compensating, self-cleaning mechanisms, ensuring a well-balanced distribution of water or effluent directly into the soil, even on slopes.*



# Buy Netafim products through your Netafim distributor.

## Netafim dripperline specifications for landscape and turf installation

### Techline subsurface or on-surface dripperline

- Dripper flow rates: 0.4, 0.6, or 0.9 GPH (1.6, 2.3, or 3.5 L/hr)
- Pressure compensation range: 7 to 70 psi (0.5 to 4.8 bar)
- Max recommended system pressure: 50 psi (3.4 bar)
- Tubing diameter: 0.66" (1.68 cm) OD, 0.56" (1.42 cm) ID
- Coil lengths: 100' (30.5 m), 250' (76.2 m), 1000' (304.8 m)
- Recommended filtration: 120 mesh
- Bending radius: 7" (17.78 cm)
- Tubing material: Linear low-density polyethylene

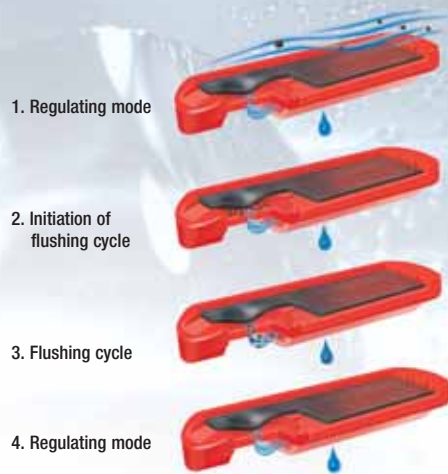
### Techline CV dripperline — with a check valve in every dripper

- Dripper flow rates: 0.26, 0.4, 0.6, or 0.9 GPH (1.0, 1.6, 2.3, or 3.5 L/hr)
- Dripper spacings: 12" (30.48 cm), 18" (45.72 cm), and 24" (60.96 cm)
- Pressure compensation range: 14.7 to 70 psi (1 to 4 bar); stainless-steel clamps recommended above 50 psi (3.4 bar)
- Max system pressure: 50 psi
- Tubing diameter: 0.66" (1.68 cm) OD, 0.56" (1.42 cm) ID
- Coil lengths: 100' (30.5 m), 250' (76.2 m), 1000' (304.8 m)
- Recommended filtration: 120 mesh

## Netafim dripperline specifications for on-site drip dispersal wastewater installations

### Bioline pressure-compensating dripperline for on-site wastewater drip dispersal

- Dripper flow rates: 0.4, 0.6, or 0.9 GPH (1.6, 2.3, or 3.5 L/hr)
- Pressure compensation range: 7 to 70 psi (0.5 to 4.8 bar)
- Max recommended system pressure: 50 psi (3.4 bar)
- Tubing diameter: 0.66" (1.68 cm) OD, 0.57" (1.52 cm) ID
- Recommended filtration: 120 mesh
- Uses 17 mm fittings and accessories
- Coil lengths: 500' (152.4 m) or 1000' (304.8 m)



Techline's self-cleaning pressure-compensating dripper is a fully self-contained unit molded to the interior wall of the dripper tubing. Both tubing and dripper housing are manufactured from high-quality synthetic elastomers to withstand chemicals and fertilizers.

Techline is continuously self-cleaning during operation, not just at the beginning and end of a cycle. The result is dependable, clog-free operation, year after year.



Techline CV is the next generation of dripperline in the Techline family, and the most sophisticated dripperline in the world. Techline CV incorporates the best features of Techline and adds a check valve feature. Techline CV's check valve feature is the most important breakthrough in low-volume technology since the introduction of dripperline because water does not drain out of the dripperline after zone shutdown.



Bioline's purple cover warns of non-potable water sources.





## Vermeer: Engineered for efficiency.

The Vermeer LM42 lawn plow is a 42.2-hp (31.4-kW) multi-function trencher / plow with a compact profile that allows it to fit through a 36-inch (91-cm) opening. This unit is ideal for smaller, more confined dripperline installation applications.

The RT450 and RTX450 tractors are perfectly suited for larger applications and longer tubing needs. The RT450 offers high flotation tires and the RTX450 is built on a track undercarriage that enables the unit to work in a wider variety of weather and ground conditions. Each tractor is powered by a 42.2-hp (31.4-kW) engine.

In addition, all Vermeer equipment featuring the multi-blade plow offers the following features.

## About Vermeer

*Founded in Pella, Iowa in 1948, Vermeer is one of the world's leading manufacturers of environmental, agricultural, underground, and compact equipment. From horizontal directional drills to trenchers to lawn plows and more, Vermeer has a long history of bringing new innovations and technology to the underground construction marketplace.*



- Packer wheel controls delivery depths in a consistent fashion and packs the furrow after the dripperline is installed.



- High-flotation tires help minimize turf damage, even in marginal soil conditions.

- Patent-pending plow design lays tubing gently into place.

- Blade height adjusts easily to the desired installation depth.

- Blade spacing width adjusts easily for varying soil types.



- Tubing rack holds up to 1000 feet (304.8 m) of dripperline, keeping coil changes to a minimum.

Contact your local Vermeer dealer to learn more about the Conservigation™ Drip Irrigation and Installation process. Dealership personnel can educate you on this new process, provide training on the Vermeer equipment used during the installation, as well as consult you on potential applications in your area.



Buy, lease, or rent through your Vermeer dealer.



**Multi-blade plow**

- Min number of blades: 1
  - Max number of blades: 3
  - Min depth adjustment: 2" (5.1 cm)
  - Max depth adjustment: 12" (30.5 cm)\*
  - Min blade spacing: 10" (25.4 cm)
  - Max blade spacing: 24" (61 cm)
  - Min number of coil reels: 1
  - Max number of coil reels: 3
  - Max coil size per reel: 1000' (304.8 m)
- \*Custom blades for other depths are available.



**Vermeer RT450 tractor specifications**

**General**

- Weight (tractor only): 3380 lb (1533 kg)
- Length (tractor and 6-way backfill blade): 97" (246 cm)
- Width: 58" (147 cm)
- Height (w/ bar): 85" (216 cm)
- Wheelbase: 46" (117 cm)
- Tread width: 46" (117 cm)
- Ground clearance: 7.5" (19 cm)
- ROPS: 2-post

**Engine**

- Make and model: Deutz F3L2011
- Horsepower @ 2500 rpm (gross): 42.2 hp (31.4 kW)
- Horsepower at 2500 rpm (net): 41.7 hp (31 kW)
- Torque (max @ 1700 rpm): 101 ft-lb (137 Nm)
- Displacement: 140 cu in (2.3 L)
- Number of cylinders: 3
- Cooling medium: Air / oil
- Compression ratio: 19:1
- Max engine operating angle (fore and aft): 25°
- Max engine operating angle (left and right): 25°
- Fuel type: Diesel
- Air cleaner: Dry w/ safety element
- Oil filter: Full-flow

**Capacities**

- Fuel tank: 14 gal (53 L)

**Vermeer RTX450 tractor specifications**

**General**

- Weight (tractor w/ 6-way backfill blade only): 4480 lb (2032 kg)
- Length (tractor and 6-way backfill blade): 97" (246 cm)
- Width: 63" (161 cm)
- Height (w/ roll bar): 87" (220.5 cm)
- Track base: 58" (147 cm)
- Track width: 15" (38 cm)
- Ground clearance: 9.5" (24 cm)
- ROPS: 2-post

**Engine**

- Make and model: Deutz F3L2011
- Horsepower @ 2500 rpm (gross): 42.2 hp (31.4 kW)
- Horsepower @ 2500 rpm (net): 41.7 hp (31 kW)
- Torque (max @ 1700 rpm): 101 ft-lb (137 Nm)
- Displacement: 140 cu in (2.3 L)
- Number of cylinders: 3
- Cooling medium: Air / oil
- Compression ratio: 19:1
- Max engine operating angle (fore and aft): 25°
- Max engine operating angle (left and right): 25°
- Fuel type: Diesel
- Air cleaner: Dry w/ safety element

**Capacities**

- Fuel tank: 14 gal (53 L)

**Vermeer LM42 multi-blade plow specifications**

**General**

- Approximate weight: 3550 lb (1610 kg)
- Length: 74" (188 cm)
- Width: 35.5" (90 cm)
- Height (transport): 52" (132 cm)
- Wheelbase: 44.5" (113 cm)
- Tread width: 27" (69 cm)

**Engine**

- Model: Deutz F3L2011
- Horsepower (gross): 42.2 hp (31.4 kW)
- Displacement: 140 cu in (2.3 L)
- Cylinders: 3
- Cooling medium: Air / oil
- Max torque @ 1700 rpm: 95 ft-lb (129 Nm)
- Max slope: 25°

**Capacities**

- Fuel tank: 11.6 gal (43.9 L)
- Hydraulic tank: 7.5 gal (28.4 L)

**Steering**

- Type: Center, articulated
- Turning circle: 17.5' (5.33 m)





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*Get the parts and service edge. In addition to providing quality equipment, Vermeer delivers top-quality parts and superior services. Vermeer parts are manufactured to exacting specifications to help keep your Vermeer equipment running trouble-free and at OEM specifications.*



*Vermeer offers factory training programs to its dealer network to ensure that the most current service procedures are presented to the service personnel of your Vermeer dealer.*



*Genuine Vermeer parts are precision-crafted to match your Vermeer equipment exactly. This ensures that your system will run as smoothly as possible, with the least amount of service and maintenance.*



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