

# Greenhouse Irrigation Solutions

*Giving your crops a lot more than just water*

## GREENHOUSE



**AGRO-EXPERIENCE**

AGRO-ECONOMY

**AGRO-KNOWLEDGE**

**AGRO-TECHNOLOGY**





## High tech irrigation could be the most cost-effective system in your greenhouse.

As a greenhouse grower, you belong to a high-tech world. Today's most effective products and sophisticated technologies are at your disposal. Making the right decisions is crucial.

Irrigation technology is one of the elements fundamental to the success of your greenhouse. Yet compared with a new or upgraded greenhouse project, a comprehensive irrigation system requires a lower investment, in comparative terms. That's why it makes good, sound sense to work with the best - and that means Netafim, pioneer and global leader in irrigation technology.

### **Resources that help us understand your needs.**

Netafim works closely with farmers and growers on five continents. We develop and manufacture a wide range of irrigation products recognized worldwide for quality and performance.

**By applying the full power of our knowledge, experience and global resources, Netafim delivers irrigation solutions that far surpass industry standards.**



# Growing in soilless cultures

## Challenge:

Most soilless substrates require frequent irrigation to maintain the air-water ratio. The use of small growing containers requiring low frequency irrigation is increasing. Result - reduced water quantities for crops.

## Solution:

Relatively small spacing between drippers. Low flow rates. Anti drain properties. Uniform irrigation with short application options.

## Canals and Gutters

For ground-based or suspended containers needing frequent pulse irrigation:

### Uniram CNL

High-precision compensating dripper (anti drain). Shuts down at the end of the irrigation cycle



without emptying sub-mains and laterals. Simultaneous reopening of drippers ensures uniform irrigation throughout the greenhouse.

## Potted Plants and Rock Wool Cubes

Each plant pot or rock wool cube is an independent growing unit. To ensure equal and precise water and nutrients, every unit needs its own compensating dripper

### PCJ-CNL

**For compensating and focused irrigation with flow rate unaffected by work pressures.**

A compact on-line dripper with a drop-leading stake is the optimal irrigation solution for this growing technology. Anti drain model prevents irrigation lines from emptying and refilling between irrigation applications. Addition of a drop-leading stake helps growers customize droplet size suited to the type and dimension of the pot or rock wool cube as well as the plant's age and irrigation regime.



PCJ

## Microsprinkler Irrigation Solutions

### Challenge:

To find the right solution for your specific structure, gable width, breadth of bed per gable, etc. Also essential, the correct interface for frequent or auxiliary irrigation, germination, contact cooling and more.



SpinClear SD



SuperNet

GyroNet

### Solution:

Field-proven high tech microsprinkler irrigation for every requirement.



SpinNet

### SpinNet

Bridgeless (non-leaking) micro-sprinkler with a flat trajectory and full overlap irrigation. Featuring excellent distribution uniformity and acid resistance (AA).

### SpinClear

Bridge micro sprinkler for full overlap irrigation, as well as for tunnels and benches.



CoolNet

### GyroNet

Micro sprinkler with a wide variety of flow rates 27 - 300 L/H; very high efficiency; anti-insect, acid resistant; low-pressure consumption.

### SuperNet

Regulated micro sprinkler with a wide variety of flow rates and very high efficiency; anti-insect, acid-resistant, robust plastics; low-pressure consumption.

### CoolNet

A supreme fogger that works on standard irrigation system pressure. Via pulsing, temperature can be substantially reduced and humidity elevated. Acid resistant. Fogs at any pressure. Can also be used for chemical applications.

### AD (anti drainage) Valve

Oblique type operated by a membrane and a spring. Fast and accurate. Acid resistant. Four different pressure levels available.



# Growing in soil

## Drip Irrigation Solutions

### Challenge:

Vegetables and flowers cultivated in sandy or light soils require irrigation several times a day.

### Solution:

Frequent and pulse irrigation for surface and subsurface applications.

### Uniram Integral Anti Drain Dripper

- High precision filter in every dripper.
- Anti siphon fitting prevents vacuum at the end of irrigation; stops sand and impurities entering the system
- Root entry barriers
- Enhanced self cleaning
- Operates equally well in soil and soilless substrates without replacing irrigation equipment



**Vegetables and flowers cultivated in medium to heavy soil require low frequency irrigation.**

### Dripline 2000 Integral Dripper

Exceptionally thick walls ensure wide adaptability to pressure changes and high durability.

### Tiran Integral Dripper

The effective answer for irrigating with low quality water. Wide water passages prevent clogging.



Medium to heavy soil irrigation

# Nursery Irrigation

### Challenge:

Choosing the right solutions for the growing environment and stage of production (rooting, germination, etc).



Nursery

### Solution:

Overhead irrigation - the system preferred by most nurseries. **Spin Clear SD** and **Jet Clear SD** static emitters deliver highly uniform results for narrow bench irrigation.

# Agro-technical Solutions

**In hot climates, the cooling and humidifying of greenhouses without wetting foliage, is crucial.**

## Cooling

### Coolnet

A super-fine mist sprayer highly suitable for rooting. Does not wet crop leaves. Operates at accepted working pressures. Delivers an ultra-small drop size of 80 microns at a pressure of 4 bars. Used in extremely short water bursts, it can reduce the ambient temperature by 5-10°C (depending on atmospheric conditions, relative humidity and/or temperature).

- Benefits:
- Grey color prevents overheating of cooling accessories.
  - Non-return mechanism stops dripping,
  - Heightens flexibility
  - Smaller pump size saves energy and costs.
  - Easy to use, maintain and clean.
  - High corrosion resistance.

## Roof washing

**Glass, polycarbonate and polyethylene greenhouses require a solution for ensuring maximum radiation in cloudy conditions, and for cooling.**

**N-85** sprinkler or **GyroNet** impact plastic sprinkler with one or two nozzles delivers 300 to 850L/H at 2.5 Bar, and highly uniform results.

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