

SUBSURFACE DRIP IRRIGATION



Irrigation

Subsurface Drip Irrigation (SDI) allows you to water efficiently, directly to the root zone, irrigate 100% of your field, no missed corners, and provides even water distribution throughout the entire field.

Apply nutrients directly to the root zone by running liquid fertilizers through SDI.

Design

Subsurface drip irrigation with NutraDrip begins with a custom design that will guarantee your system will operate uniformly for your farm. For this, we will discuss your needs, vision for your business or farm, field geography, water source, soil type, crops and cultivation process.

SDI systems should not be difficult to operate. Our intent is to teach you and ensure you have the tools you need to operate your system. We are always available for support, and to share updated technology and information.

With your NutraDrip Irrigation System, you will find high quality products installed by knowledgeable and efficient crews. This is a critical process to ensure proper function of components, and longevity of your system.



System longevity is important to us all. Longevity starts with the design, but maintenance is another important component. Custom maintenance options are available whenever needed. Spring startup and winterization are most common; however, additional services are available as needed.

You are the reason we do what we do. We bring you alongside us as we continually learn and stay up to date on new technology. NutraDrip hosts field days, agronomy meetings, webinars, and publishes relevant information to help support you and your system and empower you to farm using best practices and hit your goals.





Fertigation

Conservation

95% water use efficiency. Irrigate evenly throughout the entire field, and grow more with less. Every drop counts. SDI drastically reduces water loss due to evaporation.









SUBSURFACE DRIP IRRIGATION

is defined as the application of water below the soil surface by micro-irrigation emitters. SDI has been used commercially for irrigating many crops since the early 1990's.

Common spacings today are 30", 40" and 60". The dripline is typically buried 10 to 16 inches deep depending upon soil type and germination conditions.

In addition to the water savings provided by drip irrigation, field trials have shown an increase in nitrogen use efficiency of up to 47%. This results in more of the fertilizer being taken up by the plant, preventing the leaching of excess nutrients from the soil to the groundwater below. The system has also shown to help decrease the emission of greenhouse gasses.

SUBSURFACE DRIP IRRIGATION REDUCES CULT

SDI is the most efficient irrigation system using less water and fertilizer, and saving operational expenses. Drip is well adapted to 'No-till, Strip-till, and Minimum till' systems reducing cultivation costs.



Precise application of nutrients to root system.

Less fertilizer.

crops

Use on-farm nutrients to fertilizer forage

Reduces synthetic fertilizer cost.



Using SDI with strip or no-till streamlines crop management strategy. Less weed growth.

Reduces time for ground

preparation cultivation and crop residue management.



SDI irrigates 100% of the land.

No dry corners as with center pivot irrigation.



HIGHEST WATER USE EFFICIENCY

Water loss through evaporation, runoff and deep percolation are virtually eliminated.

ADAPTS FOR FIELD SIZE, SHAPE & TOPOGRAPHY Odd shaped, small, and steep fields are not an issue with Netafim SDI solutions.

uniform crop and higher yields.

LONG LASTING PERFORMANCE A high-quality drip system can last 25 years or more, when properly maintained.

IMPROVES CROP QUALITY & BOTTOM LINE RESULTS

Water and nutrients are used more efficiently, resulting in reduced input costs, and produces a more



30+ YEARS IN WASTEWATER

6 NETAFIM TM **EMMITTERS**



ARIES

non-pressure compensated (non-PC) drip line

• as the pressure increases the flow increases so it is used in fields that has uniform slopes, where typically the drip line is going downhill on a consistent basis

DRIP NET PC

- a pressure compensated drip line
- typically used in rolling topography or fields that have very long run lengths



DripNet PC™ integral pressure compensated selfcleaning drip lines deliver the optimal cost-performance ratio when irrigating sloping terrain, uneven topographies and long crop rows.

Aries is a non-pressure compensated (non-PC) dripline. meaning as the pressure increases, the flow increases. When you're irrigating orchards, vineyards and field crops on flat topographies with less than ideal water conditions, Aries[™] drip Lines with extra-robust drippers can outlast any dripper in its category, giving you an irrigation system that works perfectly - season after season.





IN-SEASON FERTIGATION

H20+FERTILIZER = MAXIMUM EFFICIENCY POTENTIAL



WATER CONSERVATION

By applying freshwater mix. Coordinating timing of nutrient distribution directly to the root zone, via SDI, evaporation is almost totally eliminated. No moisture on soil surface means less weed growth and less cultivation or herbicide sprays.



ENERGY CONSERVATION

Typically, SDI gives the ability to reduce overall amount of nutrients being applied, because it is applied with precise timing coordinated with plant uptake.

NUTRIENT CONSERVATION

Coordinating timing of nutrient distribution with plant uptake can reduce the amount of nutrients being applied. With drip, nutrients are applied directly to the root zone becoming quickly available to the crop.

FILTRATION

The filter system protects the drip system from the fine sand and other small particles that can plug the emitters. A well-conceived filter system provides the maximum operating life of the SDI system.













INLET MANIFOLD















KNOWLEDGE & CONSULTATION



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TAYLOR ZELTWANGER Sales Rep (ND, SD, MN) & Service Techniciar

PRE RIPPING & ROCK PICKING



TAPE STAGING











PLOWING & WHEEL PACKING













CONNECTIONS & RISERS











BACKFILLING





6

PUMPS

MEDIA FILTERS

WELL SETUPS

CONTROLS

CONTROLS

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copan, Freezen Farms, Dr 🎓 🖂 🖂	Shop aus - Welter meter (1)	North sys Water rector (2)	Northwestern sys-Water Netz., 🔅	South sys - Water Meter (4)
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NUTRADRIP SERVICE

DISC FILTERS

AGRONOMY RESULTS

MEET THE TEAM NutraDrip

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Accountin

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EDGAR MUNOZ Field Technician

ILHUITL BARRANCO Field Technician

MANURE MANAGEMENT

Manure doesn't have to be a waste product. With the right filtration system, you can transform manure into a liquid product to pump back through your drip irrigation system. This allows you to repurpose waste and utilize the nutrients still available for your crop.

Aeration is the process of mixing air, or creating bubbles, into the manure to promote the growth of aerobic bacteria. This process fights the formation of odor-producing bacteria, while simultaneously boosting the breakdown of the organic material.

YOUTUBE

NUCLEAR DE LITIGATION SYSTEMS

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