AWARD-WINNING

SUSTAINABLE MANURE MANAGEMENT SOLUTION

NETAFIM™
GROW MORE WITH LESS

2022 VANGUARD AWARD Recipient
Irrigation Association

2020 U.S. Dairy Sustainability Award for **Outstanding Community Impact**

SDI-E

Subsurface Drip Irrigation For Dairy Effluent Water Application

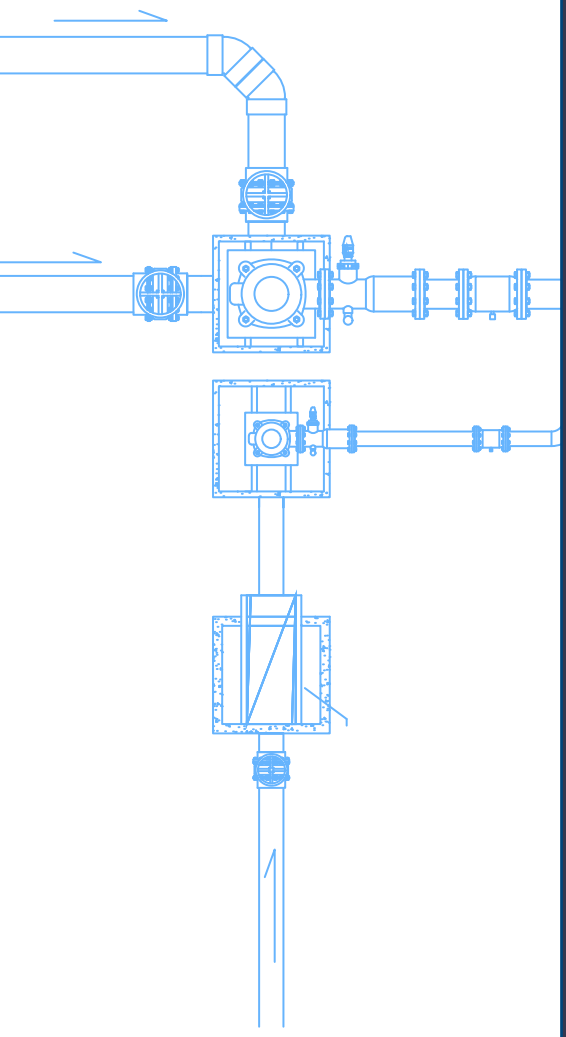
TURNING WASTE INTO VALUE

A Circular Economy Model Driving Sustainability in Dairy Manure Management

orbia

SDI-E

An innovative subsurface drip system that utilizes advanced filtration and proprietary, patent-pending technology developed by Netafim to blend dairy wastewater with fresh water enabling consistent and reliable application of dairy effluent as a nutrient-rich fertilizer. This process not only re-uses water, but also recycles manure as a natural crop nutrient and soil builder, reducing the need for commercial fertilizer.



To learn more about SDI-E, visit netafimusa.com/effluent.

Turning Waste Into Value BENEFITS

↑ Increased crop uniformity and yields	With SDI, water and nutrients are used more efficiently reducing input costs, producing a more uniform crop and higher yields.
↑ Increased water use efficiency	Water loss through evaporation, runoff and deep percolation are virtually eliminated.
↓ Reduced need for scarce water resources	Allows Dairy Farmers the ability to weather extreme drought
↓ Reduced risk of polluting water bodies	Reduced nutrient use avoids polluting water supplies
↓ Reduced need for synthetic fertilizer	Dairy Farmers save by utilizing the already available organic on-farm nutrients.
↓ Reduced greenhouse gas emissions	Studies show approximately 70-90% fewer greenhouse gases were released, when dairy effluent water was applied through an SDI system.

Project Partners MAKING AN IMPACT

Sustainable Conservation

WESTERNUNITEDDAIRIES

DE JAGER DAIRY

MCREE DAIRY

Precision Blending Control System TECHNOLOGY

(US Patent No. 10143130)

Netafim's patented system precisely blends the right ratio of effluent and fresh water for maximum nutrient uptake reducing the need for synthetic fertilizers to grow feed crops. Unique system features of our SDI-E system include:

- Electronically Actuated Valve
- Controller with EC Capable Logic
- Doubled Filtration Capacity
- 2 VFD Pumps

Key Factors SUCCESS

5 Cows to 1 Acre Ratio for effective nutrient management	The use of **two lagoons or settling ponds** to help filter the effluent water	**Netafim's patented blending controls** for fresh/effluent water blending	The use of **sprinklers or flood irrigation for germination** then transition to SDI	Optimized and **engineered effluent water intake**	Operations focus on **dripline maintenance**

Pilot Results SUMMARY

YIELD	WATER USE EFFICIENCY	WATER APPLIED	NITROGEN USE EFFICIENCY	NITROGEN APPLIED
Tons Yield/Acre	Tons Yield/Acre/Inch of Water	Inch of Water Per Acre	Tons Yield/Acre/lbs of Nitrogen	lbs N Applied Per Acre
2.57%	**38.13%**	**-35.16%**	**47.22%**	**-44.78%**

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Funding SOLUTIONS

EQIP NRCS

Contact your local NRCS office for an application.

SWEEP CDFA

Contact your local CDFA office for an application.

NETAFIM FINANCIAL SOLUTIONS

Visit netafimusa.com/financial-solutions

System Design INSTALLATION

For system design your **Authorized Netafim Digital Farming Dealer**, versed in the local aspects of crop irrigation with SDI, will help determine what system configuration is best.

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