HYDRALOOP®

USE WATER TWICE

Hydraloop's solution principles

Leverage extreme decentralised water recycling

Safety first

At any time, the system delivers recycled water that meets the highest safety standards, such as NSF-350.

Minimal footprint

Extreme decentralisation implies installation in buildings with high square meter costs. Systems are compact, affordable, and include storage capacity.

Low maintenance

The system is self-cleaning and sustainable, demanding treatment without filters or membranes, or use of chemicals.

Modular design

A stylish design as well as a modular approach for scaled-to-measure supply in the case of multi-family housing and commercial real-estate.

Automatic back-up procedure

All cleaning processes are controlled electronically, the system should switch to backup water in case of malfunction or insufficient storage.

Internet connectivity

Like other smart home appliances, the system offers user-friendly controls per app, remote support, and over-the-air software updates.

How Hydraloop works

Collect lightly contaminated greywater

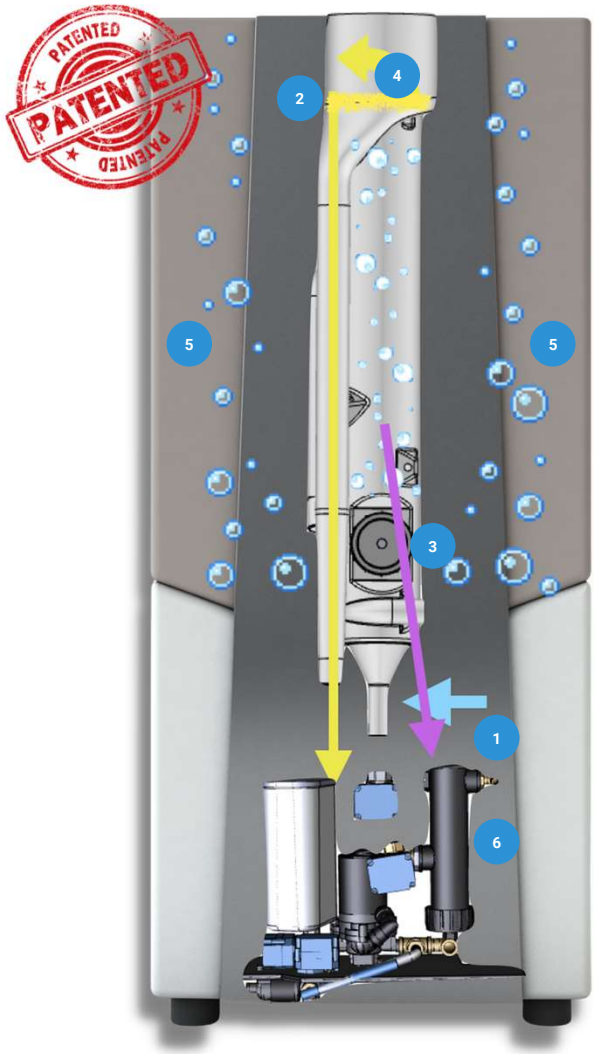
Hydraloop collects water from bath and shower, washing machine and dryer as well as condensation water from heat pumps and air conditioners.

Clean the greywater at the source

Hydraloop's sustainable technology treats the greywater in six cleaning steps, resulting in clean, clear, safe, and disinfected water for non-potable use.

Reuse the cleaned water

The treated water is redistributed to toilets, washing machines, and optionally for garden irrigation and/or topping up swimming pools.



The treatment process

Without the use of chemicals, filters or membranes

Controlled by central processor and smart use of air pressure, to stimulate the law of communicating vessels, the following sequential treatment processes apply:

1. **Sedimentation**
   Sediment is collected at the bottom of tank
2. **Floatation**
   Floating dirt (hair, soap) is purged via central skimmer into the sewer
3. **Dissolved air floatation**
   Tiny air bubbles will travel upwards, collecting small particles
4. **Foam fractionation**
   Soap and suspended solids are skimmed off
5. **MBBR**
   Biological treatment by aerobic bioreactor
6. **UV disinfection**
   Every 4 hour by UV-light

SOLARIMPULSE EFFICIENT SOLUTION FEBRUARY 2019

Long term operation

Low maintenance and user-friendly

Self cleaning

Automatic regular self-cleaning

Safe air gap

Tap water switch via a safe air gap according to EU, US & AU standards

Distribution

Treated water will be distributed by a low noise water pump and controlled valves

Back-up water

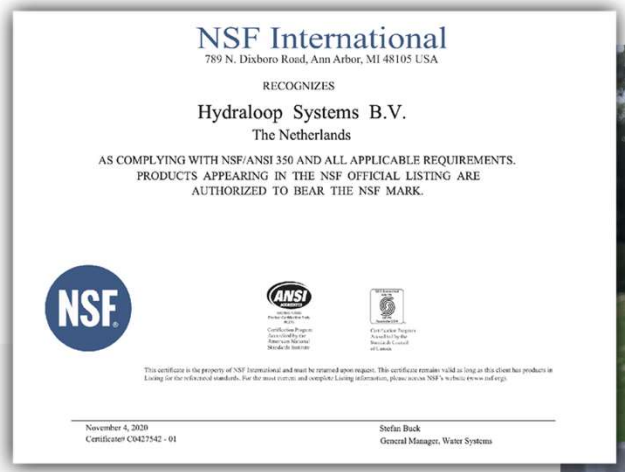
Automatic switching to back-up water supply in case of default and/or insufficient storage

Internet connected

All systems are internet connected with smartphone app support and remote monitoring and over-the-air-software updates

Hydraloop water quality

Treated water meets stringent European, US and international quality standards for reuse as non-potable water



NSF International
789 N. Dixboro Road, Ann Arbor, MI 48105 USA

RECOGNIZES

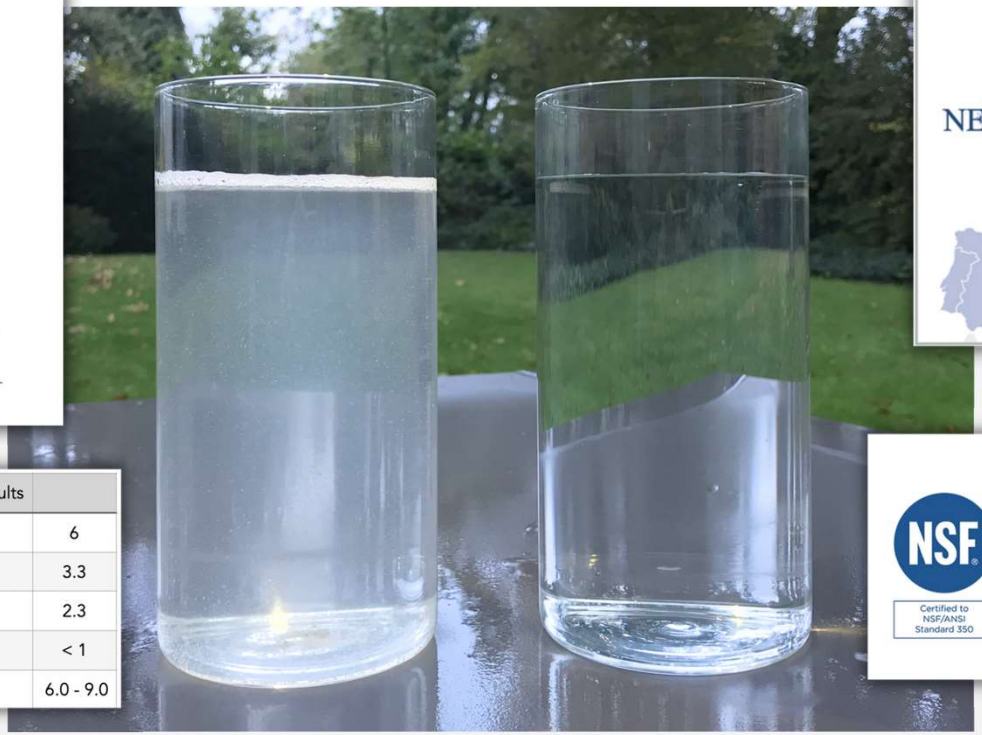
Hydraloop Systems B.V.
The Netherlands

AS COMPLYING WITH NSF/ANSI 350 AND ALL APPLICABLE REQUIREMENTS.
PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE
AUTHORIZED TO BEAR THE NSF MARK.

November 4, 2020
Certificate# C0427542 - 01

Stefan Buck
General Manager, Water Systems

NSF/ANSI 350 requirements		HYDRALOOP average results	
CBDO5 (mg/L)	< 10	CBDO5 (mg/L)	6
TSS (mg/L)	< 10	TSS (mg/L)	3.3
Turbidity (NTU)	< 5	Turbidity (NTU)	2.3
E. coli (MPN/100mL)	< 14	E. coli (MPN/100mL)	< 1
PH (SU)	6.0 - 9.0	PH (SU)	6.0 - 9.0



Certified to NSF/ANSI Standard 350

BRL-K14011

FEBRUARY 2019

Before Treatment **After Treatment**

Product portfolio

For residential real estate

Coming soon

Hydraloop 300
For single-family housing
with 4-5 persons

Hydraloop 600
For larger communities
up to 10 persons

Hydraloop Concealed
For multi-family housing and apartments
Easy plumbing for retrofit situations

Product portfolio

For commercial real estate

Hydraloop Cascade

For larger operations such as hotels, office buildings, shopping centers, student housing, sports clubs, airports, and more

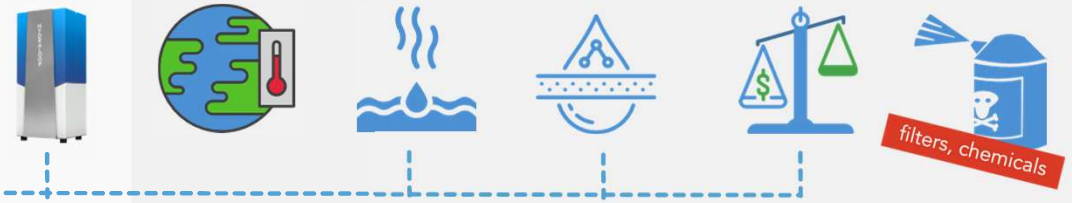
Modular and scalable made-to-measure

Competitive position

Hydraloop vs. alternative solutions for water supply and water savings

SUSTAINABLE DEVELOPMENT GOALS	Hydraloop	Do nothing	Rainwater Harvesting	Desalination	Blackwater Recycling	Direct competition
6 Clean Water	✓	✗	✓	✓	✓	✓
11 Sustainable Cities and Communities	✓	✗	±	±	✓	✓
12 Responsible Consumption and Production	✓	✗	±	✗	✗	✓
13 Climate Action	✓	✗	±	✗	✗	✓
Low Maintenance	✓	n/a	±	✗	✗	✗
Small footprint	✓	n/a	✗	✗	✗	✗
Home application design	✓	n/a	✗	n/a	n/a	✗
Return on Investment	±	n/a	±	✗	±	±

It always makes sense
to use water twice



Complementary as an option

Happy customers

Residential

Volongo family, Luxembourg

Mertens family, Belgium

Kaust student house, Saudi Arabia

Commercial Real Estate

&Beyond Resort, Namibia

Bed & Breakfast, The Netherlands

Soccer Club ONT, The Netherlands

Hydraloop in motion

A few examples

Brave Blue World
Netflix Documentary

Innovation Nation
CBS, United States

7 News
Australia

Energy Observer
United Nations

The 8 O'clock news
NPO1, The Netherlands

EcoIndia
Deutsche Welle, global news

Founded in Friesland
NPO1, The Netherlands

Addressing World Leaders
Hydraloop at COP26

Click on image or find more on the **Hydraloop YouTube Channel**

mt/sprout
Challenger50-winnaars

HYDRALOOP®

USE WATER TWICE

Winner Innovation Award!
INTERNATIONAL WATER SUMMIT
PART OF ABU DHABI SUSTAINABILITY WEEK
15th - 18th January

CES INNOVATION AWARDS 2020 BEST OF INNOVATION

- BEST OF THE BEST
- Best of Innovation Award: Sustainability, Eco-design & Smart Energy
- Best Sustainable Product
- Best Startup
- TIME Magazine top 25 best products of CES 2020
- NEWSWEEK top 12 best products of CES 2020

SOLAR IMPULSE EFFICIENT SOLUTION LABEL

Winner Rabobank Circularity Innovation Award 2019
RABOBANK INNOVATION CHALLENGE
Powered by Building Holland

BEST FEATURED INNOVATION ISH 2021
DIGITAL BATHROOM ASSOCIATION

WINNER WIS AWARD 2018
EUROPEAN WATER TECHNOLOGY WEEK

THE GLOBAL GOALS For Sustainable Development
6 CLEAN WATER AND SANITATION
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION

WINNER
GLOBAL WATER CHALLENGES PRIZE 2019
Water Europe
Technology & Innovation