

# Monsal\* advanced digestion technology (ADT) Re:Smart\*

## smart temperature control heat exchangers

### overview

SUEZ's line of Monsal advanced digestion systems use bacteria in the absence of oxygen to break down matter and create biogas.

Trends in anaerobic digestion aim to reduce retention time and increase dry solids concentrations raising organic loading and improve efficiency.

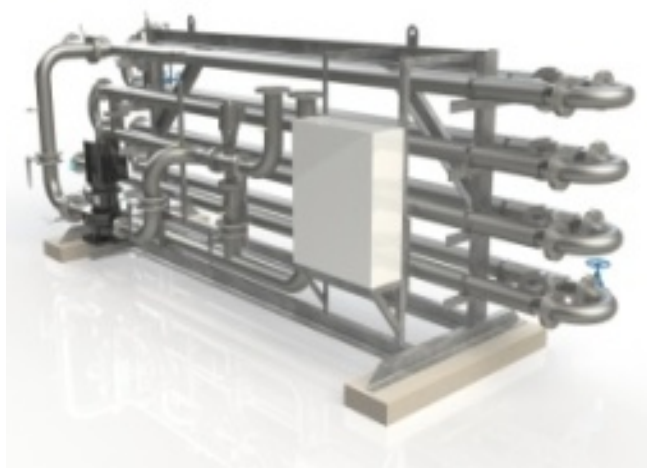
Temperature control plays a critical role for a successful and efficient anaerobic digester.

The Monsal ADT Re:Smart (Figures 1 and 2) controls digester temperature at +/- 1°C automatically and can be configured to any set point temperature including mesophilic, thermophilic and even high temperatures for pasteurization. Enter a single temperature control set point and the system manages itself.

### benefits

Monsal ADT Re:Smart systems offer the following benefits:

- Precise automatic temperature control of any anaerobic digester or process to +/- 1°C
- Optimised sludge and water flows to maintain heat transfer
- Designed to limit sludge baking on heat transfer surface
- Available in heating and or cooling configuration
- Large, blockage free pipe sizes
- Easy access to maintain heat transfer surface



**Figure 1: Monsal ADT Re:Smart**

- Delivered skid mounted with integral controls
- Suitable for all sludge types with dry solids of over 10% concentration.

### applications

Monsal ADT Re:Smart offers configurations for:

- Heating or cooling of in temperature ranges covering mesophilic and thermophilic digesters
- Applicable for applications with up to 10% dry solids concentration within the digester
- Heating Pasteurization processes and hydrolysis processes
- In line heating and cooling of raw sludge

Find a contact near you by visiting [www.suezwatertechnologies.com](http://www.suezwatertechnologies.com) and clicking on "Contact Us."

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**Figure 2: Monsal ADT Re:Smart Installation**

### precise control

Anaerobic digesters are biological systems that do not like sudden changes in temperature. By controlling to a set point temperature, biological stress from temperature change is minimized and the digester can run at optimal conditions. The Monsal Re:Smart system can be configured for both heating and cooling duties and offers optional additional functionality to include anaerobic digester monitoring.

### multiple sizes

Monsal ADT Re:Smart heat exchangers come in a wide range of standard sizes from 50kW to 3MW and can be customized to achieve larger sizes.

Using large bore pipe sizes to prevent blockages and by optimizing velocities to maintain high heat transfer efficiencies, these units are available in standard lengths of 3 m to 6 m (9.8 ft. to 19.7 ft.) delivered as a complete assembly, skidded and integrated control system.

### more information

If you would like to learn more about how SUEZ can provide temperature control in your anaerobic digestion system, contact your local SUEZ representative or visit us at our website [www.suezwatertechnologies.com](http://www.suezwatertechnologies.com).