

# TurboTec<sup>®</sup>THP

## Continuous thermal hydrolysis

More biogas, less sludge,  
high quality biosolids



### Why use Sustec TurboTec<sup>®</sup>THP?

- continuous process
- 40% less sludge
- 30 – 35% higher conversion to biogas
- up to 35% improvement of final dewatering
- higher volumetric loading rate in digesters
- sludge hygienisation to Bioclass A quality

### Sustec, your specialist in sustainable energy and resource recovery

Sustec – part of the DMT group – is dedicated to provide sustainable technologies for a circular economy. With a focus on thermal hydrolysis processes and resource recovery, we offer our customers cost effective solution with our advance TurboTec<sup>®</sup> and innovative NutriTec<sup>®</sup> technologies. Sustec is a reliable partner and market leader in the field of continuous thermal hydrolysis technologies for municipal and industrial sludge treatment. We offer our clients higher yields of biogas, reduced sludge volumes and the possibility for high quality sludge recovery for agricultural applications. Compared to conventional thermal hydrolysis, TurboTec<sup>®</sup> offers lower operational costs with a significant smaller footprint.

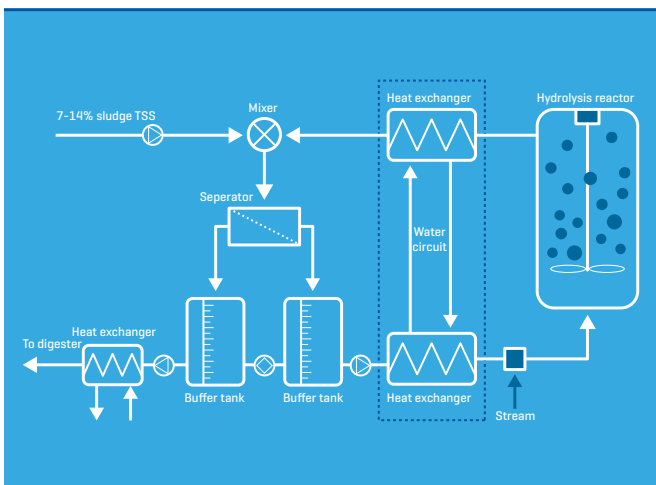
## From sludge to biogas

The patented continuous TurboTec®THP process treats organic material and biomass at a standard pressure of 4 – 6 bar and a temperature of 140 – 160 °C. This temperature treatment also ensures hygienisation of the final biomass cake and pre-thickening by belt presses of the biomass to 10 – 12% TS minimizes the use of costly chemicals. The steam consumption for heating is limited to less than 800 kg/tTS due to the efficient heat recovery via heat exchangers and an innovative mixing and separation step.



## Lower operational costs

Biomass hydrolysis of waste activated sludge results in up to 35% more biogas in the digestion, while in the improved final dewatering more than 30% TS can be achieved. By using TurboTec®THP the capacity of existing digesters can be increased or smaller digester can be installed for new treatment plants. The TurboTec®THP continuous process has reduced capital costs and significant lower operational costs compared to conventional batch processes.



## Optional features

- Pre-treatment
- Heat exchanges
- Skid mounted
- Steam boiler
- Combination with NutriTec®
- Addition of Carborex®

Please visit our website for more information and references, or scan this QR code to go to the Water Treatment page: [www.dmt-et.com/products/water-treatment](http://www.dmt-et.com/products/water-treatment)



**Our challenge**  
To create a clear  
and prosperous future

No rights may be derived from the contents of this publication.

### DMT Environmental Technology

P.O. Box 231, 8440 AE Heerenvveen

Yndustrywei 3, 8501 SN Joure, The Netherlands

T +31 (0) 513 636 789, [info@dmt-et.nl](mailto:info@dmt-et.nl) [www.dmt-et.com](http://www.dmt-et.com)

### Sustec - part of DMT group

Agro Business Park 7a

6708 PV Wageningen, The Netherlands,

T +31 (0) 317 763 749, [info@sustec.nl](mailto:info@sustec.nl) [www.sustec.nl](http://www.sustec.nl)