

# Lystek

Nothing wasted.  
Everything to gain.



## Mobile THP®

The Lystek Mobile THP solution is Lystek's smallest commercial system built to date.

The mobile unit extends the proven advantages of the in-plant Lystek THP solution by offering an award-winning process through a compact, cost effective package that is capable of rapid implementation.

The system operates entirely within two vertically stacked 50' containers and requires minimal external utilities.

Lystek Mobile THP offers operational flexibility with options for LysteGro® production, LysteMize® digester enhancement, LysteCarb® BNR enhancement, and thickening capabilities - all included within the unit.



### Primary Advantages

Lystek THP offers the following, operational advantages and flexibilities:

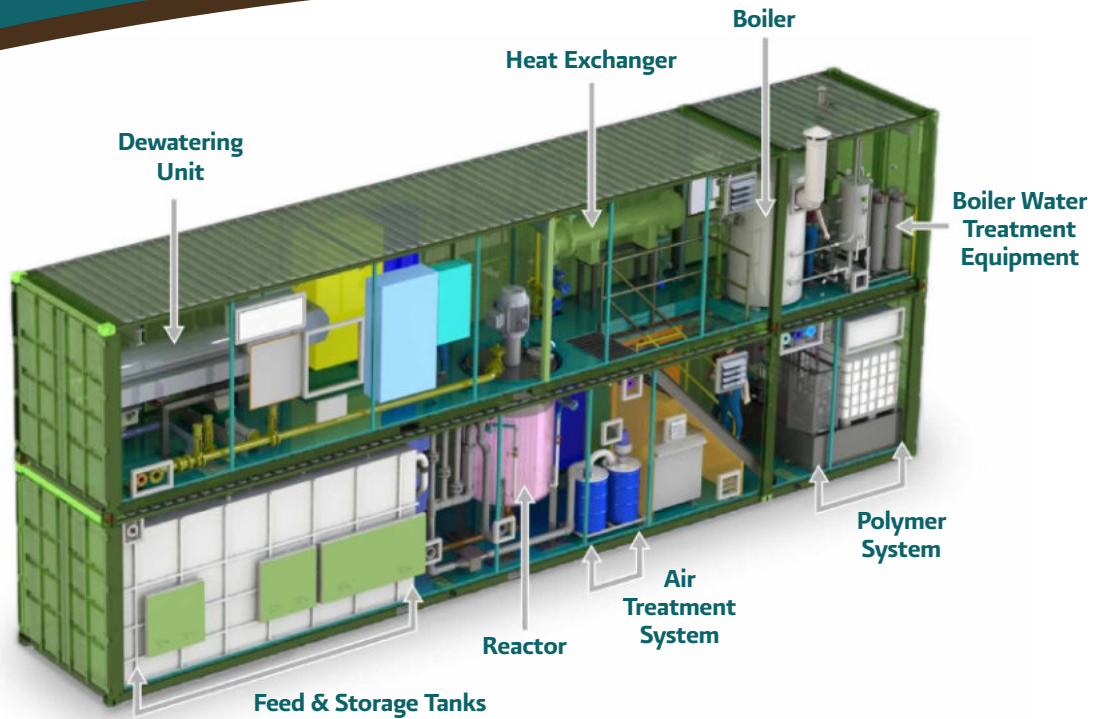
1. Can be installed as a permanent solution for smaller scale facilities where the operating parameters and capacity of the unit can be matched to processing needs.
2. Can be leased for shorter terms to determine market demand or to address challenges requiring time-sensitive solutions, while developing a long-term, full-scale plan.

### About the Lystek Technology

The Lystek low temperature Thermal Hydrolysis Process (Lystek THP) is an innovative, award-winning, proven biosolids and organics management solution.

Lystek transforms raw or digested biosolids into multi-use products that help wastewater treatment plants produce more biogas while reducing volumes, costs, odors, and greenhouse gases (GHGs). It also produces a US EPA, Class A and CFIA registered, biofertilizer product.

Operating parameters are based on low pressure steam, high speed shearing and alkali, applied simultaneously in an enclosed module. The system is fully automated and simple to operate and maintain.



### Key Operating Parameters<sup>i</sup>

Electrical Consumption	61 kw-h per dry ton
Electrical Compatibility	600 V or 460 V
Heat Requirements <sup>ii</sup>	1100 MBtu per dry ton
45% Caustic Potash <sup>iii</sup>	240 - 280 lb per dry ton
Operating Temperature	167° F / 75° C
Solids Content – end product	13 - 16%
Viscosity – end product	5,000 - 10,000 cP

### Lystek THP Mobile Sizing

Processing rate (dry tons per hour)	0.3
Footprint <sup>iv</sup> (ft <sup>2</sup> )	400 ft <sup>2</sup> for container
Dimensions	50'L x 8'w x 19'h
Clearance Requirements	10' minimum from one long side, 5' from other, short ends must be kept accessible

### End Product Value/Options

LysteGro <sup>®</sup> biofertilizer	Meets/exceeds Class A biosolids criteria
LysteMize <sup>®</sup> digester optimization	Increase biogas production by up to 40% and volatile solids reduction by up to 25%
LysteCarb <sup>®</sup> alternative carbon source	Eliminate use of costly chemicals (i.e. methanol, glycerol)

### Key Features

- Ease of on-site installation and operation
- Operational flexibility / end product flexibility
- Automated operation, SCADA controlled, remote access available
- Minimal input requirements and external connections  
potable water, alkali, electricity, recycled water

<sup>i</sup> Operating parameters are estimates only and will vary according to site conditions, feedstock characteristics, and intended use of hydrolysed end product

<sup>ii</sup> Dependent upon biosolids feed temperature into the Reactor. Heat requirements estimated based upon an average feed temperature of 60° F.

<sup>iii</sup> For larger facilities, lower cost alkali sources are available

<sup>iv</sup> Includes Mobile unit only. Product storage requirements will vary by site conditions

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