

DLT Sludge Dryer – Focused on the USA

Centrisys engineers, consultants, and industry experts researched current low-temperature dryers. The goal was to identify critical areas for improvement. As a result, we have successfully engineered a simplified and operator-friendly dryer that creates operational efficiencies and maximizes uptime, all within a compact footprint. Made in the USA and meets Build America, Buy America (BABA) requirements.

Centrisys DLT Low-Temperature Belt Dryer

The DLT is a simple, closed-loop dryer using hot water as its heat source. The low-profile design integrates modular heat exchangers into the dryer system. The DLT can be engineered using a dedicated hot water boiler for natural gas or biogas. Waste heat from pyrolysis or CHP cooling water can be used to offset energy requirements.

Why Choose the Centrisys DLT Low-Temperature Dryer?

USA Parts and Service. Centrisys DLT is designed, built, and FOCUSED on USA plants.

- The DLTs modular sections are designed to accommodate USA sourced, off-the-shelf parts and components
- All parts and components are manufactured, sourced, and distributed in the USA
- All parts and components are stocked at the Centrisys parts distribution facility in Kenosha, Wisconsin

Smallest Footprint. Increase Flexibility for Plant Design and Expansion.

- A low-profile feeder design minimizes installation requirements
- The heat recovery system eliminates a single point of failure
- The installation footprint is reduced because of the heat recovery system design
- The modular design allows for less complex dryer sizing to meet plant capacity requirements

Enhanced Safety. Designed for Plant Operators.

- Designed to meet NFPA 820/654 standards
- The DLT is insulated to regulate and maintain low temperatures on the outer surface
- All the motor parts and instrumentation meet Class II explosion proof requirements
- An automated sprinkler system installed for safety

Simple. Engineered to Create Operational Efficiencies.

- No confined spaces; operators do not need to crawl inside the dryer module for maintenance
- Internal dryer parts are accessible and removable from outside the module
- The compact pull-out heat recovery exchangers are designed for a “swap-in-place” exchange
- The main heat exchangers are a two-piece, split-height panel design
- All doors are hinged, no special tools required
- An optional lift crane assembly to move heavier parts
- Operates 24/7 with minimal operator attention

Drivers for Low-Temperature Sludge Dryers

- Generate Class A Biosolids - dry sludge at a temperature to destroy pathogens
- Reduce sludge volume
- Reduce costs for disposal, landfill, and transportation
- PFAS regulations, minimize risk by reducing volume

Product

- Dried sludge with a dryness level greater than 90% solids
- Reduced biosolids weight up to +80%
- Meets Class A requirements
- Optimized particle size creates minimal dust; allows for land application without further processing



Discover more at Centrisys-CNP.com



More Uptime. Less Maintenance. Fewer Truckloads.

PROBLEM

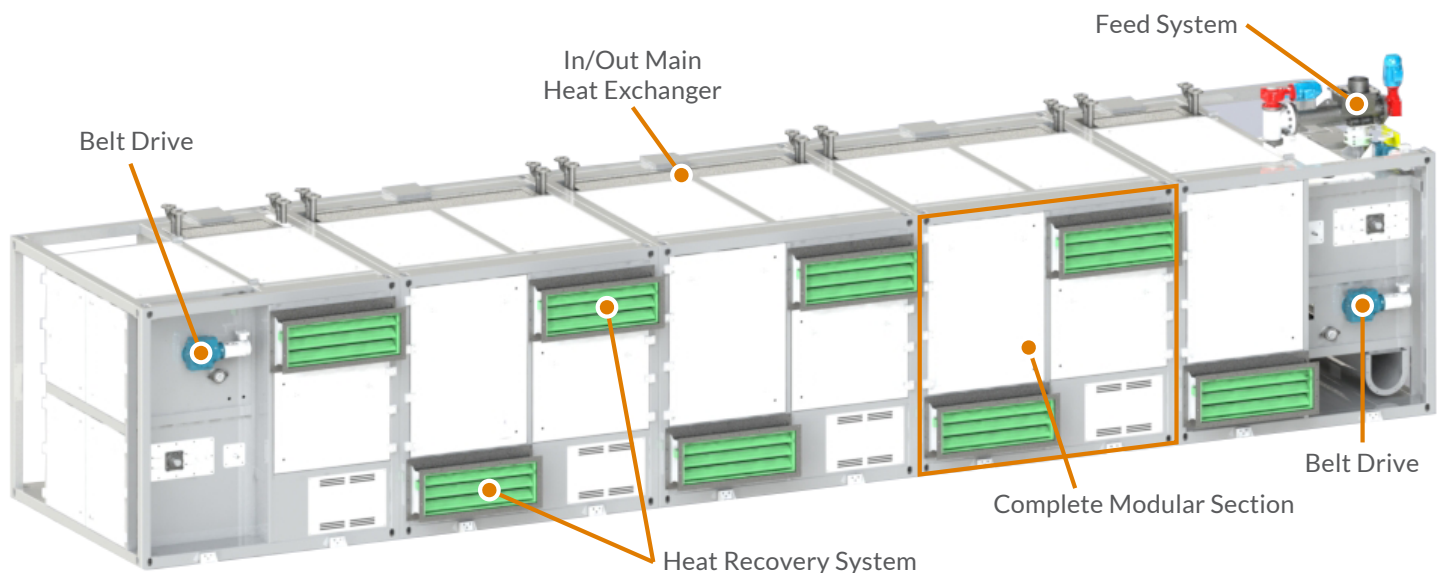
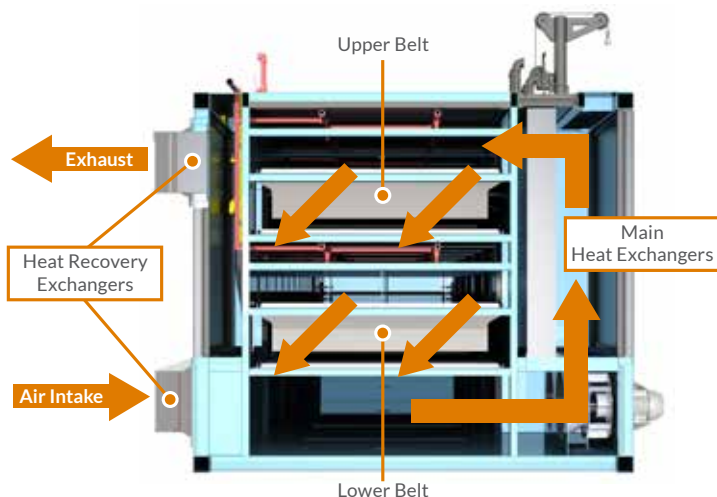
Typical low-temp dryer designs have heat recovery systems that are:

- Large
- Stand-alone
- A single point of failure
- Located outside the dryer system

During cleaning, the entire dryer must stop operation to complete this maintenance task.

SOLUTION

The DLT is engineered with a set of heat recovery exchangers on each module. If one of the heat exchangers needs cleaning or maintenance, it can be conveniently isolated, removed, and substituted with a spare. The DLT's modular design creates maintenance and operational efficiencies.



	DLT120	DLT220	DLT320	DLT420	DLT520	DLT620	DLT720	DLT820
Number of Heat Segments	1	2	3	4	5	6	7	8
Max H ₂ O Evaporation (lb. H ₂ O/hr)	350	700	1,050	1,400	1,750	2,100	2,450	2,800
Process Capacity* (t/d)	5-6	11-13	16-19	22-25	27-32	32-38	38-44	43-50
Height (ft)	11	11	11	11	11	11	11	11
Width (ft)	12	12	12	12	12	12	12	12
Length (ft)	18	27	36	45	54	63	72	81
Clearance (ft)	4	4	4	4	4	4	4	4

Hot Water Temperature In/Out: 194°F
Max Internal Temperature: 186°F

* Capacity assumes feed sludge at 20-30% TS and 24-hour operation