

**Model #
WWDS-HTS**



Wastewater Digester Sludge Heating System

for Anaerobic Digester

Dual Fuel—Bio-gas & LP or Natural Gas



Unfired Pressure



National Board



Pressure Piping



Process Piping & Power Piping

EnviroSep WWDS-HTS, Wastewater Digester Sludge Heating System is a UL-Listed, factory manufactured and tested system used in biological wastewater treatment plants for maintaining sludge temperature in the Anaerobic Digester. The Indirect Heating method is employed, with a sealed-in primary water circuit, combined with an internal heating coil eliminates corrosion, scaling, and sludge baking. The *Model WWDS-HTS* Secondary Water circuit is utilized to control the Digester Process Temperature within the mesophilic range at an optimum 100 deg F. A three-way Modulating Control Valve maintains a low Log Mean Temperature Difference in the Tube-in-Tube, Sludge Heat Exchanger which prevents baking of sludge on the tube walls and prevents Digester upsets. Additional safety devices are included to automatically prevent system operation unless specific process parameters are verified. The *Model WWDS-HTS* provides Air-free, Hot Water at a controlled flow rate, while automatically refilling under normal system losses and allows for system thermal expansion/compression based on the system volume. A UL-Listed, Industrial Control Panel with single-point power connection is pre-wired to all electrical field devices and power sources. The *Model WWDS-HTS* speeds installation and start-up by eliminating costly and time sensitive field construction and system integration.

Standard Features:

- ASME, Tube-in-Tube, Wastewater Sludge Heat Exchanger, with U-stamp
- Parker Indirect Fired, Hot Water Boiler, w/ dual fuel gas train
- Centrifugal Hot Water End-suction Pumps
- Self-priming Sludge Transfer Pumps
- Vortex Air Separator, with Auto Air Vent
- Bladder Expansion/Compression Tank
- Triple Duty Valves & Suction Diffusers
- UL Listed NEMA 4 Industrial Control Panel, w/ stand alone controls
- Safety Relief Valve
- Make-up Water Assembly
- Pump Differential Pressure Gauges
- ASME Section IX Welding



Options:

- PLC System Controller w/ Touch Screen (customized controls and monitors—Upon Request)
- Internet Connectivity for Remote System Monitoring
- Flexible Pump Connectors
- Seismic or Vibration Isolators
- Specific Performance Criteria (Upon Request)

TYPICAL SPECIFICATIONS

Heating Loads	0.5 to 6.0 MMBTU/hr
Hot Water Temperature	120 to 140 deg F
Standard WW Flow Rate	125 to 1200 GPM
Standard Power	460 V (Other Voltages Available)
Dimensions	Based on Customer Requirements
Working Pressure	100 to 150 psig (6.8 to 10.2 barg)

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