

Specifications:

Digester Model:

Avatar 2B149-12

- > 7,500 Gallons/Day Capacity
- > Plug Flow Type Mesophilic Anaerobic Digester

Site:

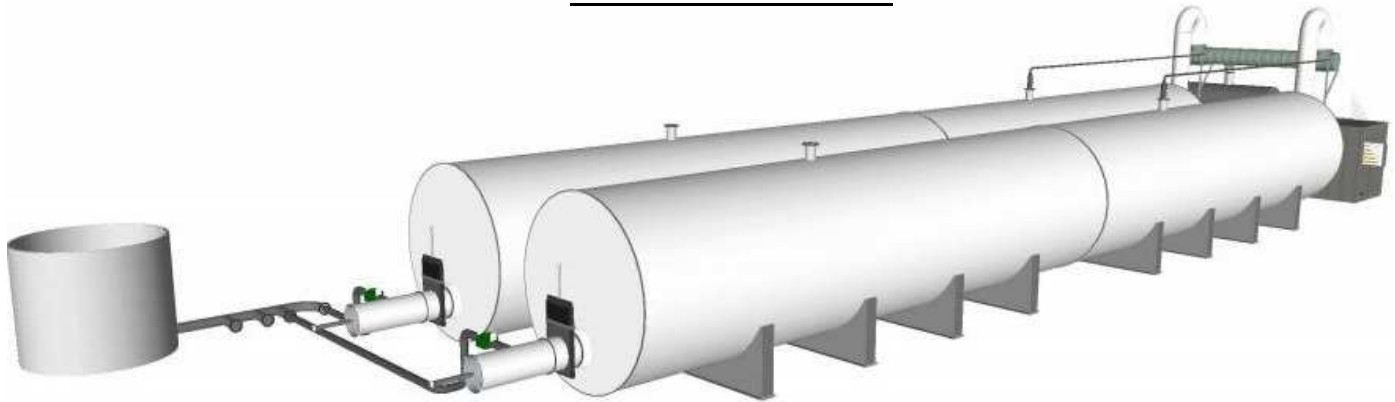
Location:

Host:

Herd Size:

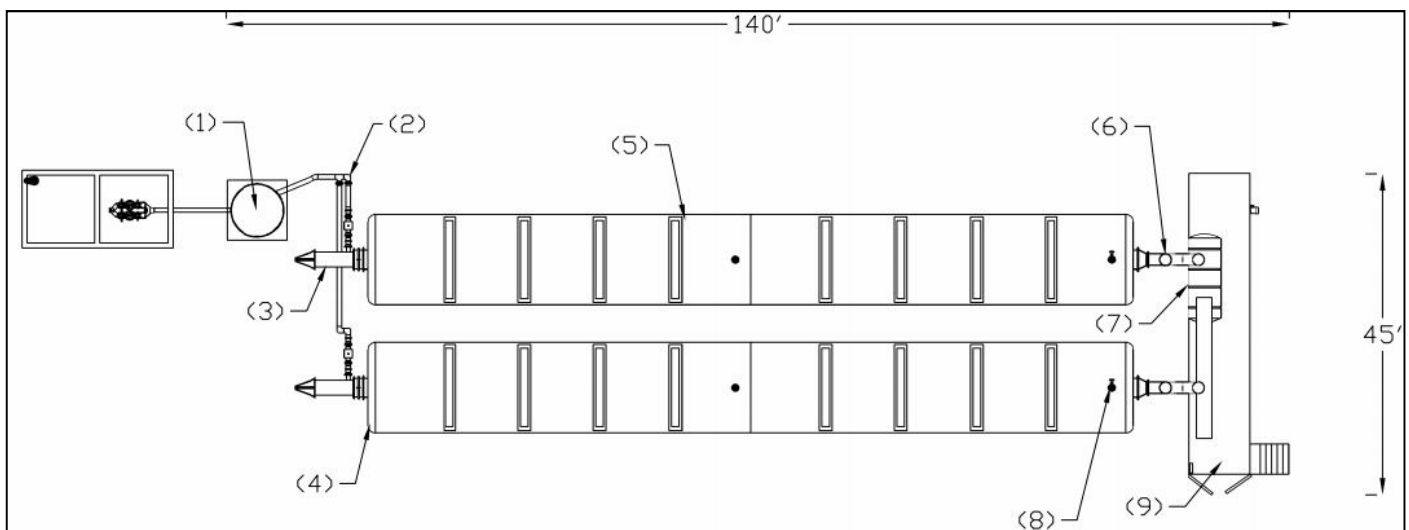
Reviewer:

Front to Rear View:



Components:

- | | |
|-----------------------------|--------------------------------------|
| 1. Injection / Heating Tank | 6. Vertical Tail Section |
| 2. Manure Intake Lines | 7. Effluent Collection Hopper & Tank |
| 3. Injection Pump | 8. Biogas Outlets |
| 4. Dished End | 9. Utility Room |
| 5. Tubular Hull Section | |



System Specifications:

AnD-2B149-12

Modular anaerobic digester with 2 digester hulls. Calculations based on dairy manure only, other feedstocks will impact system specifications.

Digester Performance:

- **Digester Substrate:** Dairy manure plus appropriate co-digestion substrates
- **Plug Flow Retention Time:** 20 days
- **Feed Rate:** 7,500 gal per day
- **Digester Operating Temperature (internal):** min: 95°F, max: 105°F
- **Ambient Operating Temperatures:** 0°F to 120°F

Biogas Specifications:

- **Biogas Composition:** 60% methane, 40% CO₂, 1200ppm H₂S, trace NH₃
- **Biogas Energy Content:** 600 BTU per cubic foot
- **Approx. Production Rate:** 31,222 cuft biogas per day
- **Approx. Energy Production Capacity:** 69 kW continuous

Digester Dimensions:

- **Hull Dimensions:** Length: 100' (w/o injector pumps or tail sections), Diameter: 12'
- **Overall System Length:** 140' (including heating and effluent tanks)
- **Digester Footprint:** 45' wide x 140' long.

**Shelter options available*

Utility Requirements:

- **Electricity:** Single or three phase (preferred)

The Avatar Anaerobic Digester

The manure is processed in the holding tank for 18-21 days. Methane gas rises and is collected above the sludge.

A heating coil is wrapped around the holding tank to maintain optimum temperature for manure processing and methane production.

The exterior of the digester hull is wrapped in waterproof insulation suitable for interior or exterior installation sites.

