

Specifications:

Digester Model:

Avatar 8B896-12

- > 45,000 Gallons/Day Capacity
- > Plug Flow Type Mesophilic Anaerobic Digester

Site:

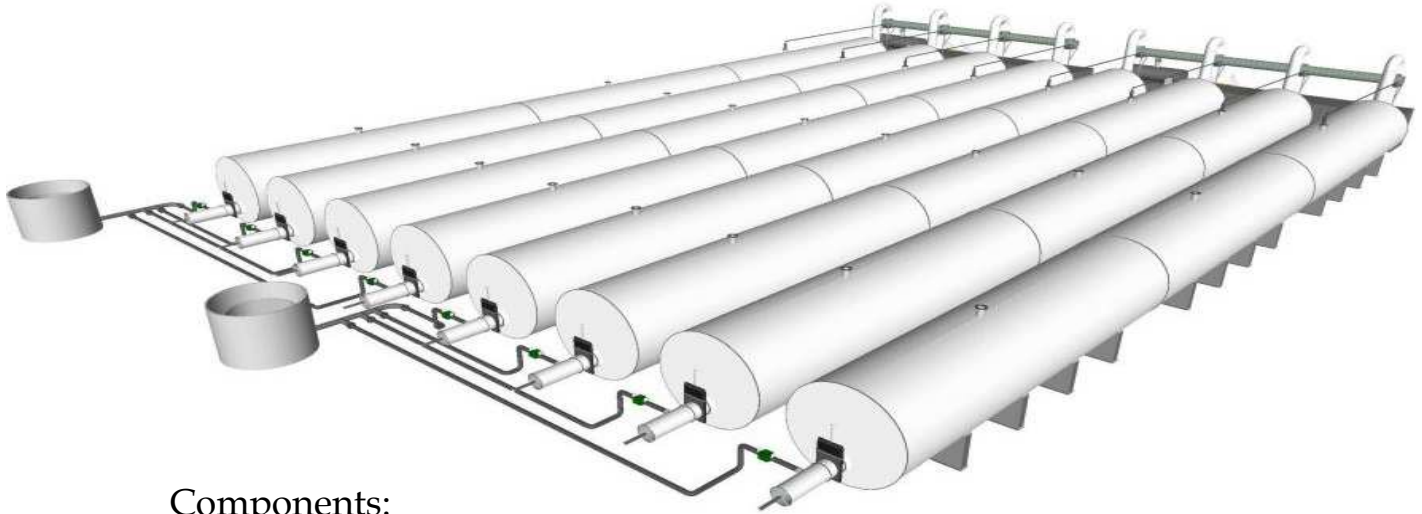
Location:

Host:

Herd Size:

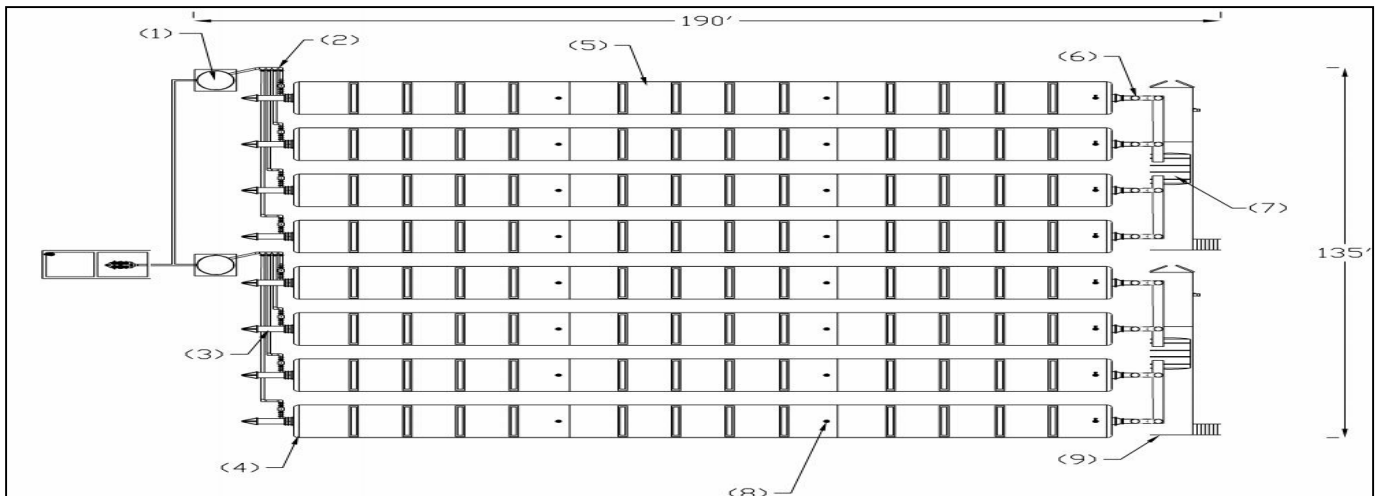
Reviewer:

Front to Rear View:



Components:

- | | |
|--|--|
| <ul style="list-style-type: none"> 1. Injection / Heating Tank 2. Manure Intake Lines 3. Injection Pump 4. Dished End 5. Tubular Hull Section | <ul style="list-style-type: none"> 6. Vertical Tail Section 7. Effluent Collection Hopper & Tank 8. Biogas Outlets 9. Utility Room |
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System Specifications:

AnD-8B896-12

Modular anaerobic digester with 8 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:** 45,000 gallons 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:** 187,333 cuft biogas per day
- **Approx. Energy Production Capacity:** 413 kW continuous

Digester Dimensions:

- **Hull Dimensions:** Length: 150' (w/o injector pumps or tail sections), Diameter: 12'
- **Overall System Length:** 190' (including heating and effluent tanks)
- **Digester Footprint:** 135' wide x 190' 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.

