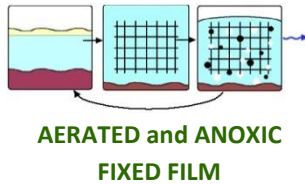


**PECONIC
GREEN
GROWTH
TECH INFO SHEET**

Firm: Fuji Clean Co., LTD.

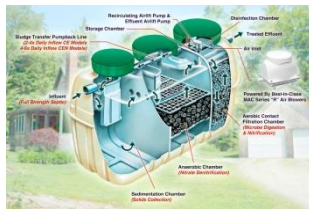
System: Fuji Clean CEN Series

Category:



Process: Wastewater first enters a chamber for primary treatment and sedimentation. The effluent then travels by gravity to an anoxic chamber with fixed media. This is where formation of ammonium nitrogen from raw sewage continues and much of the denitrification occurs after effluent has cycled through the aeration chamber. The effluent then enters /reenters the aeration chamber with two types of fixed media, where air activates the effluent. Sludge and a portion of the effluent is air lifted back to the septic chamber for a carbon source and recirculation. Another air lift raises effluent to a dispersal portal. Effluent recirculates 4-6 times per day before dispersal.

System: Incorporates a primary treatment chamber in a three-chamber design. The unit does not replace the discharge components.



Flow Range: 450 - 900 GPD

Tests: NSF/ANSI 245 for denitrification;
Pending: Suffolk County Pilot 2

Cost: \$10,000-\$12,000 (separate septic tank not needed)
Cost does not include the dispersal system.

Energy: Energy use is limited to a blower running continuously. It controls both aeration and air lift for circulation and dispersal. The estimated energy usage is roughly 38 kWh/month, for a cost of roughly \$7 per month. All other movements are passive.

Tanks: Fiberglass reinforced plastic

Venting: Venting is needed, but can be remote

Footprint: 33 SF

Fuji Clean USA
 41-2 Greenwood Road
 Brunswick
 ME 04011

Telephone:
 207 406 2927



Depth: Tank is 5.5 feet deep. To allow one foot for the riser and maintain a 2-foot clearance to groundwater, a depth of 8.5 feet is needed.

Life Cycle: Blower: 5-6 years (Cost: \$200)

Warranty: 2 years

Maintenance:

Twice per year; pump-outs as needed (estimated every 2-3 years).

Notes: Disinfection option

Phosphorus reduction option (needs replacement every 3 months)

Time for reestablishment after shutdown is 1-4 weeks.

Installations: Over 2 million, worldwide. In the USA, 300 in 16 states.

Treatment:

| | TN /aver 50% | cBOD 25 mg/L aver/mon | TSS 30 mg/L aver/mon | DO | pH ⁽⁶⁻⁹⁾ |
|---------------------|--------------------|-----------------------------|----------------------------|----|---------------------|
| Performance mg/L | 10 | 9 | 10 | 4 | 6.3- 7.9 |
| % | 74% | 95% | 99+% | | |

Advantages:

- Good treatment levels ~ 10 mg/L
- Flow equalization
- During a power outage, the unit can function as a simple septic tank
- Disinfection options/wider reuse
- Small footprint
- Moderately shallow installation
- Septic tank not needed
- Maintenance needs minimal due to no submerged moving parts
- Phosphorus reduction option

Disadvantages:

- Due to size of the primary treatment chamber, pump-outs are needed fairly frequently (2-3 years)
- Recovery from shut down is moderate