

Summary
Of the
Benefits of the AGF Process

Capacity - Expands the capacity of anaerobic digesters by *3 to 4 times* their *current capacity* while using 1/4th the land area, and 1/8th the volume of a single digester. The AGF process uses less energy than that required to mix a conventional digester. SRT/HRT ratios above 3.0 are commonly used.

Volatile Solids Destruction - Substantially increases the SRT of a digester and as a result, increases the volatile solids destroyed and converted to gas. (*70% to 80% VS destruction using AGF and 80% + with AGF Pasteurization Process*).

Operational Flexibility - The influent solids do not have to be thickened to the extent required by conventional digestion. *More dilute influent solids can be fed.* Dewatering requirements are *not* based on influent sludge volume. *The solids can be concentrated in the digester while the dewatering schedule is adjusted to accommodate the needs of the operator .* Incorporating AGF solids removal *reduces digester-cleaning requirements.*

Solids Dewatering - The time required to dewater waste solids is reduced to a *third of the time required to dewater conventionally digested solids.* Dewatering polymer is also reduced by 50% while cake solids concentrations are increased.

Gas Quality - Production of high quality gas. *Ninety- percent reductions in H₂S levels and fifty- percent reductions in CO₂ levels* can be achieved.

Scaling - Struvite formation and precipitation are inhibited through the AGF gas flotation process.

Effluent Quality - Both soluble and particulate constituents can be removed by gas flotation. *A high quality liquid effluent is produced from which nitrogen and phosphorus can be recovered.*

Foam – Foaming is eliminated.

Storage - Biosolids are stored in existing digesters by increasing the digester's solids concentration, rather than constructing storage facilities for digested or dewatered solids.