

Technology Description:

- Porous stainless-steel tubular membranes (3/4") with internal titanium dioxide coating for abrasion resistance
- Robust design handles high temperatures, high solids, high viscosities, and extremes in pH
- Cleans quickly using standard chemistries
- Welded and bolted construction in ASME pressure vessel
- Designed to last 10-15 years in challenging applications with little downtime, maintenance, or repair
- No internal moving parts with one external centrifugal pump
- Can operate in batch-mode or continuously and be mounted horizontally or vertically
- Proudly manufactured in the USA



Performance

- Solids-laden liquids are readily filtered, producing a transparent liquid filtrate and concentrated product
- Removes nearly all suspended solids, oils, bacteria/pathogens, and a large fraction of organic matter
- Filtrate recoveries as high as 90%



Data from filtering food waste digestate (mg/L):

Parameter	Feed	Filtrate	Conc.	Removal
Total solids (%)	2.79	1.32	5.6	53%
TSS	18,400	140	55,500	99%
TVS	16,000	4,140	38,600	74%
COD	27,790	9,284	97,300	67%
TKN	2,000	1,090	3,780	46%
NH4-N	1,050	1,030	1,370	1.9%
Organic-N	950	60	2,410	94%
Phosphorus	445	15	814	97%
Potassium	1,060	888	682	16%
Sulfur	124	28	197	77%



Facility Benefits

- Digestate can be filtered to produce transparent liquid for low-cost irrigation or sewer discharge
- Reduce wastewater disposal and lagoon management costs
- Opportunity to reuse pathogen-free and solids-free filtrate as dilution water
- Opportunity to recycle UF concentrate to the digester for enhanced organics conversion to biogas

Please call us today for a customized quotation and to learn more about our pilot testing services.