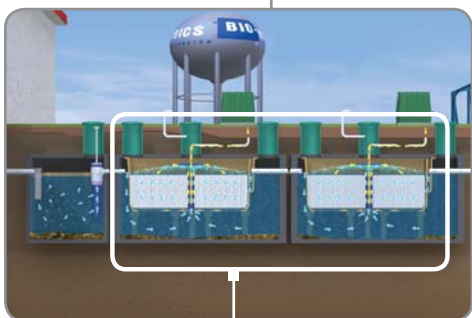


Proven, Safe, Reliable

HighStrengthFAST® wastewater treatment systems are ideally suited for use in restaurants, schools, trailer parks, office buildings, commercial properties and other high-strength waste applications. Commercial facilities are among the most challenging projects, often having biological loading (BOD) and Fat, Oil, and Grease (FOG) levels that are significantly higher than standard sanitary-strength sewage. Certain applications may have additional challenges that can affect the wastewater treatment system due to the unique characteristics of a particular facility. Wastewater treatment projects should always be designed with these challenges in mind and never on flow volumes alone. HighStrengthFAST wastewater treatment systems are proven, innovative treatment products that provide robust, high-performance treatment to meet the challenges of our changing world. Dependable, affordable...FAST.



The Real Beauty Is How Well It Works.

FAST® is simply great technology, based on environmentally sound and simple scientific principles. The FAST (Fixed Activated Sludge Treatment) process employs a unique hybrid combination of attached and suspended growth in an aerobic, packed bed bioreactor. This proven IFAS (Integrated Fixed-Film Activated Sludge) combination includes the stability of fully-submerged, fixed-film media and the effectiveness of activated sludge treatment, making the innovative, patented FAST system technologically advanced and extraordinarily reliable.

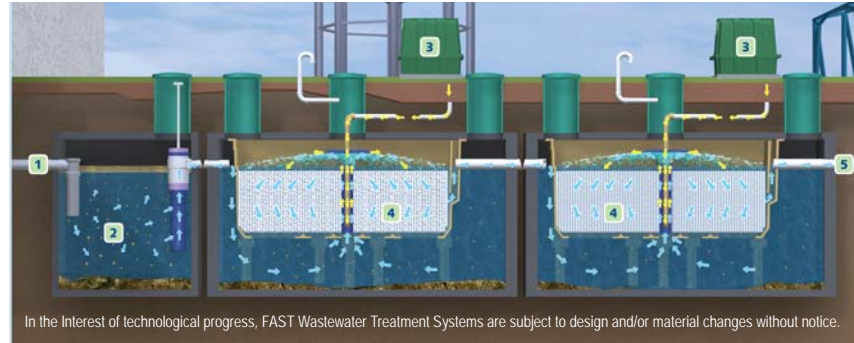


Nitrogen Reduction

Nitrification and denitrification projects are much easier with FAST technology. Multiple biological, bio-chemical, chemical and physical processes occur simultaneously within the FAST wastewater treatment system. MicroFAST wastewater treatment systems have proven themselves to consistently reduce nitrogen levels – including nitrates and all other nitrogen species - at exceptionally high percentage rates.

HighStrengthFAST[®] wastewater treatment systems

Technical Specifications



How Does It Work?

- 1 HighStrengthFAST[®] wastewater treatment systems process the wastewater from restaurants, schools, office buildings, trailer parks and other commercial properties.
- 2 Natural separation and settling processes occur prior to entering the HighStrengthFAST treatment module.
- 3 A remote-mounted, above-ground blower, the system's only moving part, introduces air (oxygen) into the treatment module to facilitate a robust circulation of wastewater through the media's channeled flow path.
- 4 FAST's fixed film media provides a high surface-to-volume ratio to maintain exceptional microbial growth during low, average and peak usage. Bacteria become "fixed" or attached to the stationary media where the abundant, diverse and self-regulating population of microbes is consistently maintained in the aeration zone to metabolize the incoming waste.
- 5 Clear, odorless, treated water is ready for standard or innovative dispersal.

HighStrengthFAST[®] Specifications

High Strength/Commercial Modules	Maximum Treatment Capacity*	Module Dimensions**	Weight***	
			Pounds	Metric
HighStrengthFAST [®] 1.0	Consult Factory	59" L (149.9 cm) x 48" W (121.9 cm) x 57" H (144.8 cm)	227 lbs	103 kg
HighStrengthFAST [®] 1.5	Consult Factory	82" L (208.3 cm) x 55" W (139.7 cm) x 58" H (147.3 cm)	455 lbs	206.4 kg
HighStrengthFAST [®] 3.0	Consult Factory	71" L (180.3 cm) x 59" W (149.9 cm) x 81" H (205.7 cm)	610 lbs	276.7 kg
HighStrengthFAST [®] 4.5	Consult Factory	145" L (368.3 cm) x 73" W (185.4 cm) x 51" H (129.5 cm)	1600 lbs	725.8 kg
HighStrengthFAST [®] 9.0	Consult Factory	145" L (368.3 cm) x 73" W (185.4 cm) x 76" H (193 cm)	2300 lbs	1043.4 kg
Larger Applications	Multiple FAST [®] treatment modules can be used in parallel and/or series			

*Treatment capacity: Individual FAST module capacities are rated based on biological (BOD), hydraulic and other project-specific considerations. All rated capacities are given as guidelines for suggested use. Actual capacity may vary with local conditions and performance goals.
 **Module dimensions/weight provided only for shipping specifications. Please see design specifications for recommended exterior tankage sizing. Treatment modules shall be installed inside tanks that are locally approved and manufactured using watertight materials.
 Electrical Options: Electrical components are available to meet all worldwide electrical specifications (volt/phase/frequency).

FAST[®] Certifications Include:

- UK Department of Trade • European Union (CE) • European Electrical Systems (& Tropical Certification) • Australian Department of Transportation • Royal Australian Navy • Saudi Arabian Standards Organization (SASSO)
- US Coast Guard • International Maritime Organization (IMO) • US Electrical System • Underwriters Laboratories (UL) • Canadian Standards Association (CSA) • Canadian Great Lakes (CGL)
- US Environmental Protection Agency (EPA) Environmental Technology Verification (ETV) for RetroFAST .250 and .375
- National Sanitation Foundation - NSF/ANSI Standard 40 & 245 for MicroFAST 0.5, 0.75, 0.9, and 1.5.



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