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DID YOU KNOW?

FAST® processes raw, unscreened sewage as it is produced

FAST units are capable of handling any combination of blackwater, graywater, ground food waste, freshwater, seawater, vacuum toilets and conventional toilets. No macerators, grinders, pretreatment or flow equalization tanks are required.

Clogging in everyday operation is virtually impossible

The process is very turbulent and the airlifts used for oxygen transfer throw foreign objects to the sides of the tank where they will not interfere with the process.

There are no moving parts in contact with sewage, no filters, membranes or fine pore aerators to blind or plug.

FAST effluent meets any known marine standard worldwide

FAST units provide outstanding effluent quality without any filters or membranes. Consider official testing under three separate regulations over a 33 year span and with standard production units:

Parameter units	BOD5 mg/l	TSS mg/l
Canadian Great Lakes		
Official Test Results	5.3	2.76
Effluent Requirement	50	50
US Coast Guard 33CFR159		
Official Test Results	3.2	4.2
Effluent Requirement	n/a	150
MEPC.159(55)		
Official Test Results	4.1	5.8
Effluent Requirement	25	35
Definitions		
BOD5 - 5 day biochemical oxygen demand		
TSS - total suspended solids		

FAST is not adversely affected by light loading

Many biological processes are upset by light loading. The only effect on FAST is that the effluent quality is even better.

FAST starts up in half the time

FAST starts up much faster than conventional suspended growth processes. Also, FAST is self-starting without powdered bacteria or activated sludge from another sewage treatment plant.

In the real world, all biological processes are upset from time to time. FAST handles these quickly and automatically and no operator intervention is required.

As full style agent & distributor:
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DID YOU KNOW?

FAST produces the minimum amount of sludge possible

All processes capable of removing pollutants to meet MEPC.159(55), US EPA and other secondary effluent standards produce a residual sludge that requires separate disposal - that is, all processes that do not employ dilution to meet standards.

The FAST process supports a more complex microbial culture than conventional suspended growth systems. Segmented sludgeworms, insect larvae and other higher ordered organisms predate upon simpler microorganisms and reduce the mass rate of sludge accumulation by one-third or more.

At the same time, FAST sludge is heavier and more concentrated than that from suspended growth systems of all types (including MBR's). In volumetric terms, the net result is a rate of sludge accumulation of much lower than that of other processes.

FAST units set up for MEPC.159(55) or secondary treatment incorporate from one to three month's internal sludge storage. The accumulated sludge can eventually be pumped out at sea, incinerated or transferred to a separate tank for efficient disposal.

User Friendly

There is no need for operators to come into contact with sewage at any time.

FAST units are more compact

FAST® is truly a state of the art process. Operating weight is less than half that of comparable biological units.

FAST handles the entire range of shipboard applications

The smallest FAST units are sized to handle harbor tugs and individual homes. The biggest systems so far handle 195,000 gpd from 1,750 persons aboard a cruise ship and 1,500,000 gpd from a municipal system at Tokoroa, New Zealand.

FAST units are built to last

Steel tanks are designed to meet ABS Deep Tank standards. This provides a strong foundation for a superior coating system.

Many FAST units remain in everyday marine and offshore service after 50 years of continuous operation. When requirements change, these units can be and are updated at minimal cost.

FAST units can be upgraded

With such long service lives, older FAST units can be and are upgraded to meet the latest regulations when so required. Although the process technology is state of the art, the components are simple and economical.

All claims for the FAST process and for FAST sewage treatment systems are supported by more than 70,000 installations worldwide and over 51 years of research, development and real world operating experience.

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Blue Water and a Clean Wake