



FRED

SURFACE MIXER



PREVENT SETTLEMENT AND CRUST FORMATION AS WELL AS MIXING THE ENTIRE BASON.

APPLICABLE FOR VISCOUS + SLUDGE BULKING APPLICATIONS



MAIN CHARACTERISTICS

Radial Aspiration and Mixing floatable material with downdraft flow and dual action impeller. The homogenization phase allows re-entrainment with the biological process.

FRED units prevent settlement and crust formation as well as mixing the entire basin. Nothing is discharged from the basin.

Applicable for Viscous + sludge bulking applications and grease trap systems upstream of biological reactor SBR.



ADVANTAGES

SPECIAL DUAL ACTION IMPELLER

EXCELLENT MIXING PERFORMANCE

RELIABLE + NON-CLOGGING DESIGN

EASY INSTALLATION + REMOVAL

LAW MAINTENANCE

ADAPTABLE TO MOST ANY TANK GEOMETRY

STAINLESS STEEL CONSTRUCTION

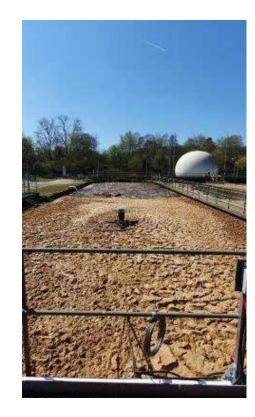
FRED/MIX STANDARD SIZES

COMPONENTS

- 1.1 22KW Motors
- 4 6 Pole Speed, Direct Drive
- 2 + 3 Float Options
- AISI 304/316 or special SS

OPTIONS

- Float Mounted only
- Vertical Operation only
- One x Surface drive Fixed or variable Water Levels



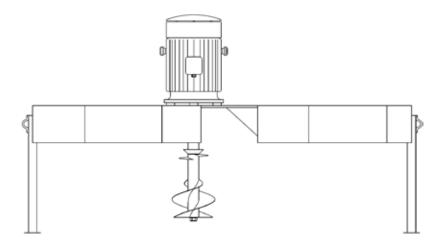
Model	MOTOR HP	MOTOR RPM	TOTAL HEIGHT (inch)	FLOAT DIAMETER (inch)	WEIGHT (lbs)
0400-20	5	1200	42	25	488
0550-20	7.5	1200	48	60	559
0750-20	10	1200	51	105	657
1100-30	15	1800	51	105	642
1100-20	15	1200	57	105	716
1500-20	20	1200	60	109	1005
1850-20	25	1200	62	109	1109
2200-20	30	1200	64	109	1135

Note:

- 1. Other sizes are available. Please contact factory for details.
- 2. Patented in 1999.

FUNCTIONING

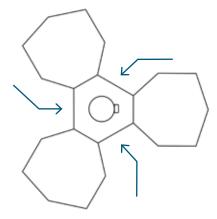
The AQUA TURBO® F.R.E.D. was developed to help solve surface solids build-up problems, such as fats, oils and grease that occur in wastewater treatment. Because heavy accumulation of surface solids can cause severe problems, the unique FRED MIXER was designed to help combat the problem.



Field proven and patented in 1999, the FRED MIXER design includes a unique tri-float system, and modified Screwpeller™.

The FRED MIXER entrains the surface solids by pumping the floating material downward into the liquid through the tri-float openings.

The modified Screwpeller™ also eliminates vortexing problems with a unique up-pumping screw near the surface, and once the material is pumped through the float openings, the Screwpeller's high performance mixing action helps to keep the solids from re-forming at the surface.



The Results... F.R.E.D. is a highly effective mixer that entrains surface solids.

Quality built of stainless steel, this simple, yet effective FRED MIXER is virtually maintenance free. Available in a variety of motor horsepower sizes, FRED's flexibility allows for use in most any type of basin geometry and with a variety of mooring options.

This tri-float system (viewed from the top) shows the three openings that creates a path for the floating material to follow as it is pumped downward by the Screwpeller's $^{\text{TM}}$ high performance mixing action. Once the floating material is pulled down into the liquid, the modified Screwpeller $^{\text{TM}}$ re-entrains the solids and thoroughly mixes the basin.

A STEP AHEAD IN WATER TECHNOLOGY

sfa-enviro.com



