

High Performance Hydrofoil Agitator



The hydrofoil agitator has numerous advantages that provide cost savings and convenience to the user. At equal flow the hydrofoil agitator allows for a decrease in torque (up to 50% over standard agitators). This results in increased gear reducer life and often smaller gear reducers and motors, which reflect in direct costs savings. In addition, the rigid coupling allows for an easy installation of the shaft and impeller.

High Efficiency Mud Agitator

Mud agitators are an important part of any solids control system. When using agitators with weighted mud, they will keep the weighting agents in suspension therefore minimizing solids from settling. The need for a more efficient agitator becomes apparent as energy and maintenance costs continue to climb. Elgin's hydrofoil agitator uses an aerodynamic design that maximizes lift and minimizes drag. This results in a more efficient and power conscious agitator. Elgin's design involves a tank-mounted stabilizer to increase gear and bearing life.

Advantages

Compared to standard agitators, on the market today, Elgin's hydrofoil design nearly doubles the mixing capacity at any impeller size. Elgin's hydrofoil agitators feature:

- High flow efficiency, low power consumption, and lower operation costs.
- Hydrofoil design includes: high efficiency gearbox, axial flow to provide improved mixing as well as less side force, lower bending moments and longer life for gear reducers and shaft seals.
- Durable construction and easy maintenance.

Elgin High Performance Hydrofoil Agitators vs Standard Agitators

IMPELLER DIAMETER	28"		32"		36"		40"		44"		48"	
AGITATOR SOURCE	HYDROFOIL	STANDARD	HYDROFOIL	STANDARD	HYDROFOIL	STANDARD	HYDROFOIL	STANDARD	HYDROFOIL	STANDARD	HYDROFOIL	STANDARD
20# MUD HP RATING	3	5	3	7.5	5	10	7.5	15	7.5	20	10	25
15# MUD HP RATING	3	5	3	5	3	7.5	5	10	5	15	7.5	20
CAPACITY (GPM)	6,300	2,500	6,300	3,780	10,050	5,460	15,000	7,140	19,030	10,080	19,030	13,020
CAPACITY (BBL/MIN)	150	60	150	90	239	130	357	170	453	240	453	310

Elgin's hydrofoil design nearly doubles the mixing capacity at any impeller size with lower power consumption.

High Efficiency Mud Hopper



Properly engineered hoppers ensure the highest discharge pressures, solid addition rates and shear rates.

Elgin Separation Solutions manufactures four (4) inch and six (6) inch hoppers with standard flow rates from 130 GPM to 830 GPM as well as the Venturi shearing system, primarily used for shearing hard to mix additives. Elgin can assist with properly sizing a hopper to fit your system. There is no reason to be forced to mount the hopper on top of the mud tanks since the venturi allows for convenient location of the hopper. Sizing assistance should be requested when extensive piping or elevation is planned for the downstream side of the hopper.