

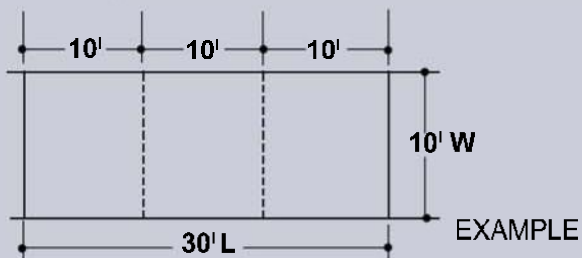
STATE OF THE ART FINE SCREENING & SOLIDS CONTROL

# MUD AGITATORS

RIG OIL LLC uses an impeller to mix and suspend the solids using both axial and radial flows, and by utilizing low shear mixers to suspend and mix mud additives particle size degradation and polymer shear. Unlike centrifugal pumps or mud guns. The Agitator is relatively low shear and low energy device, so it's easy to operate and inexpensive to maintain.

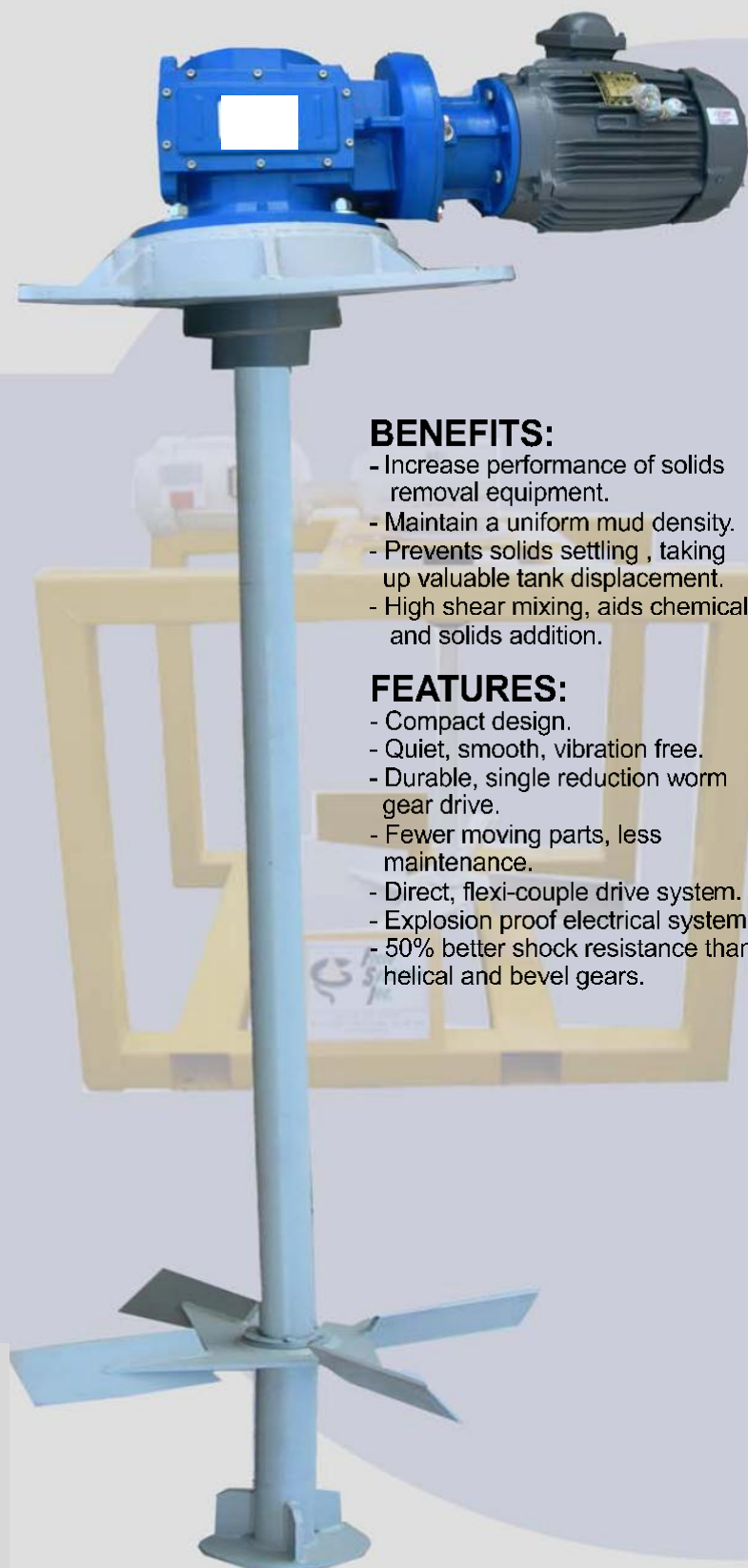
**HORSEPOWER AVAILABLE:** 7.5, 10, 15, 20, or 25

**HOW TO CALCULATE MUD AGITATOR SIZE:**



Correct mud agitator horse power sizing is based on a given impeller diameter versus a given volume and mud weight. If you had a mud tank that was 10' Wide x 8' Deep x 30' Long, you should divide the tank as equally as possible (divide L X W) or in this case, 3 areas that would be 10' x 10'. If the tank depth is 8'. The normal mud depth would be 7', (normal fluid level is 1' from top). therefore, you would have three areas with a volume of 123.2 BBLS (10' L x 10' W x 7' D x .176= 123.2 BBLS).

Refer to the mud agitator sizing chart and find 123.2 BBLS on the left side, vertical scale, move horizontally to the right until you intersect the "AXIAL" Impeller curve. from this point move down vertically to establish the proper impeller diameter (36") and turn overtime. turn over time is the time required for the volume of the agitated area to be projected by the impeller. We have established that a 30 to 90 second turn over time is acceptable. To have less than 30 second turn over time would create vortexing (introducing air into mud). To have more than 90 sec. turn overtime would allow suspend solids to settle. Therefore, the range in each impeller category (in example-36") is 30 seconds from left to 90 seconds to the right. The example yields approximately 58 seconds turn overtime.



**BENEFITS:**

- Increase performance of solids removal equipment.
- Maintain a uniform mud density.
- Prevents solids settling, taking up valuable tank displacement.
- High shear mixing, aids chemical and solids addition.

**FEATURES:**

- Compact design.
- Quiet, smooth, vibration free.
- Durable, single reduction worm gear drive.
- Fewer moving parts, less maintenance.
- Direct, flexi-couple drive system.
- Explosion proof electrical system.
- 50% better shock resistance than helical and bevel gears.