

**Concept**

Using properly conditioned drilling fluids will improve drilling performance, and reduce the amount and cost of fluid additives required. Compared to conventional methods, Shear Blender high speed mixing technology decreases mixing time and significantly improves mixing efficiency. Existing mixing hoppers requires high velocity inflow to create a zone of relatively low pressure, which creates suction, drawing additives into the void space. The unique design of Shear Blender does not require a high pressure/high velocity input.

**How It Works**

The fluid enters the Shear Blender via a 2-in. line or hose. The dry powdered or liquid additives are fed through the hopper where a high speed impeller imparts an intense mechanical force and thoroughly mixes and blends the chemical additives with the incoming fluid. The homogenized fluid exits the mixer at high velocity and discharges back into the drilling fluid system.



**Application**

*RGD Shear-Blender is intended for the mixing of most drilling fluid additives.*

Viscosifiers  
Lubricants  
Salts  
Surfactants  
Filtrate Reducers  
Weighting Materials

Flocculants  
Shale Control Inhibitors  
Emulsifiers  
Defoamers  
Dispersants/Thinners



**Benefits**

- Reduces the amount of additives needed to maintain fluid properties
- Optimize system chemical properties
- Minimizes “fish eyes” in hard-to-mix products
- Energy Efficient
- Speeds up drilling fluid preparation time
- Economic benefits through product efficiencies and time savings
- Rugged stainless steel design will withstand harsh environment
- Simple to operate
- Small footprint makes it ideal for any offshore location
- Can be installed readily on any drilling rig

**Features**

- CSA standard
- High speed impeller (3500rpm)
- Mixing up to 20,000 kg/hr(44,000lbs/hr)
- Butterfly valve to control powder feed
- Compartment box for spare parts
- Hopper screen
- Flat-top skid for easy relocation

**Specifications**

- Stainless steel 304 body structure
- 2" fluid inlet/outlet
- Motor: exp proof, 10hp,3500 rpm, 440 volts, 3-phase
- Dimensions (LWH) 46 in, 26 in, 51 in  
117cm, 66cm, 130cm
- Weight: 900 lbs, 408 kg