

ES 300 and ES 500

The Triflo ES 3000 is a patented 3-phase liquid-solids separation system, which separates solids from pumpable slurries down to a nominal 10 um size. Solids produced are “dry” (pass paint filter).

Throughput capacity is 300 gpm (500 gpm on the ES 5000) on a continuous basis. There is no batching involved, nor is any chemical enhancement required.

THE THREE PHASES

PHASE ONE - Slurry is passed over an unbalanced elliptical shale shaker to remove the large material- Rock, gravel, larger sands, plastic, grass, roots, paper, rubber and other foreign material that is larger than 30 mesh.

PHASE TWO - The slurry which has the above materials removed, now passes through the first set of hydrocyclones, to remove the finer sands and coarser silts The underflow from the hydrocyclones is deposited on an elliptical shale shaker screen for drying. Screen selection size is adequate to capture and dry the above silts and sands. Cuts are down to 30 um.

PHASE THREE - The slurry which has the above material removed, now passes through a second bank of hydrocyclones to make the final cut which includes the fine silts and non-hydrated clays. The underflow from these hydrocyclones is deposited on an elliptical shale shaker screen for drying. Screen selection, plus clay “piggybacking” is adequate to capture and dry the above fine silts and clays. Cuts are down to 10 um. The phases described above are performed in a continuous and in sync operation with final discharge controlling the whole operation.



Suggested Application Descriptions for the ES 300 & ES 500

ACTIVE WATER OR BRINE BASED MUD SYSTEMS - Taking feed from the rig shaker tank sand trap, this system will remove LGS and solids that are too small to be removed by the rig shakers. Mud is discharged back into the rig system after processing on a continuous basis at 300 to 500 gpm.

ADVANTAGES: 1. Improved mud rheology. 2. “Dryer” solids production. 3. Eliminates dilution & fresh mud makeup requirements. 4. Allows the rig shakers to run coarser screens. “Dryer shaker screen discharge” 5. Adds very little volume requirements to the mud system. Flow thru operation. 6. Eliminates the need for a centrifuge. 7. Can recondition the whole mud system for reuse when the water based phase of drilling is completed. 8. Operation is completely mechanical- No chemical flocculants or settling agents which cause the inherent hole problems – Solids settling, wall cake buildup and deteriorating mud rheology 9. Eliminates the need for solids control equipment on the rig mud system except for their shale shakers. 10. Fast and simple rig ups, rig downs and moves. 11. Trailer mounted.