



Hydrocyclone Packages



Round Desilter



Inline Vertical Desander

*Good Solids Control Starts with Efficient
Removal of Fine Drill Cuttings*

4" and 10" Hydrocyclones



4" Hydrocyclone



Tri-nut
Apex



Snap-on
Apex

Derrick 4" Hydrocyclones

Derrick's polyurethane hydrocyclone offers operators a high capacity 4" cone while providing contractors an economical replacement for less efficient older equipment. Derrick's 4" desilter cones are designed to efficiently remove silt sized solids (12-74 microns) from drilling fluids.

Derrick hydrocyclones are manufactured using a specially formulated EU polyurethane that has excellent resistance to heat and abrasion. Its unique uni-body construction eliminates excess parts and seams where excessive wear can occur. Derrick manufactures two 4" cones with different internal geometries – *with* and *without* a ramp in the feed inlet. The circular pipe feed is smoothly reformed into a rectangular feed. This rectangular ramp feed enters the cone tangentially minimizing turbulence in the upper portion of the cone allowing the solids to quickly move to the wall of the hydrocyclone. The ramp feed cone has a capacity of 80 GPM at 75 feet and is primarily used if the cone discharge is over a shaker/mud cleaner. The 4" cone without the ramp feed is typically used on stand-alone desilters when liquid conservation is of prime importance. This cone has a capacity of 70 GPM at 75 feet of head. An extra long vortex finder prevents oversized solids from short-circuiting and exiting in the cone overflow before they can be pushed to the wall of the cone at the feed.

Derrick 4" desilter cones are easier to operate and maintain making them last more than twice as long as conventional cones. If oversized solids plug the underflow simply unscrew the replaceable wear section (bottom third) clean and replace. Service and replacement of the bottom cone section is made quick and easy by A.N.S.I. buttress threaded bottom sections. The apex is available in two styles: tri-nut or snap-on. Derrick hydrocyclones are available with ceramic inserts for extreme duty. The hydrocyclone is designed with metal reinforced grooved connections on the feed and overflow fittings allowing it to fit most existing desilter manifolds.

These high performance features, coupled with Derrick's lightweight construction and interchangeable threaded bottom, provide customers with the best, balanced, 4" hydrocyclone for today's toughest oil field drilling projects. When combined with our full line of solids control equipment, your drilling operation will have the best chance of removing detrimental drilled solids on the first circulation.



10" Hydrocyclone

Derrick 10" Hydrocyclones

Derrick's 10" polyurethane hydrocyclones offer operators a high volume 500 GPM cone where feed is tangentially blended into the cone entry as a narrow rectangle. This design minimizes turbulence in the upper section of the cone, allowing the solids to move quickly to the cone wall.

The cone is divided into three easy to replace or service sections which are held together by non-corrosive stainless steel clamps. The joints between each section are metal reinforced. Likewise, the grooved connections for the feed and overflow are steel reinforced and the vortex finder is steel lined. Ceramic lower sections are available for longer life. The apex is available in 1.0, 1.375, and 1.5 inch sizes.

Derrick Round and Inline Desilters

The Derrick round and inline desilters are designed to remove silt sized (12-74 microns) solids from drilling fluids. Derrick desilters are simple to operate, easy to maintain and relatively inexpensive. The round desilters have shut-off valves on each cone inlet which allows for individual cone removal and inspection without interrupting operation of the desilter. The inline desilters are designed for use in areas that cannot accommodate the spacial requirements for the premium round desilter configuration.



Shut-off Valve

Round and Inline Desilter Features:

- Available in 10, 12, 16, and 20 cone models
- Shut-off valves on each cone inlet (round desilter only)
- Vacuum breaker connection
- Controls mud properties by removing silt sized solids
- Increases penetration rate
- Lowers mud costs
- Low cost polyurethane cone engineered to minimize plugging and maintenance
- Reduces mud loss with adjustable or interchangeable apexes
- Cones available with or without a ramp in the feed inlet



Round Desilter



Inline Desilter

Inline Desander

Derrick Inline Desanders

Derrick desanders make separations between 40 and 100 microns, and offer the flexibility of mounting either one, two, or three 10" desander cones over a cone underflow pan. Each 10" hydrocyclone processes 500 GPM at 75 feet of head, allowing for a maximum capacity of 1,500 GPM. The underflow can be discarded or directed onto a vibrating screen for further processing. Derrick desanders are available in vertical or inclined manifold stand-alone models, or for inclined mounting on Derrick shakers.



Inline Vertical Desander



Horizontal 3 Cone Desander

An Integral Part of the High  Solution[®]



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