



## 4" Hydrocyclones



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

# 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.

## Features:

- 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 apices
- Cones available with or without a ramp in the feed inlet



Inline Desilter



Round Desilter

An Integral Part of the High  Solution<sup>®</sup>



15630 Export Plaza Drive • Houston, Texas 77032  
Toll Free: (866) DERRICK Phone: (281) 590-3003 • Fax: (281) 442-6948  
[www.DerrickEquipment.com](http://www.DerrickEquipment.com)

