

HYDROCYCLONES

FOR SOLIDS/LIQUID SEPARATION



HydroSpin[™]

A simple way to accelerate solids/ liquid separation using the power of centrifugal force.

HydroSpin™ hydrocyclones are simple solids/liquid separation devices with no moving parts designed to accelerate the settling process of solids in liquid using centrifugal force. What determines the separation size of particles in a cyclone is a function of feed pressure, cyclone diameter, exit dimensions, and the relative characteristics of the particles and liquid. Special oil/water separating hydrocyclones are also available in this line.

The incoming flow is directed into the cylindrical part of the hydrocyclone tangentially, creating a spin of the entire contents of the flow. The heavy components in the stream move outward toward the wall of the cylinder. The conical section of the cyclone causes the speed of rotation to increase, throwing even smaller particles toward the wall. In solids/liquid separating hydrocyclones, the solids tend to move downward to the bottom of the cyclone by gravity where they are discharged with a percentage of the incoming flow. The cleaner fluid circulating in the center forms a vortex that travels up and out of the top section of the cyclone through the vortex finder.

Features:

- Made of abrasion resistant polyurethane, carbon steel, or stainless steel
- Ceramic or rubber liners are available for steel and stainless steel models
- Other materials of construction are available for special chemical compatibility
- Available in sizes from 1" to 33"
- Single hydrocyclone models will handle flow from 1 GPM to over 8,000 GPM
- Multiple hydrocyclones can be installed on a manifold to handle higher flow rates
- Cuts to below 5 microns @ 50 PSI feed pressure can be achieved with 1" polyurethane models

Applications Include:

- Pulp and paper (remove sand and contaminants)
- Drilling industry (remove sand and silt from drilling mud)
- Metal working (separate metal particles from cooling liquid)
- Mineral processing (classification of particles)
- Irrigation (remove sand and silt)
- Oil industry (separate oil from water)
- · Carpet recycling
- Plastic recycling
- · Chemical processing
- Well water desanding
- · Catalyst reuse









A Series 2.5"



B Series
3"



C Series 4", 5", 10" and 12"



D Series 1", 2", 3", 4", 6", 8", 10", and 15"

Models

Park Process offers a full line of polyurethane and metal hydrocyclones as well as packed vessel systems.

