

# Eutek SlurryCup™

## Grit Washing and Sludge Degritting

### Product Profile

The Eutek SlurryCup™ system is a highly efficient process used to capture, classify, and remove fine grit, sugar sand, high density fixed solids from grit slurries, and both primary and secondary sludge.

### Applications

- Grit washing at WWTP headworks
- Primary and secondary sludge degritting
- Continuous grit discharge
- Pumped flow operation

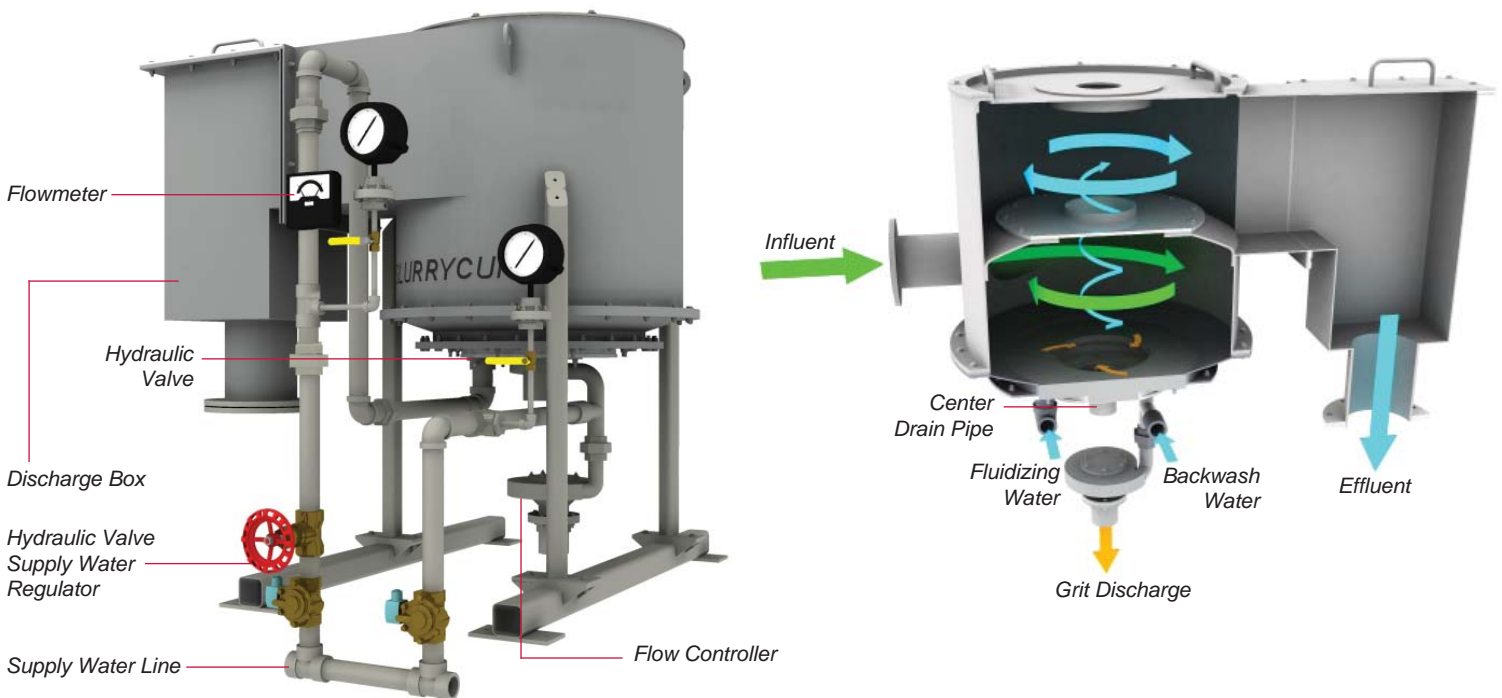
### Advantages

- Increasing performance as flows increase
- Boundary layer grit washing can retain grit as small as 75 micron
- No moving parts and no power needs
- Durable 304 or 316 stainless steel construction

### How it Works

Flow enters the stainless steel vessel tangentially at a controlled rate and velocity. The flow regime established in the device forms an open free vortex which results in high centrifugal forces and a thin predictable boundary layer. Grit is forced to the outside perimeter or held in suspension until it falls by gravity into the boundary layer which sweeps the grit, but not volatile solids, into the collection chamber at the bottom of the unit.

The concentrated slurry exits the vessel through a hydraulic valve where a secondary wash occurs prior to discharge. Two levels of washing produces clean grit ready for dewatering. The water containing the volatile solids exits from the overflow through the discharge box for additional treatment by downstream processes.



## Configurations



- Inlet and outlet can be oriented to accommodate many piping configurations.
- The system can be provided with an optional maintenance access platform

## Eutek SlurryCup™ Performance



- Removes 95% of particles equal to or greater than 75 microns at the design flow rate
- Less than 15% volatile solids and greater than 60% total solids when used with a Hydro dewatering system



Eutek SlurryCup™ / Grit Snai® with optional access platform



## Design Notes



- Reduces downstream deposits and mechanical wear
- Increasing performance as flows increase
- All hydraulic design with no internal moving parts is simple to operate and ensures long component life
- Large diameter easily handles peak flow grit volumes
- Final grit slurry typically contains 60% total solids with less than 15% organic solids
- Hydraulic valve provides secondary grit washing

## Capacity



- Handles flow of 150 to 1,000 GPM in a single unit
- Two Eutek SlurryCup™ units can be mounted on a single grit clarifier to increase capacity
- Solids concentrations up to 1.5%
- Sizes from 24"-56" diameter



Overhead View of SlurryCup™ Vortex

