

Cyclone Process Sheet



- Geometry
 - 0.2 m maximum diameter
- Temperature
 - Isothermal at 300 K
- Particles
 - Chalk powder, particle density = 2730 kg/m^3
 - Bulk density = 0.5 particle density
 - PSD provided
 - Loading = 50 g/m^3 of air
- Fluid
 - Air
 - Gas flow = $0.04 \text{ m}^3/\text{s}$
- Boundary Conditions
 - Flow BC - Solids can enter at inlet
 - Pressure BC - solids exhaust at the vortex tube only