MULTI-CYCLONE SCRUBBERS

HORIZONTAL OR VERTICAL CONFIGURATIONS



Two Peerless Multi-Cyclone Scrubbers installed at a metering station in western Canada. Typical natural gas flow through these 2000mm diameter vessels is 2.5 billion standard cubic feet per day.

MULTI-CYCLONE BENEFITS

- High-efficiency liquid and solid removal
- A wide range of flows
- Intermittent flow spikes capacity
- Maintenance free
- Fixed or removable cyclone bundles
- 2" or 4" diameter cyclones available



MULTI-CYCLONE PRINCIPLE OF OPERATION

Multi-Cyclone Scrubbers use centrifugal force to effectively remove solid particles and liquids from gas without moving parts.

- (A) Contaminated gas enters the Cyclone Tube tangentially at two locations.
- (B) The tube housing forces the gas into a cyclonic flow pattern. Centrifugal force throws the solids and liquids against inner cyclone tube wall.
- (C) Solid and liquid particles drain down the cyclone tube walls and collect at the bottom.
- (D) Clean gas flows down and then up through the center annulus and exits at the top.



Peerless Cyclone Tube

Peerless uses multiple, small-diameter cyclones arranged in parallel to achieve separation of small and large size particles. Depending upon the application, a bank of cyclones may contain in excess of 200. Selection of 2" or 4" diameter cyclones will depend upon the system gas flow rate.

Innovative Designs Cost-Effective Retrofits Guaranteed Performance

PERFORMANCE GUARANTEE – MULTI-CYCLONE

Solids removal efficiencies: • 100% of 8-micron particles • 99% of 6- to 8-micron particles • 90% of 4- to 6-micron particles • 85% of 2- to 4-micron particles Liquid removal efficiencies:

- Outlet gas will contain less than 0.1 US gallon of entrained liquid per million standard cubic feet of gas passed through the separator (13 litres/Million SCM)
- 100% of all droplets 8-microns in diameter and larger