

## TWO-STAGE PEERLESS EXTRACTION DESIGN MAXIMISING LIQUID HANDLING



A 2500mm diameter Peerless Swirl Tube Separator installed in a gas gathering system. Typical flow is 3 billion standard cubic feet of gas per day.

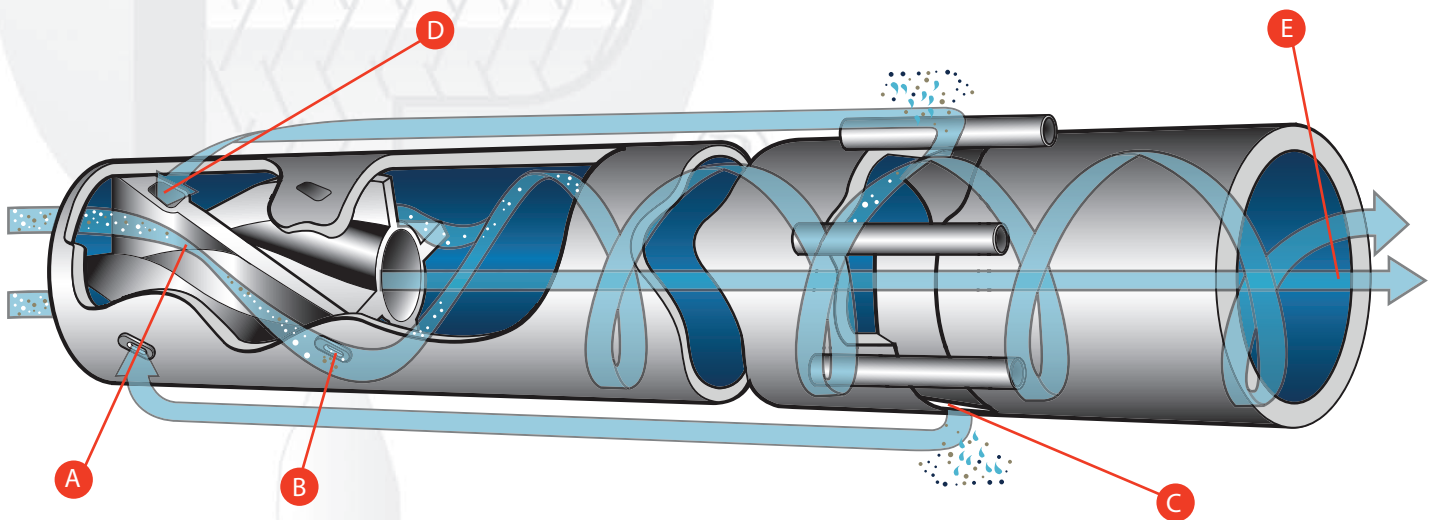
### SWIRL TUBE BENEFITS

- High-efficiency removal of entrained liquid
- Maintenance free
- Increased liquid handling
- No moving parts

### SWIRL TUBE PRINCIPLE OF OPERATION

Swirl tubes create inertial forces on the entrained liquid as it passes around the inlet helicoid.

- (A) Contaminated gas enters the swirl tube where centrifugal forces are imposed on the flow.
- (B) Liquids are thrown out of the gas flow and against the walls of the swirl tube
- (C) Liquids fall out of the swirl tube at the primary extraction slots
- (D) Minor amounts of gas exiting at the primary extraction slots are directed back through the swirl tube through side openings to repeat the separation process.
- (E) Clean gas exits the swirl tube.



### SWIRL TUBE SEPARATOR

Swirl Tubes can be installed in either vertical or horizontal configurations without affecting the performance of the system

### PERFORMANCE GUARANTEE – SWIRL TUBE

#### 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
- 99% of 4- to 6-micron droplets
- 98% of 2- to 4-micron droplets