cyclonaire

Collect & Convey Dust Reclaim System

Cyclonaire's automated Collect and Convey (C&C) Reclaim System preserves air quality and conserves valuable material by capturing airborne product dust from silo filling operations and automatically returning it directly to source silos. Each unit combines an efficient Cyclonaire Pulse Jet Dust Collector with a rugged, gravity-fed CycloLok® Dense Phase Pneumatic Conveyor that operates on plant air and runs only when needed.

Multiple Applications — Works in concert with rail or truck unload systems and can be used to recycle dust from a variety of dry solids, including foodstuffs, corrosive chemicals and highly abrasive materials such as cement, slag and fly ash.

Less Product Degradation – Low conveying velocities cut product degradation and component wear.

Safety and Convenience — Easy servicing from ground level. Hinged door for easy filter access. Automatic onboard controls allow unattended operation and signal when service is needed.

Easy Installation — Flanged outlet and dust discharge ensure quick installation.

Standard

Robust Carbon Steel Construction; Relay Timer Controls with High-Level Probe; Fan Selected to Fit; Collection Hopper; Cyclonaire Blue Paint; Dense Phase CycloLok Conveyor

Standard Options

Air Receiver; Motor Starter; PLC with Audio Visual Alarms Available; Cyclonaire White Paint

Custom Options

Stainless Steel Material Contact; NEMA 7/9 Enclosure

Boost Productivity and Efficiency



Example Application

During silo loading, the exhaust fan draws particle-laden air from the silo into the dust collector, where reduced air velocity allows larger particles to fall into the collection hopper. Finer particles are drawn to the pleated filter cartridge. Timed reverseair pulses discharge this dust into the hopper. When sufficient material fills the hopper, a high-level sensor automatically activates the CycloLok® Dense Phase Conveyor. Air entering the CycloLok moves the captured material through the convey system, returning it to the source silo or other destination. To minimize air supply usage, preset timers control the duration of the convey cycle. The entire process of cleaning the pleated filter cartridge and conveying reclaimed dust is controlled automatically by an on-board PLC, which triggers an alarm if service or maintenance is required.

