

Railcar Unloading

FOR THE CEMENT INDUSTRY

The industry needed a better way. We responded.

Enter Cyclonaire. We were built through our invention and design of conveyance equipment patented specifically to unload railcars.

Our invention was unlike anything else on the market.

- No compressed air was needed—proprietary valves relied on blower air for actuation
- No electrical controls were utilized—all timing-control circuits were pneumatic
- No filters were needed to protect the vacuum generator (venturi vs pump)
- No pit was required for connecting to the railcar



cyclolift
FROM CYCLONAIRE

Another Industry Gold Standard.

As the marketplace evolved, so did our unloading equipment. For several decades, we maintained our reputation as a prime solution provider for railcar unloading equipment. Just like the invention in 1966 that catapulted us into a leadership position, we introduced another product that changed the face of the industry. The CycloLift.



A customer remarked, “Your equipment is so robust and heavy duty, we wish you could supply a railcar connector in the same class.” We accepted the challenge. Within weeks, we unveiled the CycloLift. The simple, rugged design perfectly suited the tough environment below a cement “jenny” railcar. The CycloLift outlasted and outperformed every other connector in the industry.

The CycloLift was adaptable to virtually any railcar flange size, allowing flexibility to receive other ingredients such as flyash and ground slag. This adaptability led to many unique solutions, not only in the cement industry, but beyond.

Better. Faster. Stronger.

A Range of Unloading Rates.

As cement production and distribution continue to increase, Cyclonaire keeps pace with designs that are adaptable to meet nearly any need. While 50 tons/hr was a common baseline unloading rate for terminals 15 years ago, 100 tons/hr is a common practice today. Cyclonaire has developed a standard suite of solutions to match the range of unloading rates desired by our clients.

0-30 tons/hr

Achievable with standard conveyors and over-the-track railcar connectors.

0-75 tons/hr

Achievable with CycloLift connectors and aerated vacuum pans installed in shallow pits below grade.

75-150 tons/hr

Achievable with CycloLift connectors and a slightly larger aerated hopper installed beneath the track.

The aerated hopper has aptly been nicknamed “the coffin,” due in part to its appearance (box shaped with a black Rhino Lining coating, making it impervious to moisture) and the fact that it is often installed in the tomb of a deceased screw pump.

150 tons/hr

A variety of solutions is available and tailored to specific site conditions. Common designs incorporate:

- Continuous vacuum concepts
- Dual conveyors
- Dense-phase pressure vessels

Unique Solutions

We continue to excel at railcar unloading and constantly implement improvements over time to advance innovative solutions to match the growth and changes in the industry. Our partnership with suppliers in the cement industry has also led to the development of unique solutions such as: high-speed pneumatic blending, booster systems to speed PD truck and rail unloading, silo/bin aeration systems and truck load-out.

Contact a cement sector specialist at
1-800-445-0730 or cement@cyclonaire.com

