



Quantum Case Study

www.vortexglobal.com

QUICK CLEAN ORIFICE GATE HANDLING WHEY PROTEIN

CLIENT: Company policy dictates name cannot be used.

GATE SIZE: 8 in. (203 mm)

FEATURES:

- Accepted by USDA Dairy Standard.
- Gate body constructed from 304 stainless steel.
- Blade is electropolished & constructed from 304 stainless steel.
- Material contact areas constructed from 304 stainless steel & PET.
- Wear-compensating seals constructed from PET. Seals are live-loaded using sanitary, USDA-accepted silicone rubber.
- Air cylinder shaft constructed from 303 stainless steel.
- Interior surfaces polished to a #4 finish.
- Rated for continuous service in maximum product temperature 100° F (38° C).
- Should be hand-cleaned using treatment solutions. Should not be cleaned at temperatures greater than 180° F (82° C).
- Air cylinder equipped with a magnetic piston to accommodate magnetic reed switches for blade position indication.



APPLICATION: Find a solution for stopping flow of materials in a gravity flow application that requires frequent wash-down. Solution will be installed indoors and must be capable of handling 35-40 lbs./ft³ (16-18 kgs./m³) of material in the presence of vibrations.

RESULTS: Like the Quantum Series Orifice Gate, the Quick Clean Orifice Gate provides a positive seal for fine powders and is dust-tight to atmosphere. It also mechanically self-cleans on the opening stroke. With a full-port opening, the Quick Clean Orifice Gate allows unrestricted material flow.

Especially beneficial for food & beverage manufacturers, the Quick Clean Orifice Gate can either be fully opened or closed, or be configured with one of Vortex's four material flow control assemblies. This allows the blade to be stopped at midpoints to create highly accurate and replicable batches.

Most importantly, the Quick Clean Orifice Gate can be easily removed and reinstalled into the process line. Once the gate is removed from service, quick-lock bolts along the lateral aspect of the gate can be loosened without the use of tools, and the top of the gate can be separated so that the gate's internals are exposed. Then, the blade and seals can be quickly removed for wash-down or replacement.

The Quick Clean Orifice Gate is intended for non-abrasive powders, pellets and granules in gravity flow material handling applications.

REF: EA40915

