PFlow’s patented DeckLock Safety System locks in safety at every level.
PFlow vertical reciprocating conveyors (VRCs) are built with substantial standard safety features designed to maintain carriage position up to 150% of load capacity when they are maintained per PFlow’s maintenance schedule. However, inadvertent carriage overload (such as introduction of a forklift onto the carriage or a load that exceeds the VRC’s weight capacity*) can result in a dangerous and unintentional carriage descent.

PFlow’s optional DeckLock safety system provides a reliable additional layer of safety that prevents unintended carriage descent in the event of an inadvertent overload.

**DECKLOCK SAFETY SYSTEM BENEFITS**

- Increases safety during loading/unloading of VRC
- Locks engage automatically when gate at floor level is opened and retract when gate is closed
- Protects workers, materials and machines by eliminating potential accidents caused by unintended carriage descent due to lack of brake maintenance
- Offers added assurance for safe loading/unloading via forklift
- Ensures that pallet jacks and hand trucks can load/unload smoothly, easily, and safely
- Simple and reliable operation. Pneumatic, electrical, or mechanical operation available
- Exclusive safety system available only on PFlow VRCs
- DeckLocks do not increase the VRC’s stated weight capacity

*When a forklift is fully loaded, 80% of the weight rests on the front wheels. If this weight exceeds the VRC’s rated capacity or if the brake is not properly maintained, the VRC brake could fail.*
Electrical DeckLocks are column-mounted and utilize a gate-mounted electrical switch combined with an electric actuator on the lock. Electrical DeckLocks are controlled with or without a PLC (programmable logic controller) and can be used on all 2- and 4-post mechanical VRCs, including those with non-PFlow gates, or those with multiple gates per floor level (with the exception of limited outdoor applications).

Electric DeckLocks:

- Have adjustable limit switches
- Have a terminal strip that allows for pre-wiring
- Use a removable pivot pin to allow for replacement of pivot bearing and spring
Pneumatic DeckLocks are operated by electrical solenoid valves, combined with a pneumatic actuator (cylinder). This DeckLock can be used on all mechanical VRCs with limited outdoor applications. Pneumatic DeckLocks cannot be used on non-PFlow gates. Pneumatic DeckLocks can be:

- Used in explosion-proof environments
- Used in outdoor environments above 32°F
- Used on 2- and 4-post VRCs
Mechanical DeckLocks utilize a gate mounted cable mechanism that directly actuates the mechanical DeckLock cam with a push-pull steel control cable. Mechanical DeckLocks are for use on 2-post VRCs with one gate per floor level.