Split-Frame Unloader for Bulk Bags

A new Split Frame Unloader allows discharging of bulk bags and rigid totes from mezzanines and other low headroom areas. Unlike fixed-frame unloaders that require sufficient headroom above the top of the frame to clear the load-backrest of a forklift, the Split Frame Unloader allows the upper frame to be forklifted onto the plant floor, loaded with a bulk bag, and then forklifted back onto the subframe within several inches/centimeters of the ceiling.

For discharging from bulk bags, the subframe is equipped with a Power-Cincher® flow control valve that cinches the bag spout concentrically on a horizontal axis for easy tie-offs, and vertically in a tight zigzag pattern to prevent leakage of fine powders. It also allows full-open discharge from bag spouts of all popular diameters and is USDA accepted.

With the flow control valve closed around the bag spout, the spout can then be untied, the access door closed, and the valve opened slowly, reducing uncontrolled bursts of material into the hopper and dust into the plant environment.

Side-FlexerTM bag activators impart horizontal forces to opposite sides of the bulk bag to promote flow and are height adjustable to optimize performance.

For unloading of bulk solids from rigid bins, the bins are forklifted onto receiving cups of the subframe, which is equipped with a removable plate containing a gasketted inlet port that seats against the discharge port of the bin.

The flanged discharge chute of the frame shown is offset to direct material into an off-center receiving vessel below a mezzanine.

The low profile Flexicon bulk bag unloader is constructed of stainless steel and finished to sanitary standards, and is offered with load cells and programmable controls for automated weigh batching of ingredients directly from bulk bags and/or rigid bins.