

Wilco

Stationary Bulk Plant



Our experience in building bulk plants and bulk storage silos and tanks is second to none. Pressure, vacuum, and non-pressure bulk and tank systems can be built per one of our proven designs or custom per your requirements. Systems can be designed and configured for stationary plant installations, offshore installations, mobile marine installations, or trailer-mounted. We design and manufacture systems to meet ASME, DOT, USCG, or other applicable design requirements.

We have built bulk systems and vessels for over 30 years. We have the manufacturing technology, experience, and skilled craftsmen to ensure superior quality that meets your requirements.

Features

Bulk storage tank – 12-ft diameter x 32-ft, 8-in. tall with an internal volume of 2,560-cf and non-pressure design for vented usage. Complete with 5-in. discharge pipe with flange at base of cone, 5-in. fill pipe with Victaulic grooved connection located in the cone, and 5-in. vent pipe with Victaulic connection located in the cone. Tank supported by four 8-in. pipe legs with I-beam skid base capable of supporting the tank while containing bulk material. 3-in. air supply manifold with Victaulic connection located on one pipe leg. The tank includes a complete aeration system for supplying air pressure to the tank and to fluidize the bulk materials for pneumatic conveying. One 20-in. diameter bolted cover non-pressure manway located in cone and one 20-in. diameter non-pressure manway installed in the tank head with interior ladder. Complete with sandblast and two-coat paint system of single color. Less external ladder and OSHA ladder cage.

Bulk scale tank – 10-ft diameter x 11-ft, 8-in. tall with an internal volume of 400-cf ASME Code design for 40-psi and 30-in. Hg at -20°F . Complete with 5-in. discharge pipe with Victaulic grooved connection, seven 5-in. fill pipes with Victaulic grooved connection, 22-in. vent with bolted flange for dust collector, and 3-in. air supply manifold with Victaulic connection. Tank is supported by four 5-in. pipe legs with I-beam base arranged for installation of a scale (LESS SCALE) and capable of supporting the tank while containing bulk material. The tank includes a complete aeration system for supplying air pressure to the tank and to fluidize the bulk materials for pneumatic conveying. One 20-in. diameter manway is installed in the tank cone with interior ladder. Complete with sandblast and two-coat paint system of single color. With external ladder less OSHA ladder cage.

Bulk blend tank – 10-ft diameter x 11-ft, 8-in. tall with an internal volume of 400-cf ASME Code design for 40-psi at -20°F . Complete with 5-in. discharge pipe with Victaulic grooved connection, one 5-in. fill pipe with Victaulic grooved connection, one 5-in. vent pipe with Victaulic grooved connection, and 3-in. air supply manifold with Victaulic connection. Tank is supported by four 5-in. pipe legs with I-beam skid base capable of supporting the tank while containing bulk material. The tank is to include a complete aeration system for supplying air pressure to the tank and to fluidize the bulk materials for pneumatic conveying. One 20-in. diameter manway is installed in the tank with interior ladder. Complete with remote pressure gauge connection, pressure relief valve, sandblast, and two-coat paint system of single color.

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Waste tank – 12-ft diameter x 19-ft, 5-in. tall with an internal volume of 1,200-cf and non-pressure design for vented usage. Complete with 5-in. discharge pipe with flange at base of cone, seven 5-in. inlets with Victaulic grooved connections, vent connection with 12-in. butterfly flange, 3-in. air supply manifold with Victaulic connection. Tank is supported by four 6-in. pipe legs and capable of supporting the tank while containing bulk material. The tank includes a complete aeration system for supplying air pressure to the tank and to fluidize the bulk materials for pneumatic conveying. One 20-in. diameter manway is installed in the tank head with interior ladder. Complete with external pressure gauge port, pressure relief valve, sandblast, and two-coat paint system of single color. Less external ladder and OSHA ladder cage.

Pressure/vacuum dust collector - Mounted on the scale tank for vent air cleaning. The dust collector has 13 filter bags and is designed per ASME Code for 40 psi and 30 in. Hg at -20°F. The dust collector is to be mounted to the scale tank with a 22-in. bolted flange. Two access hatches are installed in the dust collector shell for internal service. Tank is provided with 3-in. vacuum inlet manifold and a 3-in. vent manifold. A pneumatic shaker is installed for shaking dust from the filter bags. Complete with sandblast and two-coat paint system of single color.

Electronic weighing system - Electronic weighing system with 60,000-lb scale capacity for use on 400-cf scale tank. System includes digital indicator, ticket printer, load cells, and interconnecting wiring. Scale system is approved for measurement of bulk material weight for sale.

Additive hopper - Additive hopper for vacuum of dry bulk materials into scale tank. Completed with 5-in. discharge pipe, sack cutting screen, sandblast, and two-coat paint system of single color.

Control panel - Stainless steel control panel for operation of bulk system from the inside of the control house. The panel is assembled with pneumatic lever switches to operate the required bulk system valves, lights to indicate the open valves and gauges to indicate pressure, or vacuum for each vessel and compressor. The control panel designed for use outdoors and comes complete with sandblast and two-coat paint system of single color.

Vacuum compressor system for scale tank – Dekker Model VMX0453 oil-sealed air-cooled simplex liquid ring vacuum rotary screw compressor with 410-scfm input at 29-in. Hg. Vacuum system complete with skid base, 5-micron inlet filter, vacuum relief valve set at 26-in. HG for 350-scfm, with 460-V, 3-ph, 60-hz, 20-hp direct drive motor. With sandblast and two-coat paint system of a single color.

Bulk conveying compressor package for scale and blend tanks - Rotary screw compressor with 490-scfm output at 100-psi. Compressor complete with skid base, NEMA 4 enclosure, air-to-air cooler, 460-V, 3-ph, 60-hz, 100-hp direct drive motor, and controls. Compressor package to include 250-gal air receiver tank with 3-in. pressure regulator for 16-psi output. With sandblast and two-coat paint system of a single color.

Air dryer for bulk conveying compressor – Refrigerated dryer rated 500-scfm. Dryer includes 2½-in. inlets and outlets, NEMA 4 enclosure, 460/3/60 motor and controls. Dryer system to include coalescing 2½-in. after-filter rated at 625-scfm input/output. With two-coat paint system of a single color.

Makeup air package for storage tanks – Kaeser Omega blower package rated at 430-cfm at 12-psi with 40-hp, 460-V, 3-ph electric motor, magnetic starter, and air to air cooler. Includes elevated base, air pre-cleaner, relief valve and check valve. With two-coat paint system of a single color.

Operational air package for control air – Compressor skid rated at 34.8-scfm at 200-psi with 120-gal receiver tank. Package to include 10-hp 460/3/60 motor with belt-driven pump and after cooler with moisture separator. With two-coat paint system of a single color.

Dust collector - Mounted on the waste tank for vent air cleaning. The dust collector has 19 filter bags and is designed for vented, non-pressure operation. The dust collector is mounted to the waste tank with a 12-in. valve flange and butterfly valve. Two access hatches are installed in the side of the dust collector for service. A pneumatic shaker is installed for shaking dust from the filter bags. Complete with sandblast and two-coat paint system of single color.

Ladder and safety cage - 2560-cf storage tank to meet OSHA requirements. Includes one ladder, one safety cage with vertical bars and horizontal rings, three interconnecting walkways, and four top of tank handrails. Complete with sandblast and two-coat paint system of single color.

Work platform - 400-cf scale tank and pressure/vacuum dust collector. Includes work platform with mounts and handrails. Complete with sandblast and two-coat paint system of single color.

Ladder and safety cage - 1200-cf waste tank to meet OSHA requirements. Includes one ladder, one safety cage with vertical bars and horizontal rings, and one top of tank handrail. Complete with sandblast and two-coat paint system of single color.

Fill/discharge manifold – Includes all piping, valves, valve actuators, and Victaulic couplings to fill four storage tanks, vacuum from two storage tanks to scale tank, vacuum from waste tank to scale tank, vacuum from dry add hopper to scale tank, convey between scale tank and blend tank, convey between blend tank and scale tank, and discharge to truck transports from scale or blend tank. Complete with sandblast and two-coat paint system of single color.

Vent manifold - Includes all piping, valves, valve actuators, and Victaulic couplings to vent four storage tanks to waste tank, vent blend tank to waste tank, and vent truck transports to waste tank. Complete with sandblast and two-coat paint system of single color.

Air supply manifold - Includes valves, valve actuators, and Victaulic couplings to supply air to four storage tanks, waste tank, scale tank, blend tank and vacuum dust collector. Complete with sandblast and two-coat paint system of single color.