

# Bulk Storage Vessel

Effective material control and low maintenance

## APPLICATIONS

Land and offshore drilling

## BENEFITS

- Reduced powder buildup and associated waste and maintenance costs from cone-shaped base design
- Optimal flow during pressurization and discharge process from aeration panels in cone and base
- Enhanced real-time decision making through remote monitoring capabilities for common tasks from a mud control system (MCS) interface
- Improved operational efficiency and easy visual inspection and monitoring of tank internal pressure from manual manometer

## FEATURES

- Real-time display of tank volume, pressure, and level data on remote operator console
- Pressure safety valve (PSV) set to open automatically in the event of over-pressure
- Maintenance and access hatches

Our bulk storage vessels (bulk silo tanks) provide optimal productivity levels and low-maintenance downtime. Fluidization panels fitted at the bottom of each tank ensure that bulk material is continuously fluidized during the pressurization, fluffing, and discharge process plus eliminate the need for additional vibration units in most cases.

The bulk control system interfaces with the MCS to provide tank data, including internal volume, pressure, and level to the remote operator console; data is presented as graphic displays and menus. This interface also provides remote operating capabilities for various common tasks.



## Technical Specifications

Area classification	Safe Zone
Operation control and monitoring	Local or remote via MCS
Typical total or operating tank volume	2,295 ft <sup>3</sup> or 2,012 ft <sup>3</sup> [65 m <sup>3</sup> or 57 m <sup>3</sup> ]
Dry weight	130,865 lbm [14,000 kg]
Construction	Low- alloy carbon steel; killed steel applied for all pressure-contained parts
Design certification	DNV or ABS
Design standard	ASME as per latest edition
Design temperature	-4 to 176 degF [-20 to 45 degC]
Coating	NORSOK standard M501 or as per project requirements
Access	DN 600 (min. light opening 600 mm) manhole
Instrumentation	One pressure indicator transmitter Three electronic load cells One level switch sensor One PSV

## Standard Scope of Supply

- Vertical cone-type pressurized bulk tank (silo)
- Standard instrumentation
- Standard documentation package

## Options

- Additional instrumentation
- Cement discharge valve for bulk cement tanks
- Additional certification (CE Hazardous Zone II)
- NORSOK documentation
- Instrumentation heave tilt cabinets