



OCS Cement Silos are utilised for transport and storage of powdered cement. They are manufactured to ASME-VIII-Div 1 rules for the construction of vessels and are classified as ISO Type 20B4 (20ft Dry Bulk Containers). They also fall under ISO TC-104.

As the silos are in gauge 20 ft standards ISO configuration, they are easily transported by conventional shipping container lines and well suited to intermodal transportation. The Silos are provided with TIR, CSC certification. These are individually inspected by the CCS.

Cement Silo Tank	
Volume	22m ³
Air Supply	> 8m ³ / min
Design Pressure	0.22 Mpa
Tested Pressure	0.33 Mpa
MGW	32,200 kg
Tare	4,200 kg
Net	28,000 kg
Dimensions	20ft x 8ft x 8ft
No of Units	2

Specification and Function target

<u>Items</u>	<u>Unit</u>	<u>Parameter</u>
External dimension (LxWxH)	mm	6,058(20') x 2,438(8')x 2,591(8'6")
Internal size of tank L x D	mm	6000 x2400
Load capacity	l	22,500
Design pressure	MPa	0.22
Test pressure	MPa	0.33
Design temperature	°C	-19 to +80
Max. gross weight	kg	32,200
Tare weight	kg	4,200
Loading weight	kg	28,000
Air source pressure	MPa	0.2~0.3
Air supply	m ³ /min	≥8
Allowable stacking weight . 1.8g	kg	192,000
Manhole diameter	mm	500
Air-inlet diameter	mm	100mm cam lock type joint
Outlet diameter	mm	4" male adaptor
Average speed of discharge (conveying cement to the silo s which is 25m high and 10m far)	t/min	cement: 1.0 ~1.5
Remnant ratio	%	cement: ≤0.4 (Cement: Not more than 100kg)

Materials

Main materials used for the container shall be of the best quality conforming to the requirements of this specification and classification society.

Materials of the main parts

<u>Parts</u>	<u>Materials</u>	<u>Remark</u>
Tank shell	Q345B	
Dish end	Yield Point: 33kg/mm ²	
Bottom side rail	Tensile Strength: 52 kg/mm ²	
Top side rails		
End rails	Structural steel: SS41(Q235)	
Internals	Yield Point: 25 kg/mm ²	
Walk way	Tensile Strength: 41 kg/mm ²	
Saddles		
Reinforcement		
Corner posts	SM90A or Q345B	
Barrel supports	Yield Point: 33kg/mm ²	
End arc support rings	Tensile Strength: 50 kg/mm ²	
Corner fittings	Casted Weldable Steel: SCW49 Yield Point: 28 kg/mm ² Tensile Strength: 49 kg/mm ²	ISO/R1161
Pipe	20-GB8163 Yield Point: 25kg/mm ² Tensile Strength: 40 kg/mm ²	Seamless Pipe
Valve	Cast steel	
Ventilation layer	Synthetic fabric	
Screws	Structural steel: SS400 (Q235)	
Bolts	Yield Point: 25 kg/mm ² Tensile Strength: 41 kg/mm ²	

OCS has Equipment passports for individual equipments which must be reviewed before each project to assess the status. The equipment passport gives the working history, maintenance and certification history of equipment.

It is important to regularly review the list of critical spare parts of the equipment before each project. Where failures occur during operations Equipment bulletins will be issued to document the problem and the remediation solutions applied. The equipment bulletin will be circulated to all field engineers to be informed about the possible failure that can occur during the operation and thereby avoid future failure

This equipment file remains a live document and will be constantly updated by the equipment department.