106A500W Ton Tank for Chlorine Service

CBC 106A500W ton containers are manufactured with ASTM 516 Grade 70 material and all joints are completed using the electric fusion welding process. Unlike other electric fusion welded chlorine containers that have the circumferential weld joints under tension, the 106A500W utilizes a joint design, unique for chlorine containers, whereby the circumferential weld joint is in compression.

In addition, unlike containers with the circumferential weld joint on the outside corner of the chime, the circumferential weld joint of the Columbiana 106A500W container is on the inside of the chime, where it is protected from damage by forklifts, collisions and other potentially damaging impact events.

Like the Columbiana DOT 106A500X, Columbiana 106A500W containers have the exclusive safety-engineered feature of “inverted heads”—if a container is accidentally over-pressurized, the heads will reverse (become convex), providing an immediate visual indication of over-pressurization. The reversed heads also create additional capacity to reduce the pressure and provide valuable time for corrective action.

Through extensive prototype testing, the performance of the DOT 106A500W container has proved to equal and in many areas exceed that of the well proven DOT 106A500X. As with the DOT 106A500X multi unit tank car tank, the Columbiana DOT 106A500W multi unit tank car tank is approved by the US DOT with all the same performance and testing requirements as the DOT 106A500X. The DOT 106A500W container accommodates the Chlorine Institute emergency kit.
Fusion Welded Pressure Vessel

Since 1936, Columbiana Boiler has manufactured over 200,000 transport containers for hazardous liquids and gases.

Liquid and Pressure Controls
- Two (2) service valves (liquid & vapor), with CGA 820 or 660 outlets, located within a heavy-duty protective bonnet
- Pressure relief devices ( fusible plugs and/or spring-loaded pressure relief devices)

Commodities
- Approved for most Class 2 gases including PIH gases of Div. 2.3 (Zones B, C, D) such as: chlorine, ammonia, hydrogen sulfide, nitrogen tetroxide, etc.
- Also approved for most Class 3 flammable liquids, Class 4 pyrophoric/dangerous when wet materials, and Class 6 toxic/infectious liquids.

Finishing
- Exterior: Commercial grit blasting followed by primer and one color topcoat system
- Interior: Grit blasting followed by vacuum cleaning

Shipping
- per 20’ Intermodal container: 13
- per 40’ Intermodal container: 29
- per truck trailer up to: 31

Options
- Gas tight bonnet
- Training Ends
- Shipping Skids
- Emergency Safety Kits
- Valves, Plugs and all other spare parts

Design Characteristics
- ASTM A-516 Grade 70 carbon steel
- Test pressure = 500 psig (34.5 bar)
- Service temperature = -40 to 140°F (-40 to 60°C)

Payload CL2* 2,000 lbs. 907 kg 2,204 lbs. 1,000 kg
at 125% filling density (1.25 kg/l) for chlorine; payload for other commodities varies by filling density.

Weights and Sizes

<table>
<thead>
<tr>
<th></th>
<th>standard ton</th>
<th>metric ton</th>
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</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>193 gal</td>
<td>731 lt.</td>
</tr>
<tr>
<td>Diameter</td>
<td>30”</td>
<td>762mm</td>
</tr>
<tr>
<td>Length</td>
<td>81.5”</td>
<td>2,070mm</td>
</tr>
<tr>
<td>Tare weight</td>
<td>1,300 lbs.</td>
<td>590 kg</td>
</tr>
</tbody>
</table>

* at 125% filling density (1.25 kg/l) for chlorine; payload for other commodities varies by filling density.