Take Control of Your CO₂ Distribution with the Orca™ Mite MicroBulk Delivery System

For years, Chart has provided the finest MicroBulk delivery units for atmospheric gases and is now offering the Orca Mite system in CO₂ service with similar features. Designed to fill the Carbo-Mizer® and Carbo-Max® Bulk CO₂ Systems and the Perma-Max™ MicroBulk CO₂ System, the Orca Mite unit will provide you with a safe, efficient, and reliable delivery unit for years to come.

The stainless steel inner vessel on the Orca Mite delivery unit is protected by a high quality vacuum with super insulation for minimal heat transfer. This insulation system eliminates just-in-time filling and provides colder CO₂ necessary for a single-hose, no loss fill to the storage vessel. To maintain a high delivery pressure from stop to stop, the Orca Mite delivery unit incorporates a dedicated diesel-fired glycol-based pressure builder system.

The Orca Mite delivery units are equipped with the Flowcom™ Flow Meter System available with data options. The Flowcom stainless steel meter section contains no moving parts for low maintenance, calibration stability, dry ice resistance, and has a lifetime warranty.

**PRODUCT HIGHLIGHTS**

- 2 ton capacity – Single axle truck or tandem axle trailer*
- Inner vessel 350 psi MAWP (ASME Section VIII, Div. 1)
- Specification MC-338**
- 304 stainless steel inner vessel (Food Grade Standard) with a design temp range of -320°F to 100°F.
- Stainless steel vacuum jacketed welded outer
- Lightweight, corrosion-resistant cabinet and plumbing components
- 100' beverage hose and reel
- Chart’s pre-selected list of qualified trucks and trailers
- 3-year Vacuum Warranty

**VACUUM JACKETED OUTER**

- A vacuum jacketed tank delivers colder and up to 10% denser liquid allowing for longer intervals between customer visits
- Keeps liquid colder which prevents it from venting (or wasting) CO₂ to the atmosphere
- Durable stainless steel outer will keep its good looks for years
- The reduced heat leak into the tank is significant enough to allow for smaller (and less expensive) ASME relief valves

**PERFORMANCE AND FEATURES**

- Pressure transfer through beverage hose typically 60 - 100 lbs/min (full metered range ≈ 5 - 130 lbs/min)
- ThermaFired™ pressure builder provides fast acting pressure rise in all temperature ambient conditions
- Flowcom® Flow Meter System (16 - 80 lbs/min) with display***
- ThermaFired™ pressure builder provides sufficient vapor for commissioning new tanks
- Diverter valve to allow for relief valve servicing
- Stainless steel piping and ball valves

* < 33,000 lbs GVW (No FET required)
** 5-year DOT inspection required
*** National Conference of Weights & Measures Certificate No.: 99-139A3
**Standard Design Features**

- Built to ASME and DOT MC-338 design codes
- Special Permit 20847
- Flowcom® 1000 Flow Meter System
- MAWP 350 psi / 24.1 bar
- 100’ hose reel
- Vapor return connection

**Lifecycle Costs**

- Rebuild frequency of 10 to 15 years versus 5 to 7 years for foam insulation
- Rebuild costs of approximately ½ of foam insulated products
- Mandatory DOT 5 year replacement items are 75% less expensive
- Over a 15 year period, the lifetime costs for vacuum jacketed is 30% lower than foam

**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>2 Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC338 Capacity (gal/ltrs)</td>
<td>420 / 1593</td>
</tr>
<tr>
<td>Overall Length (in/cm)</td>
<td>155 / 394</td>
</tr>
<tr>
<td>Overall Height (in/cm)</td>
<td>50 / 127</td>
</tr>
<tr>
<td>Overall Weight (in/cm)</td>
<td>43 / 110</td>
</tr>
<tr>
<td>Tare Weight (lbs/kg)*</td>
<td>3900 / 1769</td>
</tr>
<tr>
<td>Truck Rear Axle</td>
<td>Variable</td>
</tr>
<tr>
<td>Under 33,000 lbs GVWR / US FET</td>
<td>Yes</td>
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</tbody>
</table>

**Performance**

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<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Pressure Building Type</td>
<td>ThermaFired™ or ThermaFired XL™</td>
</tr>
<tr>
<td>Dispense Method</td>
<td>Pressure Transfer</td>
</tr>
<tr>
<td>Min. Dispensing Rate (lbs/min / kg/min)**</td>
<td>16 / 7.3</td>
</tr>
<tr>
<td>Max. Dispensing Rate (lbs/min / kg/min)**</td>
<td>80 / 36.3</td>
</tr>
<tr>
<td>Max. Dispensing Pressure (psig/bar)</td>
<td>350 / 24.1</td>
</tr>
</tbody>
</table>

*Tare weights are estimated, and calculations will be confirmed when it is built.

**Minimum and Maximum Dispensing Rates are based on NTEP approval and are dependant on many variables: Orca truck pressure, receiver pressure, liquid temperature, flow circuit restriction, etc. The system is capable beyond these rates. Specifications subject to change without notice.

**Control Cabinet**

Chart Exclusive – “Smart” flow metering system monitors flow electronically with no moving parts in meter section (standard on all models).