

# ORCA™ MITE

2 TON MICROBULK DELIVERY UNIT FOR CARBON DIOXIDE



## Take Control of Your CO<sub>2</sub> 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 CO<sub>2</sub> service with similar features. Designed to fill the Carbo-Mizer® and Carbo-Max® Bulk CO<sub>2</sub> Systems and the Perma-Max™ MicroBulk CO<sub>2</sub> 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 CO<sub>2</sub> 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 of -320°F, so it can handle -109°F of dry ice
- Stainless steel vacuum jacketed welded outer
- Lightweight, corrosion-resistant cabinet and plumbing components
- 100' beverage hose and reel
- Customer sourced truck or trailer built to Chart's specifications
- 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) CO<sub>2</sub> 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



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SPECIFICATIONS	
MODEL	2 Ton
MC338 Capacity (gal/ltrs)	420 / 1593
Overall Length (in/cm)	155 / 394
Overall Height (in/cm)	50 / 127
Overall Width (in/cm)	43 / 110
Tare Weight (lbs/kg)*	3900 / 1769
Truck Rear Axle	Variable
Under 33,000 lbs GVWR / US FET	Yes
<b>PERFORMANCE</b>	
Pressure Building Type	ThermaFired™ or ThermaFired XL™
Dispense Method	Pressure Transfer
Min. Dispensing Rate (lbs/min / kg/min)**	16 / 7.3
Max. Dispensing Rate (lbs/min / kg/min)**	80 / 36.3
Max. Dispensing Pressure (psig/barg)	350 / 24.1

\*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.

## 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

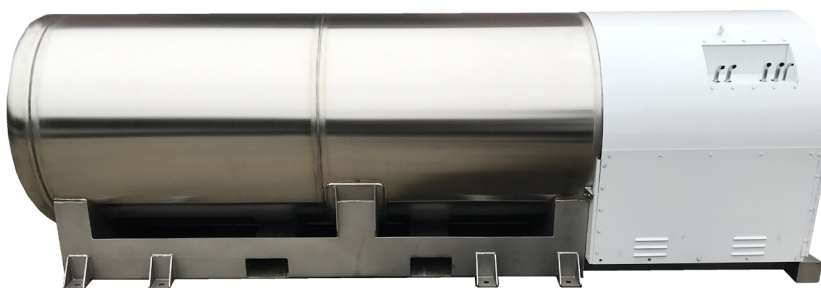
## LIFECYCLE COSTS

- 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



### Chart Exclusive –

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



### Control Cabinet

