# ORCA, CO2 SERIES MICROBULK DELIVERY UNIT FOR CARBON DIOXIDE





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

For years, Chart has provided the finest MicroBulk delivery units for atmospheric gases and is now offering the Orca system in  $CO_2$  service with similar features. Designed to fill the Carbo-Mizer® and Carbo-Max® Bulk  $CO_2$  Systems and the Perma-Max™ MicroBulk  $CO_2$  System, the Orca  $CO_2$  unit will provide you with a safe, efficient, and reliable delivery unit for years to come.

The stainless steel inner vessel on the Orca  $\mathrm{CO}_2$  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  $\mathrm{CO}_2$  necessary for a single-hose, no loss fill to the storage vessel. To maintain a high delivery pressure from stop to stop, the Orca  $\mathrm{CO}_2$  delivery unit incorporates a dedicated diesel-fired glycol-based pressure builder system.

All Orca  $CO_2$  Series 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**

- 5.5 ton capacity Single axle models\*
- 6.5, 10.5 ton capacity Tandem axle models
- 13 ton capacity Tandem axle trailer
- Inner vessel 350 psi MAWP (ASME Section VIII, Div. 1)
- Specification MC-338\*\*
- Stainless steel inner vessel (Food Grade Standard) with a design temp of -320°F
- Painted steel vacuum jacketed welded outer
- Lightweight, corrosion-resistant cabinet and plumbing components
- 100' hose & reel
- Customer sourced truck built to Chart's specifications
- 3-year Vacuum Warranty
- \* < 33,000 lbs GVW (No FET required)
- \*\* 5-year DOT inspection required
- \*\*\* National Conference of Weights & Measures Certificate No.: 99-139A3

## **PIPING FEATURES**

- Diverter valve to allow for relief valve servicing
- Stainless steel piping and ball valves
- ThermaFired<sup>™</sup> pressure builder provides fast acting pressure rise in any ambient conditions
- Flowcom® Flow Meter System (50 500 lbs/min) with display\*\*\*

### **Performance**

- Hose reel (50 120 lbs/min)
- Bulk dispense (100 500 lbs/min) with vapor balancing
- Bulk transfer hoses (fill & vapor) and storage tubes
- Dedicated high pressure cylinder storage / Carbo Series tanks
- Multiple tool box sizes and quantities
- Pressure or pump (hydraulic) transfer
- Pump option includes the ability to assist with filling the Orca CO<sub>2</sub> truck
- Pump through the hose reel provides ~20 lbs/min more flow



# ORCA<sub>TM</sub> CO<sub>2</sub> SERIES MICROBULK DELIVERY UNIT FOR CARBON DIOXIDE



SPECIFICATIONS				
MODEL	5.5 Ton	6.5 Ton	10.5 Ton	13 Ton Trailer
MC338 Capacity (gal/ltrs)	1225 / 4637	1480 / 5602	2340 / 8858	2970 / 11,243
Overall Length (in/cm)	181 / 460	205 / 521	288 / 732	346 / 879
Overall Height (in/cm)	68 / 1173	68 / 1173	68 / 1173	115 / 292 (w/ trailer)
Overall Width (in/cm)	102 / 259	102 / 259	102 / 259	102 / 259
Tare Weight (lbs/kg)*	8600 / 390	9700 / 4400	13,700 / 6215	16,400 / 7440
Truck Rear Axle	Single	Tandem		
Under 33,000 lbs GVWR / US FET	Yes	No		
PERFORMANCE				
Pressure Building Type	ThermaFired™			ThermaFired™ XL
Dispense Method	Pressure Transfer or Pump			
Min. Dispensing Rate (lbs/min/kg/min)**	50 / 22.7			
Max. Dispensing Rate (lbs/min / kg/min)**	500 / 227			
Max. Dispensing Pressure (psig/barg)	350 / 24.1 400 / 27.6			

<sup>\*</sup>Tare weights are estimated, and calculations will be confirmed when each size is built.

Specifications subject to change without notice.

# **STANDARD DESIGN FEATURES**

- Built to ASME and DOT MC-338 design codes
- Flowcom® Flow Meter System
- MAWP 350 psi / 24.1 bar
- Pump can be used to fill Orca vessel
- 100' hose reel
- Vapor return connection



#### **Chart Exclusive -**

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

### **Control Cabinet**



Chart Inc.

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<sup>\*\*</sup>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.