

# CO<sub>2</sub> Selection Guide – Stationary Tanks

All data for CO <sub>2</sub>	Carbo Series Bulk CO <sub>2</sub> Systems								Perma-Max™ MicroBulk CO <sub>2</sub> Systems				
	Carbo-Mite® 220	Carbo-Mizer® 300	Carbo-Mizer® 450	Carbo-Mizer® 550	Carbo-Mizer® 600	Carbo-Mizer® 750	Carbo-Max® 750	Carbo-Max® 1000	Perma-Max™ 2200 HP	Perma-Max™ 3300 HP	Perma-Max™ 4400 HP	Perma-Max™ 6000 HP	Perma-Max™ 12000 VHP
<b>Dimensions</b>													
Diameter	20"	20"	20"	22"	22"	26"	26"	30"	42"	48"	48"	58"	80"
Height <sup>(1)</sup>	40"	49.63"	65.88"	66.9"	69.94"	67.88"	67.88"	72.5"	82"	92"	116"	122"	119"
Tare Weight (lbs)	156	216	273	318	323	430	430	788	1765	2200	2600	3300	9100
<b>Thermal Performance (NER%/Day)</b>	0.4%	0.6%	0.5%	0.4%	0.4%	0.4%	0.4%	0.6%	0.3%	0.3%	0.3%	0.3%	0.3%
<b>Storage Capacity (Net)</b>													
(Gas) SCF	1603	2562	4088	5105	5350	6897	6897	8741	19960	28431	38048	52954	99954
(Liquid) Lb	221	299	477	584	612	789	789	1000	2283	3256	4352	6058	11427
<b>Gas Delivery Rate (continuous)<sup>(2)</sup></b>													
SCFH	8.74	8.74	48	56.8	120	87.4	131.1	262	320.0	450.0	500.0	500.0	1167.0
Lb/Hour	1.0	1.0	5.5	6.5	15.0	10.0	15.0	30.0	25.0	36.0	36.0	36.0	91.0
<b>Gas Delivery Rate (Peak)<sup>(3)</sup></b>													
Lb/Hour	1.5	3.0	10.0	10.0	40.0	15.0	40.0	50.0	36.0	51.0	51.0	51.0	130.0
<b>Design Specification</b>													
ASME	X	X	X	X	X	X	X	X	X	X	X	X	X
MAWP (psig)	300	300	300	300	300	300	300	300	350	350	350	350	350 <sup>(4)</sup>
<b>Standard Design Features</b>													
Operating Pressure													
125 PSIG	X	X	X	X	X	X	X	X	X	X	X	X	X
300 PSIG									X	X	X	X	X
450 PSIG									X	X	X	X	X
Gas Withdrawal (PB) <sup>(4)</sup>		X	X	X		X							
Liquid Withdrawal <sup>(5)</sup>	X				X		X	X	X	X	X	X	External
<b>Optional Design Features</b>													
Sure-Fill™		X	X	X	X	X	X	X					
ZX Pressure Build System Available									X	X	X	X	Standard

<sup>(1)</sup> Carbo Series heights without 6" legs. <sup>(2)</sup> Values are based on vessel or vaporizer operating in ambient conditions of 70°F & 50% relative humidity for 12 consecutive hours. <sup>(3)</sup> Values are based on vessel or vaporizer operating in ambient conditions of 70°F & 50% relative humidity for 4 consecutive hours. <sup>(4)</sup> Process gas comes from head space. <sup>(5)</sup> Economizer for Carbo Series / internal process vaporization coils for Perma-Max Series. <sup>(6)</sup> Can be upgraded to 500 psig / 34.5 barg.



**Carbo Series Bulk CO<sub>2</sub> Systems**  
The Carbo Series system incorporates the Sure-Fill™ system designed to allow single-hose filling with minimal losses. Most Carbo Series tanks can be equipped with optional legs.



**Perma-Max™ MicroBulk CO<sub>2</sub> Systems**  
The Perma-Max systems are specifically designed for CO<sub>2</sub> service. One notable performance improvement is the fast fill feature – at least three times the fill rate over our standard Perma-Cyl® MicroBulk Storage Systems from a typical beverage delivery truck.

# CO<sub>2</sub> Selection Guide – Portable Tanks

All data for CO <sub>2</sub>	Dura-Cyl® Liquid Cylinders					Mega-Cyl® Liquid Cylinders	
	Dura-Cyl® 160	Dura-Cyl® 180	Dura-Cyl® 200	Dura-Cyl® 230 RB	Dura-Cyl® 265 RB	Mega-Cyl® 450	Mega-Cyl® 1000
<b>Dimensions</b>							
Diameter	20"	20"	20"	26"	26"	30"	42"
Height	59.8"	64.3"	66.6"	57.2"	59.9"	62"	76"
Tare Weight (lbs)	280	300	320	367	390	1275	2650
<b>Thermal Performance (NER%/Day)</b>	0.5%	0.5%	0.5%	0.5%	0.5%	0.6%	0.3%
<b>Storage Capacity (Net/DOT<sup>(1)</sup>)</b>							
(Gas) SCF	3382	3766	4011	4614	5305	8652	18580
(Liquid) Lb	387	431	459	528	607	990	2323
<b>Gas Delivery Rate (continuous)<sup>(2)</sup></b>							
SCFH	110.0	110.0	110.0	110.0	110.0	195.0	300.0
Lb/Hour	12.6	12.6	12.6	12.6	12.6	22.3	34.3
<b>Design Specification</b>							
DOT <sup>(1)</sup>	X	X	X	X	X	X	
ASME							X
MAWP (psig)	350	350	350	350	350	350	350
<b>Standard Design Features</b>							
Max Operating Pressure							
175 PSIG							
300 PSIG	X	X	X	X	X	X	X
450 PSIG							
Gas Withdrawal (PB)	X	X	X	X	X	X	X
Liquid Withdrawal (Economizer)	X	X	X	X	X	X	X

<sup>(1)</sup> DOT = Department of Transportation <sup>(2)</sup> Values are based on vessel or vaporizer operating in ambient conditions of 70°F & 50% relative humidity.



**Dura-Cyl® Liquid Cylinders**  
 Chart's Dura-Cyl series is a premium transportable liquid cylinder for cryogenic service. The patented internal support system design and quality construction makes the Dura-Cyl series the most efficient yet rugged cylinder on the market today.



**Mega-Cyl® Liquid Cylinders**  
 The Mega-Cyl product introduces Chart's line of palletized cylinders, designed for easy transport. It is ideal for construction sites, remote purging operations and back-up systems.



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