

ROBERTS



OXYGEN

SPECIALTY, MEDICAL & CRYOGENIC GASES

BULK & MicroBulk GASES | DRY ICE

SPECIALTY GAS EQUIPMENT | CRYOGENIC EQUIPMENT

## *MicroBulk Argon, Carbon Dioxide and Nitrogen*



**Benefits of MicroBulk.** Scheduled delivery system **provides an uninterrupted supply of gas.** Unique auto shut-off feature allows **remote filling** through a wall box, eliminating the need for the driver to enter the facility. Mounts permanently in very little space and conforms to ASME standards for stationary operation. **MicroBulk the other alternative to high pressure or liquid cylinders.** With the delivery system's "smart" flow-meter and easy-to-read printouts, reports of your delivery are available in seconds. MicroBulk tank sizes range from 450 liters to 2,000 liters and have a **variety of applications...**

### **Argon...**

Laboratories - Analysis, purging  
Electronics - Crystal growth  
Metal fabrication - Plasma, MIG and TIG welding

### **Carbon Dioxide...**

Laboratories - Cell Culture (incubator)  
Water treatment - Process water pH control  
Metal fabrication - MIG welding  
Restaurants - Beverage dispensing

### **Nitrogen...**

Biotech - Cryogenic storage, analytical, blanketing, purging  
Laboratories - R&D, cryogen storage, analysis  
Electronics - Purging, thermal testing  
Food - Processing, transport, preservation, flash freezing  
Metal fabrication - Laser cutting, plasma cutting, heat treating, inerting

Roberts Oxygen Co, Inc.

Cryo-Bio Newsletter

Register online for our  
E-Newsletter at  
[www.robertsoxygen.com](http://www.robertsoxygen.com)

[info@robertsoxygen.com](mailto:info@robertsoxygen.com)

### **Reduces Customer Maintenance:**

#### **Facility Damage:**

Eliminate damage to door frames, floor tiles and stairways, sidewalks, and parking lots from cylinders.

#### **High Pressure Regulator Damage:**

Eliminate broken or dropped regulators.

### **Improves Safety:**

#### **Facility Safety:**

Frees floor space, eliminates clutter of cylinders, and eliminates the need of safety chains.

### **Improves Quality:**

#### **Contamination:**

Eliminate damage contamination from rotating cylinders.

#### **Supply:**

No interruptions due to cylinder exchanges during business hours.

For more information on the benefits of MicroBulk please call or visit one of our store locations.

[www.robertsoxygen.com](http://www.robertsoxygen.com)



**LD Series**

**CST**  
Cryo-Science  
Technologies

**Features**

- High performance modern construction and advanced insulation materials assure high thermal efficiency
- New rugged construction, ribbed high strength aluminum body, magniformed necktube design, and more durable paint system
- Easy operation lightweight snap-on cap and necktube assures tight closure and easy access, convenient larger handles
- Superior vacuum performance with super insulation provides maximum holding times
- Optional equipment includes liquid withdrawal device, tipping stand, dippers and roller base (for some models)



Models	LD4	LD5	LD10	LD25	Classic 25	LD35	LD50	
Static Holding Time days (1)	10	6	45	109	119	152	122	
Working Time days (2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Evaporation Rate (1) liters/days	0.40	0.77	0.22	0.23	0.21	0.23	0.41	
Liquid Nitrogen Capacity - liters	4	5	10	25	25	35	50	
Weight Empty	- lbs. - kg.	6.6 3.0	6.9 3.1	14.5 6.6	23.2 10.5	19 8.6	35.1 16.0	38.7 17.6
Weight Full	- lbs. - kg.	13.7 6.2	15.8 7.2	32.3 14.7	67.7 30.8	63.5 28.9	97.4 44.3	127.7 58.0
Neck Diameter	- in. - mm.	1.2 30	5.6 142	2.0 51	2.5 64	2.0 51	2.5 64	2.5 64
Overall Height	- in. - mm.	17.0 432	17.5 445	23.5 597	25.8 655	22.9 582	26.3 668	32.4 823
Overall Diameter	- in. - mm.	7.6 193	7.6 193	11.4 290	15.6 396	15.5 394	18.8 475	18.8 475
Liquid Withdrawal Device P/N	N/A	N/A	N/A	D050-8C00	N/A	D050-8C00	D050-8C00	
Roller Base P/N	N/A	N/A	N/A	R018-8C00	D024-8C02	RO33-8C00	R033-8C00	
Tipping Stand P/N	N/A	N/A	N/A	D025-8C00	DO24-8C00	N/A	N/A	
Dipper P/N	N/A	R018-8C50	R018-8C50	R018-8C50	R018-8C50	R018-8C50	R018-8C50	

(1) Evaporation rate and static holding time are nominal. Actual rate may be affected by the nature of the contents, atmospheric conditions, container history, and manufacturing tolerances.  
 (2) Work time is an arbitrary, reference-only value to estimate container performance under the actual operating conditions.

**For more information on all Taylor Wharton products please call or visit one of our store locations.**

**CONCOA 202 Series**  
**Single Stage Chrome-Plated Brass Cylinder Regulator**



**Typical Applications**

- Gas supply purging
- Gas system charging
- Fuel gas supply control
- Calibration gas control
- Atomic absorption acetylene

**Advanced Features**

- Chrome-plated forged brass body  
Economical high purity design
- High flow capacity  
Supply multiple user locations
- Pressure ranges 0-15 to 0-200 PSIG  
Broad range of applications

**Can be Customized to Your Specific Requirements!**

- ⇒ Single Stage Chrome-Plated
- ⇒ Forged Brass Body
- ⇒ Five-Port Configuration
- ⇒ 316L Stainless Steel Diaphragm
- ⇒ Cleaned Room Assembled

The 202 Series regulators are intended for primary pressure control of noncorrosive, high purity or liquefied gases (up to grade 4.5) in applications where minor fluctuations in outlet pressure due to diminishing inlet supply pressure can be tolerated.

**200 Advantage Materials Specifications**

<ul style="list-style-type: none"> <li>• <i>Capsule® seat</i> Increased serviceability and life</li> <li>• <i>316L stainless steel diaphragm</i> No inboard diffusion</li> <li>• <i>Forged body</i> Durable, long-lasting construction</li> <li>• <i>Field-adjustable pressure limit</i> Safeguard downstream equipment</li> <li>• <i>Large convoluted diaphragm</i> Smooth pressure changes</li> <li>• <i>Standard relief valve</i> Diaphragm and gauge protection</li> </ul>	<p><i>Body</i> Chrome-plated forged brass</p> <p><i>Bonnet</i> Chrome-plated die cast zinc</p> <p><i>Seat</i> PTFE PCTFE with 4500 PSIG inlet option</p> <p><i>Filter</i> 10 micron sintered bronze</p> <p><i>Diaphragm</i> 316L stainless steel</p> <p><i>Internal Seals</i> PTFE</p>	<p><i>Maximum Inlet Pressure</i> 3000 PSIG (210 BAR)</p> <p><i>Temperature Range</i> -40°F to 140°F (-40°C to 60°C)</p> <p><i>Gauges</i> 2½" diameter chrome-plated brass</p> <p><i>Ports</i> ¼" FPT</p> <p><i>Helium Leak Integrity</i> 1 x 10<sup>-8</sup> scc/sec</p> <p><i>Cv</i> 0.2</p> <p><i>Weight (202-3331-580)</i> 3.8 lbs. (1.74 kg)</p>
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**Economically Priced... Starting at only \*\$215.00.**

\*Depending on regulator configuration and additional fittings

For more information on CONCOA products please call or visit one of our store locations.

## WE APPRECIATE YOUR BUSINESS!

### MARYLAND

**Annapolis, MD** 21401, 1801 George Ave. #B.

Phone: 410-263-5506 Fax: 410-268-6892

#### **Retail Store and Distribution Location**

**Baltimore, MD** 21227, 1601 South Caton Ave.

Phone: 410-644-5015 Fax: 410-644-5086

**Baltimore, MD** 21224, 4520 O'Donnell St.

Phone: 410-522-7440 Fax: 410-522-7455

**Bladensburg, MD** 20710, 4246 Kenilworth Ave. #A.

Phone: 301-927-5600 Fax: 301-927-7280

**Cockeysville, MD** 21030, 10626 York Rd.

Phone: 410-683-1783 Fax: 410-683-0198

**Edgewood, MD** 21040, 2014 Pulaski Highway.

Phone: 410-676-3900 Fax: 410-676-3370

**Essex, MD** 21221, 712 Stemmers Run Rd.

Phone: 410-574-7501 Fax: 410-574-4633

**Frederick, MD** 21704, 5705 Industry Lane. #Q.

Phone: 301-696-0044 Fax: 301-696-0681

#### **Distribution Location**

**Gaithersburg, MD** 20877, 17011 Railroad St.

(800) 626-3433 Fax: 301-948-2465

**Glen Burnie, MD** 21061, 706 N. Crain Highway North #B.

Phone: 410-768-1175 Fax: 410-787-9733

**Hagerstown, MD** 21740, 916 South Potomac St.

Phone: 301-791-6800 Fax: 301-791-7600

**Laurel, MD** 20707, 13309 Baltimore Ave.

Phone: 301-470-1431 Fax: 301-470-2133

#### **Retail Store and Distribution Location**

**Marlow Heights, MD** 20748, 4811 Stamp Rd.

Phone: 301-899-6400 Fax: 301-423-4540

**Rockville, MD** 20855, 15830 Redland Rd.

Phone: 301-948-2205 Fax: 301-948-0037

**Salisbury, MD** 21801, 2002 N. Salisbury Blvd.

Phone: 410-749-9620 Fax: 410-749-9651

**Westminster, MD** 21157, 96 John St.

Phone: 410-840-0400 Fax: 410-840-1912

### VIRGINIA

**Charlottesville, VA** 22903, 770 Harris St. #101.

Phone: 434-296-1615 Fax: 434-295-3848

**Fairfax, VA** 22031, 2929 Eskridge Rd. #A.

Phone: 703-698-5322 Fax: 703-204-2913

**Manassas, VA** 20110, 8607 Quarry Rd.

Phone: 703-369-0400 Fax: 703-631-8264

**Petersburg, VA** 28303, 2200 E. Washington St.

Phone: 804-733-4944 Fax: 804-732-3468

#### **Retail Store and Distribution Location**

**Portsmouth, VA** 23701, 3931 Garwood Ave.

Phone: 757-487-7005 Fax: 757-487-1510

#### **Retail Store and Distribution Location**

**Springfield, VA** 22153, 7653 Fullerton Rd.

Phone: 703-644-5065 Fax: 703-644-2630

**Sterling, VA** 20166, 45000 Underwood Lane #N.

Phone: 703-471-9586 Fax: 703-471-9638

#### **Retail Store and Distribution Location**

**Richmond, VA** 23230, 2117 N. Hamilton St.

Phone: 804-353-1355 Fax: 804-353-0892

#### **Retail Store and Distribution Location**

**Waynesboro, VA** 22980, 716 N. Bath Ave.

Phone: 540-949-7178 Fax: 540-943-2148

#### **Retail Store and Distribution Location**

**Winchester, VA** 22603, 221 Brick Kiln Rd.

Phone: 540-662-1180 Fax: 540-722-9353

### PENNSYLVANIA

#### **Retail Store and Distribution Location**

**Collingdale, PA** 19023, 1230 Macdade Blvd.

Phone: 610-461-1952 Fax: 610-461-1964

#### **Retail Store and Distribution Location**

**Johnstown, PA** 15905, 101 Ferndale Ave.

Phone: 814-539-2833 Fax: 814-539-2994

#### **Retail Store and Distribution Location**

**Lancaster, PA** 17601, 3150 Hempland Rd.

Phone: 717-390-3009 Fax: 717-390-2059

**Pleasant Gap, PA** 16823, 380 West College Ave

Phone: 814-359-3399 Fax: 814-359-4376

**West Chester, PA** 19382 614 Westtown Rd.

Phone: 610-701-0700 Fax: 610-701-9898

### DELAWARE

#### **Retail Store and Distribution Location**

**Bridgeville, DE** 19933

16223 Sussex Highway.

Phone: 302-337-9666 Fax: 302-337-9663

### NEW JERSEY

#### **Retail Store and Distribution Location**

**Pleasantville, NJ** 08232, 580 West Delilah Rd.

Phone: 609-484-8181 Fax: 609-484-0281

### NORTH CAROLINA

#### **Distribution Location and Retail Store**

**Charlotte, NC** 28206, 3320 Service St.

Phone: 704-371-3030 Fax: 704-371-3033

#### **Distribution Location and Retail Store**

**Greensboro, NC** 27409, 8311 Triad Dr.

Phone: 336-664-6565 Fax: 336-664-6566

#### **Retail Store**

**Bessemer City, NC** 28016, 1206 Edgewood Rd.

Phone: 704-629-9898 Fax: 704-629-9696

## Roberts Oxygen is a Full Line Supplier of Specialty Gases.

### **PURE GASES**

- ◆ Acetylene
- ◆ Air
- ◆ Ammonia
- ◆ Argon
- ◆ Butadiene 1,3
- ◆ Butane (Normal)
- ◆ Butene (1)
- ◆ Carbon Dioxide
- ◆ Carbon Monoxide
- ◆ Chlorine
- ◆ Ethane
- ◆ Ethylene
- ◆ Halocarbon-116
- ◆ Halocarbon-134A
- ◆ Halocarbon-14
- ◆ Halocarbon-218
- ◆ Halocarbon-22
- ◆ Halocarbon-23
- ◆ Halocarbon-C318
- ◆ Helium
- ◆ Hydrogen
- ◆ Hydrogen Bromide
- ◆ Hydrogen Chloride
- ◆ Hydrogen Sulfide
- ◆ Isobutane
- ◆ Isobutylene
- ◆ Krypton
- ◆ Methane
- ◆ Methyl Chloride
- ◆ Neon
- ◆ Nitric Oxide
- ◆ Nitrogen
- ◆ Nitrogen Dioxide
- ◆ Nitrogen Trifluoride
- ◆ Nitrous Oxide
- ◆ Oxygen
- ◆ Phosphine
- ◆ Propane
- ◆ Propylene
- ◆ Silane
- ◆ Silicon Tetrachloride
- ◆ Sulfur Dioxide
- ◆ Sulfur Hexafluoride
- ◆ Tungsten Hexafluoride
- ◆ Xenon

**For a complete listing of all our Specialty Gases...ask for our Specialty Gas Line Card. Call or visit one of our 36 convenient store locations.**