

Dewars

Ratermann Manufacturing has a complete line of cryogenic vessels.



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Dewars

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180-HP & 200-HP DEWAR

Finally the features you want on

Portable Liquid Cylinders . . .

at a price you can afford.

High-Performance

- Superior product holding time
- High pressure (350 psi) models
- Designed to provide the highest gas withdrawal rates
- 5-year warranty on vacuum

Durable

- The industry's most dent resistant outer shell
- 4 handling ring supports and heavy duty foot-ring
- All Stainless Steel construction

Easy to Use

- Automatic pressure building/economizer circuits
- 1 combination pressure control regulator
- Easy to read magnetic contents gauge

Versatile

- O₂, N₂, Ar, CO₂ and N₂O service
- Ideal for gas or liquid withdrawal

180-HP Dewar

Specifications

MODEL	180 HP		
CAPACITY			
LIQUID (GROSS)	Liters		196
LIQUID (NET)	Liters		185
GAS (N ₂)	ft ³		3864
GAS (O ₂)	ft ³		4843
GAS (Ar)	ft ³		4709
GAS (CO ₂)	ft ³		3766
GAS (N ₂ O)	ft ³		3574
PERFORMANCE			
NER (N ₂)	% / Day		1.9
NER (O ₂ - Ar)	% / Day		1.3
NER (CO ₂ - N ₂ O)	% / Day		0.5
GAS FLOW (N ₂ , O ₂ , Ar)	Ft ³ / Hr		375
GAS FLOW (CO ₂ , N ₂ O)	Ft ³ / Hr		110
DIMENSIONS			
HEIGHT	inches		64
DIAMETER	inches		20
EMPTY WEIGHT	pounds		313
FULL WEIGHT (N ₂)	pounds		592
FULL WEIGHT (O ₂)	pounds		714
FULL WEIGHT (Ar)	pounds		800.2
FULL WEIGHT (CO ₂)	pounds		742.9
FULL WEIGHT (N ₂ O)	pounds		720.8
PRESSURE RATINGS			
RELIEF VALVE SETTING	PSIG		350
US DOT RATING	DOT		4L292



ASK ABOUT OUR LEASE PROGRAM

Dewar Part #	Description
DEW-HP180-580A	Industrial Argon
DEW-HP180-580N	Industrial Nitrogen
DEW-HP180-540	Industrial Oxygen
DEW-HP180-320	Industrial Carbon Dioxide
DEW-HP180-M580N	Medical* Nitrogen
DEW-HP180-M540	Medical* Oxygen
DEW-HP180-M320	Medical* Carbon Dioxide

*For Medical Dewars with labeling, 360° band and tamper proof fittings.



Dewars Option for Multi Pressure Needs

Part #	Description
PR-D2 22/235	22 PSI/235 PSI
PR-D2 50/235	50 PSI/235 PSI
PR-D2 100/235	100 PSI/235 PSI
PR-D2 22/350	22 PSI/350 PSI
PR-D2 50/350	50 PSI/350 PSI
PR-D2 100/350	100 PSI/350 PSI

*Some assembly required

200-HP Dewar

Specifications

MODEL	200 HP		
CAPACITY			
LIQUID (GROSS)	Liters		212
LIQUID (NET)	Liters		202
GAS (N ₂)	ft ³		4334
GAS (O ₂)	ft ³		5325
GAS (Ar)	ft ³		5183
GAS (CO ₂)	ft ³		4143
GAS (N ₂ O)	ft ³		3928
PERFORMANCE			
NER (N ₂)	% / Day		1.8
NER (O ₂ - Ar)	% / Day		1.2
NER (CO ₂ - N ₂ O)	% / Day		0.4
GAS FLOW (N ₂ , O ₂ , Ar)	Ft ³ / Hr		450
GAS FLOW (CO ₂ , N ₂ O)	Ft ³ / Hr		130
DIMENSIONS			
HEIGHT	inches		66.4
DIAMETER	inches		20
EMPTY WEIGHT	pounds		330
CAPACITY (N ₂)	pounds		314
CAPACITY (O ₂)	pounds		441
CAPACITY (Ar)	pounds		536
CAPACITY (CO ₂)	pounds		474
CAPACITY (N ₂ O)	pounds		451
PRESSURE RATINGS			
RELIEF VALVE SETTING	PSIG		350
US DOT RATING	DOT		4L292



ASK ABOUT OUR EASY LEASE

Dewar Part #	Description
DEW-HP200-580A	Industrial Argon
DEW-HP200-580N	Industrial Nitrogen
DEW-HP200-540	Industrial Oxygen
DEW-HP200-320	Industrial Carbon Dioxide
DEW-HP200-M580N	Medical* Nitrogen
DEW-HP200-M540	Medical* Oxygen
DEW-HP200-M320	Medical* Carbon Dioxide

*For Medical Dewars with labeling, 360° band and tamper proof fittings.



Dewars Option for Multi Pressure Needs

Part #	Description
PR-D2 22/235	22 PSI/235 PSI
PR-D2 50/235	50 PSI/235 PSI
PR-D2 100/235	100 PSI/235 PSI
PR-D2 22/350	22 PSI/350 PSI
PR-D2 50/350	50 PSI/350 PSI
PR-D2 100/350	100 PSI/350 PSI

*Some assembly required

ROUND & SQUARE BASE

240 & 265-HP Round Base Dewar



Round Base

Specifications

MODEL		240 HP	265 HP
CAPACITY			
Liquid (Gross)	Liters	248	281
Liquid (Net)	Liters	241	266
Gas (N ₂)	ft ³	4899	5548
Gas (O ₂)	ft ³	6124	6934
Gas (Ar)	ft ³	5958	6745
Gas (CO ₂)	ft ³	4529	5394
Gas (N ₂ O)	ft ³	5447	5114
PERFORMANCE			
NER (N ₂)	% / Day	1.6	1.5
NER (O ₂ , Ar)	% / Day	1.0	1.0
NER (CO ₂ , N ₂ O)	% / Day	0.5	0.4
Gas Flow (N ₂ , O ₂ , Ar)	Ft / Hr	450	450
Gas Flow (CO ₂ , N ₂ O)	Ft / Hr	130	130
DIMENSIONS			
Height	inches	56.0	60.0
Diameter	inches	26	26
Empty Weight (round base)	pounds	416	440
Capacity (N ₂)	pounds	355	402
Capacity (O ₂)	pounds	507	574
Capacity (Ar)	pounds	616	697
Capacity (CO ₂)	pounds	518	617
Capacity (N ₂ O)	pounds	545	586
PRESSURE RATINGS			
Relief Valve Settings	PSIG	350	350
US DOT Rating	DOT	4L292	4L292

240 & 265-HP Square Base Dewar



Square Base

240-HP Round Base Dewar

Dewar Part #	Description
DEW-HP240-580A	Industrial Argon
DEW-HP240-580N	Industrial Nitrogen
DEW-HP240-540	Industrial Oxygen
DEW-HP240-320	Industrial Carbon Dioxide
DEW-HP240-M580N	Medical* Nitrogen
DEW-HP240-M540	Medical* Oxygen
DEW-HP240-M320	Medical* Carbon Dioxide

*For Medical Dewars with labeling, 360° band and tamper proof fittings.

265-HP Round Base Dewar

Dewar Part #	Description
DEW-HP265-580A	Industrial Argon
DEW-HP265-580N	Industrial Nitrogen
DEW-HP265-540	Industrial Oxygen
DEW-HP265-320	Industrial Carbon Dioxide
DEW-HP265-M580N	Medical* Nitrogen
DEW-HP265-M540	Medical* Oxygen
DEW-HP265-M320	Medical* Carbon Dioxide

240-HP Square Base Dewar

Dewar Part #	Description
DEW-HP240SQ-580A	Industrial Argon
DEW-HP240SQ-580N	Industrial Nitrogen
DEW-HP240SQ-540	Industrial Oxygen
DEW-HP240SQ-320	Industrial Carbon Dioxide
DEW-HP240SQ-M580N	Medical* Nitrogen
DEW-HP240SQ-M540	Medical* Oxygen
DEW-HP240SQ-M320	Medical* Carbon Dioxide

*For Medical Dewars with labeling, 360° band and tamper proof fittings.

265-HP Square Base Dewar

Dewar Part #	Description
DEW-HP265SQ-580A	Industrial Argon
DEW-HP265SQ-580N	Industrial Nitrogen
DEW-HP265SQ-540	Industrial Oxygen
DEW-HP265SQ-320	Industrial Carbon Dioxide
DEW-HP265SQ-M580N	Medical* Nitrogen
DEW-HP265SQ-M540	Medical* Oxygen
DEW-HP265SQ-M320	Medical* Carbon Dioxide

Industrial Dewars will Include Labeling and Tamper Evident Devices

Other Bottle Styles Available – Give Us a Call

DEWAR FLASK CHART



4 Liter Dewar

MODEL LAB DEWAR 4

Net Capacity 4 Liters

PERFORMANCEStatic Evaporation Rate
(liters/day) 0.19**UNIT DIMENSIONS**

Neck opening (in/mm) 1.4 (35.5)

Usable height (in/mm) 7.8 (198)

Overall height (in/mm) 16.8 (426)

Outside diameter (in/mm) 7.3 (185)

Internal diameter (in/mm) 5.5 (139)

Weight empty (lbs/kg) 6 (2.7)

Weight full (lbs/kg) 13 (6)



Lab Dewar – 4 Liter

Part #	Description
DEW-4	Lab Dewar, 4 Liter
DEW-4LID	Spare Cork/Lid for 4 Liter Dewar



5 Liter Dewar

MODEL LAB DEWAR 5

Net Capacity 5 Liters

PERFORMANCEStatic Evaporation Rate
(liters/day) 0.15**UNIT DIMENSIONS**

Neck opening (in/mm) 2.2 (56)

Usable height (in/mm) 10.5 (266)

Overall height (in/mm) 18.2 (462)

Outside diameter (in/mm) 8.8 (222)

Internal diameter (in/mm) 8.5 (165)

Weight empty (lbs/kg) 8 (4)

Weight full (lbs/kg) 17 (8)

Lab Dewar – 5 Liter

Part #	Description
DEW-5	Lab Dewar, 5 Liter
DEW-5LID	Spare Cork/Lid for 5 Liter Dewar
DEW-5SPOUT	Pouring Spout for 5 Liter Dewar
DEW-5PLUG	Spare Rubber Plug for 5 Liter Dewar
DEW-5RDIPPER	Ridgid Dipper for 5 Liter Dewar
DEW-5SDIPPER	Swivel Dipper for 5 Liter Dewar



10 Liter Dewar

MODEL LAB DEWAR 10

Net Capacity 10 Liters

PERFORMANCEStatic Evaporation Rate
(liters/day) 0.18**UNIT DIMENSIONS**

Neck opening (in/mm) 2.2 (56)

Usable height (in/mm) 13.5 (343)

Overall height (in/mm) 21.5 (546)

Outside diameter (in/mm) 10.3 (260)

Internal diameter (in/mm) 8.3 (210)

Weight empty (lbs/kg) 13 (6)

Weight full (lbs/kg) 31 (14)

Lab Dewar – 10 Liter

Part #	Description
DEW-10	Lab Dewar, 10 Liter
DEW-10LID-2.2	Spare Cork/Lid for 10 Liter Dewar 2.2" Diameter (New Models)
DEW-10LID-2	Spare Cork/Lid for 10 Liter Dewar 2" Diameter (Old Models)
DEW-10SPOUT	Pouring Spout for 10 Liter Dewar
DEW-10MDD-2	Manual Discharge Device 2" Neck for 10 Liter Dewar
DEW-10MDD-2.125	Manual Discharge Device 2 1/8" Neck for 10 Liter Dewar
DEW-10PLUG	Spare Rubber Plug for 10 Liter Dewar
DEW-10RDIPPER	Ridgid Dipper for 10 Liter Dewar
DEW-10SDIPPER	Swivel Dipper for 10 Liter Dewar
DEW-10RPLUG-2	Rubber Plug 2" OD for 10 Liter Dewar

DEWAR FLASK CHART

MODEL LAB DEWAR 20



20 Liter Dewar

Net Capacity 21 Liters

PERFORMANCE

Static Evaporation Rate
(liters/day) 0.18

UNIT DIMENSIONS

Neck opening (in/mm) 2 (51)
Usable height (in/mm) 13.7 (348)
Overall height (in/mm) 24.7 (627)
Outside diameter (in/mm) 14.5 (368)
Internal diameter (in/mm) 11.4 (289)
Weight empty (lbs/kg) 19 (6)
Weight full (lbs/kg) 56 (26)

Lab Dewar – 20 Liter

Part #	Description
DEW-20	Lab Dewar, 20 Liter
DEW-20LID	Spare Cork/Lid for 20 Liter Dewar
DEW-20SPOUT	Pouring Spout for 20 Liter Dewar
DEW-20MDD	Manual Discharge Device for 20 Liter Dewar
DEW-20PLUG	Spare Rubber Plug for 20 Liter Dewar
DEW-20RDIPPER	Rigid Dipper for 20 Liter Dewar
DEW-20SDIPPER	Swivel Dipper for 20 Liter Dewar
DEW-20RB	Rollerbase for 20 Liter Dewar

MODEL LAB DEWAR 30



30 Liter Dewar

Net Capacity 32 Liters

PERFORMANCE

Static Evaporation Rate
(liters/day) 0.22

UNIT DIMENSIONS

Neck opening (in/mm) 2.5 (64)
Usable height (in/mm) 14.9 (378)
Overall height (in/mm) 24.1 (611)
Outside diameter (in/mm) 17 (432)
Internal diameter (in/mm) 14 (356)
Weight empty (lbs/kg) 27 (12)
Weight full (lbs/kg) 84 (38)

Lab Dewar – 30 Liter

Part #	Description
DEW-30	Lab Dewar, 30 Liter
DEW-30LID	Spare Cork/Lid for 30 Liter Dewar
DEW-30SPOUT	Pouring Spout for 30 Liter Dewar
DEW-30MDD	Manual Discharge Device for 30 Liter Dewar
DEW-30PLUG	Spare Rubber Plug for 30 Liter Dewar
DEW-30RDIPPER	Rigid Dipper for 30 Liter Dewar
DEW-30SDIPPER	Swivel Dipper for 30 Liter Dewar
DEW-3050RB	Rollerbase for 30 and 50 Liter Dewar

MODEL LAB DEWAR 50



50 Liter Dewar

Net Capacity 50 Liters

PERFORMANCE

Static Evaporation Rate
(liters/day) 0.49

UNIT DIMENSIONS

Neck opening (in/mm) 2.5 (64)
Usable height (in/mm) 22 (559)
Overall height (in/mm) 30.7 (779)
Outside diameter (in/mm) 17 (432)
Internal diameter (in/mm) 14 (356)
Weight empty (lbs/kg) 34 (15)
Weight full (lbs/kg) 123 (56)

Lab Dewar – 50 Liter

Part #	Description
DEW-50	Lab Dewar, 50 Liter
DEW-50LID	Spare Cork/Lid for 50 Liter Dewar
DEW-50SPOUT	Pouring Spout for 50 Liter Dewar
DEW-50MDD	Manual Discharge Device for 50 Liter Dewar
DEW-50PLUG	Spare Rubber Plug for 50 Liter Dewar
DEW-50RDIPPER	Rigid Dipper for 50 Liter Dewar
DEW-50SDIPPER	Swivel Dipper for 50 Liter Dewar
DEW-3050RB	Rollerbase for 30 and 50 Liter Dewar

ACCESSORIES

Replacement Top



Lab Dewar Accessories

Part #	Description
DEW-SSTU5	Stainless Steel Transfer Unit, 5 Liter
DEW-SSTU2.5	Stainless Steel Transfer Unit, 2.5 Liter
DEW-SSTU1.5	Stainless Steel Transfer Unit, 1.5 Liter
DEW-SSTU-BASKET	Stainless Steel Transfer Unit Basket

LIQUID TRANSFER • SAFETY

LIQUID TRANSFER KIT



Part # FPA4D38

Hose & Diffuser –

Armored Hose CGA-295 with 1/8" Diffuser

Part #	Hose Length	Description
FPA4D18	4'	CGA-295 w/ 1/8" Diffuser
FPA6D18	6'	CGA-295 w/ 1/8" Diffuser
FPA8D18	8'	CGA-295 w/ 1/8" Diffuser
FPA12D18	12'	CGA-295 w/ 1/8" Diffuser

Hose & Diffuser –

Armored Hose CGA-295 with 3/8" Diffuser

Part #	Hose Length	Description
FPA4D38	4'	CGA-295 w/ 3/8" Diffuser
FPA6D38	6'	CGA-295 w/ 3/8" Diffuser
FPA8D38	8'	CGA-295 w/ 3/8" Diffuser
FPA12D38	12'	CGA-295 w/ 3/8" Diffuser

Hose & Diffuser –

Armored Hose CGA-295 with 1/2" Diffuser

Part #	Hose Length	Description
FPA4D12	4'	CGA-295 w/ 1/2" Diffuser
FPA6D12	6'	CGA-295 w/ 1/2" Diffuser
FPA8D12	8'	CGA-295 w/ 1/2" Diffuser
FPA12D12	12'	CGA-295 w/ 1/2" Diffuser

CRYO-GLOVES

Features

- Superior thermal protection
- Waterproof
- Comfortable / Lightweight / Excellent dexterity
- Breathable / Stay-dry lining
- Protection from splashes of cryogenic liquids
- Extra comfort when working in cryogenic atmospheres for extended periods

Environments

- Fertility Clinics
- Bio-Medical
- Industrial
- Pharmaceutical
- Genetic and Bio Technology

Applications

- LN atmospheres and environments
- Refrigerated liquid baths
- Cryo freezers
- Cryogenic grinding



Elbow

Waterproof Cryo-Gloves

Part #	Description	1+
CRY-GL1820WP-L	Cryo-Glove 18-20" (elbow) – large	155.67
CRY-GL1820WP-M	Cryo-Glove 18-20" (elbow) – medium	155.67
CRY-GL1820WP-XL	Cryo-Glove 18-20" (elbow) – extra large	155.67

CRYO-APRON

Features

- Superior thermal protection
- Waterproof
- Comfortable / Lightweight / Breathable
- Warmth and splash protection for torso and legs
- Adjustable straps at neck and waist
- Side release buckles for quick on/off

Applications

- Cold rooms / walk-in freezers
- Blast freezers
- Delivery and filling of cryogenic liquids
- HAZMAT® cryo liquid spill response

Environments

- Cryo preservation facilities
- Cryogenic liquid producers
- Clinical laboratory
- Bio-Medical
- Blood Banks
- Frozen food processing
- Pharmaceutical



* shown: cryo-gloves Pt # CRY-IG18G-WP

Cryo-Apron

Part #	Description	1+
CRY-AP36	Cryo-Apron – 36" / 90.85 cm	117.03
CRY-AP42	Cryo-Apron – 42" / 100.4 cm	128.40
CRY-AP48	Cryo-Apron – 48" / 121.75 cm	139.75
CRY-AP54	Cryo-Apron – 54" / 137.0 cm	151.12