

DOT CATALOG

DOT Propane Cylinders
Forklift Cylinders & Tanks
Marine Cylinders



MISSION STATEMENT/TABLE OF CONTENTS

Mission Statement

Manchester Tank is the leading manufacturer of low-pressure vessels for propane, air, and industrial applications in North America and Australia.

Our mission is to retain our premier position by continuously improving our products and service level to meet and exceed the expectations of our customers. Customer satisfaction is central to our existence. Our employees will accomplish this by functioning as a team and becoming involved. We will continuously invest in operations and improve processes.

We will function with a high degree of integrity and provide a reasonable return for our owners.

History

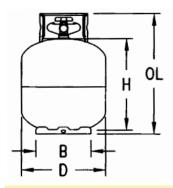
Manchester Tank, founded in 1946 by Mollie and Edward Riefschneider, is today's foremost manufacturer of low pressure vessels. They instilled a family dedication to quality workmanship and customer satisfaction.

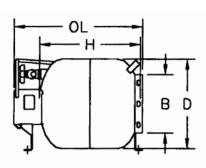
Manchester Tank has grown from an original shop with 10 employees to six manufacturing plants with over 1000 employees throughout North America and Australia today. We continue our commitment to quality, and hope to have the opportunity to put our people and our products to work for you.

MAJOR FEATURES OF OUR DOT CYLINDERS

- A full range of cylinders from 5 pounds to 420 pounds, forklift and buffer cylinders.
- Manufactured by Manchester in the most up-to-date, state-of-the-art cylinder facilities in the U.S.A.
- All cylinders conform with strict compliance to DOT specifications 4BA, 4BW and 4E. In addition, most cylinders conform and are approved under Transport Canada specifications 4BAM, 4BWM and 4EM.
- All Manchester cylinders go through multiple testing procedures.
- All Manchester cylinders are steel shotblasted prior to painting.
- All steel cylinders have Powder Coat Paint for maximum rust protection.
- HANDLE-EZ collar design. The only collar with a built-in, formed handle with no sharp edges.
- All include consumer warning decals that are easy to read for you and your customers' protection.

- Horizontal cylinders are available in 20# and 30# capacity.
- Capacity gauges are available in 20#, 30#, 33#, 40#, 43#, 200#, and 420# cylinders.
- Cylinders are shrink-wrapped on pallets or boxed individually for protection and easy storage.





VERTICAL & HORIZONTAL DIMENSIONS

H = Height

OL = **Overall Length**

D = **Overall Diameter**

B = Base Diameter

WARRANTY

That all tanks, cylinders and equipment manufactured by it to be free from defects in material and workmanship under normal use and service when installed and used in accordance with all applicable state and local laws and regulations.

Defects in material or workmanship shall be corrected, at the option of Manchester, by repair, replacement or refund. In the event a repair is not commercially practicable or cannot be timely made, the item will be replaced, or with the consent of the consumer, a refund may be made.

This warranty does not cover damage resulting from abuse, misuse, negligence or accident; nor from problems resulting from failure to comply with all applicable state and local laws and regulations or problems caused, in whole or in part, by alteration or modification to the product.

This warranty does not cover stress cracks (3000 series) caused by use of compressors which do not meet ASME UG-22 Stress Calculations.

This warranty does not cover transportation to and from service locations, loss of time, inconvenience, commercial loss, loss of use, incidental charges or other consequential damages.

All such repairs will be made at authorized service centers. The names and locations of service centers can be obtained from the dealer from whom the item was purchased.

This warranty shall be for the term of three years on D.O.T. products and one year on A.S.M.E. products from the date of the sale by the dealer to the consumer. Upon demand by Manchester or the service center, the consumer shall produce the original sales contract or receipt to identify the date of purchase.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to

LP-gas regulators are not manufactured by Manchester. Therefore, they are covered by a separate manufacturer's warranty.

DOT PORTABLE PROPANE CYLINDERS



5# VERTICAL/10054



10# VERTICAL/10228.4



11# VERTICAL/10393.1

Product Data			Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Description	Lb	Gal	Lb	In	In	In	In	Lb	
5# ACME/OPD - VERTICAL - WHITE - BOXED	5.0	1.2	13.0	12.0	8.6	8.0	6.5	10	120
10# ACME/OPD - VERTICAL - WHITE	10.0	2.4	23.8	17.4	13.8	8.9	7.3	15	80
11# ACME/OPD - VERTICAL - WHITE - BOXED	11.0	2.6	26.1	12.4	8.4	12.2	7.9	14	84
Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
5# ACME/OPD - VERTICAL - WHITE - BOXED	2.3	4.5	5.9	305	219	203	165	4.5	120
10# ACME/OPD - VERTICAL - WHITE	4.5	8.9	10.8	442	349	225	184	6.8	80
11# ACME/OPD - VERTICAL - WHITE - BOXED	5.0	9.8	11.8	315	213	309	201	6.4	84
	Description 5# ACME/OPD - VERTICAL - WHITE - BOXED 10# ACME/OPD - VERTICAL - WHITE 11# ACME/OPD - VERTICAL - WHITE - BOXED Description 5# ACME/OPD - VERTICAL - WHITE - BOXED 10# ACME/OPD - VERTICAL - WHITE	Description Lb 5# ACME/OPD - VERTICAL - WHITE - BOXED 10# ACME/OPD - VERTICAL - WHITE 10.0 11# ACME/OPD - VERTICAL - WHITE - BOXED 11.0 Description kg 5# ACME/OPD - VERTICAL - WHITE - BOXED 2.3 10# ACME/OPD - VERTICAL - WHITE - BOXED 4.5	Capacities Description Lb Gal S# ACME/OPD - VERTICAL - WHITE - BOXED 10# ACME/OPD - VERTICAL - WHITE 10.0 2.4 11# ACME/OPD - VERTICAL - WHITE - BOXED 11.0 2.6 Description kg Liter S# ACME/OPD - VERTICAL - WHITE - BOXED 2.3 4.5 10# ACME/OPD - VERTICAL - WHITE 4.5 8.9	Capacities Capacity	Capacities Capacity OL	Description Lb Gal Lb In In 5# ACME/OPD - VERTICAL - WHITE - BOXED 5.0 1.2 13.0 12.0 8.6 10# ACME/OPD - VERTICAL - WHITE 10.0 2.4 23.8 17.4 13.8 11# ACME/OPD - VERTICAL - WHITE - BOXED 11.0 2.6 26.1 12.4 8.4 Description kg Liter Kg mm mm 5# ACME/OPD - VERTICAL - WHITE - BOXED 2.3 4.5 5.9 305 219 10# ACME/OPD - VERTICAL - WHITE 4.5 8.9 10.8 442 349	Description Lb Gal Lb In In 5# ACME/OPD - VERTICAL - WHITE - BOXED 5.0 1.2 13.0 12.0 8.6 8.0 10# ACME/OPD - VERTICAL - WHITE 10.0 2.4 23.8 17.4 13.8 8.9 11# ACME/OPD - VERTICAL - WHITE - BOXED 11.0 2.6 26.1 12.4 8.4 12.2 Description kg Liter Kg mm mm mm 5# ACME/OPD - VERTICAL - WHITE - BOXED 2.3 4.5 5.9 305 219 203 10# ACME/OPD - VERTICAL - WHITE 4.5 8.9 10.8 442 349 225	Capacities Capacity OL H D B Lb Gal Lb In In In In 5# ACME/OPD - VERTICAL - WHITE - BOXED 5.0 1.2 13.0 12.0 8.6 8.0 6.5 10# ACME/OPD - VERTICAL - WHITE 10.0 2.4 23.8 17.4 13.8 8.9 7.3 11# ACME/OPD - VERTICAL - WHITE - BOXED 11.0 2.6 26.1 12.4 8.4 12.2 7.9 Description kg Liter Kg mm mm mm mm 5# ACME/OPD - VERTICAL - WHITE - BOXED 2.3 4.5 5.9 305 219 203 165 10# ACME/OPD - VERTICAL - WHITE 4.5 8.9 10.8 442 349 225 184	Capacities Capacity OL H D B Weight 5# ACME/OPD - VERTICAL - WHITE - BOXED 5.0 1.2 13.0 12.0 8.6 8.0 6.5 10 10# ACME/OPD - VERTICAL - WHITE 10.0 2.4 23.8 17.4 13.8 8.9 7.3 15 11# ACME/OPD - VERTICAL - WHITE - BOXED 11.0 2.6 26.1 12.4 8.4 12.2 7.9 14 Description kg Liter Kg mm mm mm mm Kg 5# ACME/OPD - VERTICAL - WHITE - BOXED 2.3 4.5 5.9 305 219 203 165 4.5 10# ACME/OPD - VERTICAL - WHITE 4.5 8.9 10.8 442 349 225 184 6.8

20# GAS GRILL & RV CYLINDERS

20# VERTICAL/10504





20# SUREFLAME 10577/10504TC.100





SureFlame Gauge catalog# A79610,

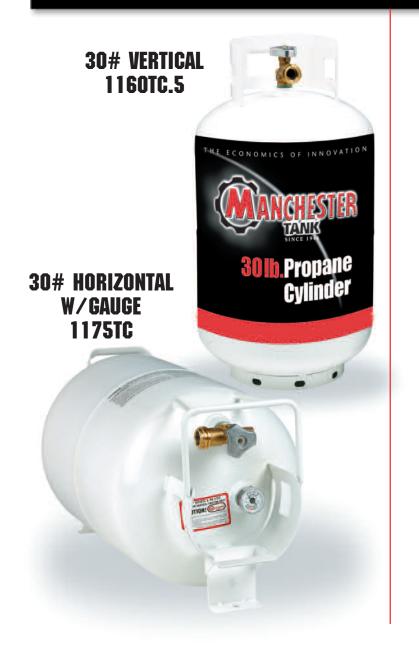
12 pack minimum.



W/GAUGE/10487TC

	Product Data	Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	ln	In	ln	In	Lb	
10504	20# ACME/OPD - VERTICAL - GRAY	20.0	4.6	47.6	18	13.9	12.2	8.0	18	60
10577	20# SUREFLAME ACME/OPD	20.0	4.6	47.6	18	13.9	12.2	8.0	18	60
(10504TC.100)	EASY TO READ GAUGE - VERTICAL - GRAY									
10487TC	20# ACME/OPD HORIZ. W/GAUGE - WHITE	20.0	4.6	47.6	17.4	13.9	12.2	7.9	21	60
Catalog No.	Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
10504	20# ACME/OPD - VERTICAL - GRAY	9.1	17.4	22	457	353	309	203	8.2	60
10577	20# SUREFLAME ACME/OPD	9.1	17.4	22	457	353	309	203	8.2	60
(10504TC.100)	EASY TO READ GAUGE - VERTICAL - GRAY									
10487TC	20# ACME/OPD HORIZ. W/GAUGE - WHITE	9.1	17.4	22	442	353	309	201	11.8	60

30# & 40# CYLINDERS





40# VERTICAL/1220.13

	Product Data	Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	In	In	ln	In	Lb	
1160TC.5	30# ACME/OPD VERTICAL - WHITE	30.0	6.8	71.4	23.4	19.6	12.2	7.9	25	48
1166TC.2	30# ACME/OPD VERTICAL W/GAUGE - WHITE	30.0	6.8	71.4	23.4	19.6	12.2	7.9	26	48
1175TC	30# ACME/OPD HORIZ. W/GAUGE - WHITE	30.0	6.8	71.4	23.4	19.6	12.2	7.9	31	48
1220.13	40# ACME/OPD VERTICAL - WHITE	40.0	9.2	95.2	29.4	25.6	12.2	7.9	32	36
1222TC.2	40# ACME/OPD VERTICAL W/GAUGE - WHITE	40.0	9.2	95.2	29.4	25.6	12.2	7.9	32	36
Catalog No.	Description	kg	liter	Kg	mm	mm	mm	mm	Kg	
1160TC.5	30# ACME/OPD VERTICAL - WHITE	13.6	25.7	32.4	594	497	309	201	11.3	48
1166TC.2	30# ACME/OPD VERTICAL W/GAUGE - WHITE	13.6	25.7	32.4	594	497	309	201	11.8	48
1175TC	30# ACME/OPD HORIZ. W/GAUGE - WHITE	13.6	25.7	32.4	594	497	309	201	14.1	48
1220.13	40# ACME/OPD VERTICAL - WHITE	18.1	34.8	43.2	747	649	309	201	14.1	36
1222TC.2	40# ACME/OPD VERTICAL W/GAUGE - WHITE	18.1	34.8	43.2	747	649	309	201	14.5	36

50#, 60# & 100# DOT CYLINDERS



Screw Cap Type



50# VERTICAL/14990TC



Collar Type



Footring Rust resistant mastic coating.







	Product Data	Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	In	In	ln	In	Lb	
14990TC	50# POL VALVE VERTICAL - GRAY	50.0	11.4	119.0	27.4	21.8	15.1	14.0	42	27
1426TC	60# POL VALVE VERTICAL - GRAY	60.0	13.7	143.0	43.1	37.4	12.2	12.2	46	24
1428	100# POL VALVE VERTICAL - GRAY	100.0	22.9	238.0	46.6	41.0	15.1	14.0	70	18
1430	100# POL VALVE VERTICAL - GRAY - WITH SCREW CAP	100.0	22.9	238.0	46.6	41.0	15.1	14.0	72	18
1436	100# MULTIVALVE VERTICAL - GRAY	100.0	22.9	238.0	46.6	41.0	15.1	14.0	71	18
1439	100# POL VALVE VERTICAL - GRAY - COLLAR W/ LIQUID VALVE	100.0	22.9	238.0	46.6	41.0	15.1	14.0	71	18
Catalog No.	Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
14990TC	50# POL VALVE VERTICAL - GRAY	22.7	43.1	54.0	696	553	383	356	19.1	27
1426TC	60# POL VALVE VERTICAL - GRAY	27.2	51.9	64.9	1095	949	309	309	20.9	24
1428	100# POL VALVE VERTICAL - GRAY	45.4	86.7	108.0	1184	1041	383	356	31.8	18
1430	100# POL VALVE VERTICAL - GRAY - WITH SCREW CAP	45.4	86.7	108.0	1184	1041	383	356	32.7	18
1436	100# MULTIVALVE VERTICAL - GRAY	45.4	86.7	108.0	1184	1041	383	356	32.2	18
1439	100# POL VALVE VERTICAL - GRAY - COLLAR W/ LIQUID VALVE	45.4	86.7	108.0	1184	1041	383	356	32.2	18

100# MINI ASME, 200# & 420# PORTABLES

DOT VS. ASME COMPARISON

- The DOT 200#, 420# and ASME 100#, 200# & 420# cylinders can be transported with 80% of total container volume.
- The weight of an ASME 420# is 13 lbs. more than a DOT 420#. This thicker steel provides the customer greater longevity of the 420# assets.
- ASME code does not mandate a retest period. DOT retest periods are 12 years after manufacturing, then each 5 year period thereafter.
- State-of-the-art powder coating system cylinder finish, called "Armor Clad II -THE NEXT GENERATION," which improves the durability of the tank by 150%!
- Vacuum Pre-purged tank saves in the cost to prepare a tank for customer use.
- HDPE (High Density Polyethylene) Lids. Extremely durable rust-proof and dent-proof. So reliable, they come with a 10 year guarantee!



100#/ASME MINI 2

200# DOT/57 GAL. ASME

420# DOT/120 GAL. ASME

Lifting Lugs standard on 200# & 420#

	Product Data		pane icities	Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	DOT	Lb	Gal	Lb	In	In	In	In	Lb	
14205TC.11HL	200# DOT 4BW240 Vertical - Multi - Valve w/ Gauge	200	45.6	476	41.9	34.1	24	20.0	152	16
1499TC.11HL	420# DOT 4BW240 Vertical - Quickifit Valve	420	95.9	1000	53.8	45.6	30	23.1	278	9
		kg	Liter	Kg	mm	mm	mm	mm	Kg	
14205TC.11HL	200# DOT 4BW240 Vertical - Multi - Valve w/ Gauge	90.7	172.9	256.7	1064	865	610	508	66.7	16
1499TC.11HL	420# DOT 4BW240 Vertical - Quadrifitt Valve	190.5	363.0	453.6	1366	1159	762	587	126.1	9
	ASME	Lb	Gal	Lb	In	In	In	In	Lb	
68143HL	28.6 (100#) ASME MINI Vertical - 250 PSI 2 hole w/Gauge	100	22.9	238	37.1	29.8	18	15.5	85	20
6765.11HL	57 gal. (200#) ASME Vertical - 250 PSI Multi Valve w/ Gauge	200	45.6	476	41.9	34.1	24	20.0	188	16
6762.11HL	120 gal. (420#) ASME Vertical - 250 PSI Quadrifitt Valve	420	95.9	1000	53.8	45.6	30	23.1	291	9
		Kg	Liter	Kg	mm	mm	mm	mm	Kg	
68143HL	28.6 (100#) ASME MINI Vertical - 250 PSI 2 hole w/Gauge	45.4	86.6	108.3	942	756	457	394	38.6	20
6765.11HL	57 gal. (200#) ASME Vertical - 250 PSI Multi Valve w/ Gauge	90.7	172.9	256.7	1064	865	610	508	85.3	16
6762.11HL	120 gal. (420#) ASME Vertical - 250 PSI Quadrifitt Valve	190.5	363.0	453.6	1366	1159	762	587	132.0	9

STEEL FORKLIFT CYLINDERS

• Quick Coupler installed on all Manchester forklift cylinders.

• Cylinders can be stamped with your company name at no extra charge for skid quantity orders.

• Manchester forklift cylinders have Lifetime Warranty on dip tubes.

 Permanently positioned relief valve with a clear path to the outside of the cylinder. No adapters, which can be lost or misdirected, are needed.

• Foot ring designed to withstand high impact.

• Stackable for increased capacity on your trucks.



20#/5560TC

33.5#/5580TC

43.5#/5595TC

		Product Data	Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.		Description	Lb	Gal	Lb	ln	In	ln	In	Lb	
5550	20# LIQUID	Fill/service through the liquid opening Has plugged vapor opening	20	4.6	47.6	19	13.6	12.2	10.3	27	48
5560TC	20# LIQUID	Fill/service through the vapor opening	20	4.6	47.6	19	13.6	12.2	10.3	27	48
5570TC	33.5# LIQUID	Fill/service through the liquid opening Has plugged vapor opening	33.5	7.7	80	27.3	21.8	12.2	10.3	36	36
5580TC	33.5# LIQUID	Fills through the vapor opening	33.5	7.7	80	27.3	21.8	12.2	10.3	36	36
5590TC	43.5# LIQUID	Fill/service through the liquid opening Has plugged vapor opening	43.5	9.9	104	33.3	27.8	12.2	10.3	44	24
5595TC	43.5# LIQUID	Fills through the vapor opening	43.5	9.9	104	33.3	27.8	12.2	10.3	44	24
5305	14.25# LIQUID	Fills through the vapor opening	14.25	3.2	33.5	20.8	16.8	9	8	22	12
5306	14.25# VAPOR	Fills through the liquid opening	14.25	3.2	33.5	20.8	16.8	9	8	22	12
Catalog No.		Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
5550	20# LIQUID	Fill/service through the liquid opening Has plugged vapor opening	9.1	17.4	22	483	345	310	260	12.2	48
5560TC	20# LIQUID	Fill/service through the vapor opening	9.1	17.4	22	483	345	310	260	12.2	48
5570TC	33.5# LIQUID	Fill/service through the liquid opening Has plugged vapor opening	15.2	29.1	36.3	692	554	310	260	16.3	36
5580TC	33.5# LIQUID	Fills through the vapor opening	15.2	29.1	36.3	692	554	310	260	16.3	36
5590TC	43.5# LIQUID	Fill/service through the liquid opening Has plugged vapor opening	19.7	37.5	47.2	845	706	310	260	20	24
5595TC	43.5# LIQUID	Fills through the vapor opening	19.7	37.5	47.2	845	706	310	260	20	24
5305	14.25# LIQUID	Fills through the vapor opening	6.5	12.1	15.2	527	425	229	203	10	12
5306	14.25# VAPOR	Fills through the liquid opening	6.5	12.1	15.2	527	425	229	203	10	12

ALUMINUM FORKLIFT CYLINDERS

- Quick Coupler installed on all Manchester forklift cylinders.
- Cylinders are inspected and vacuum pre-purged.
- Cylinders can be stamped with your company name at no extra charge for skid quantity orders.
- Manchester forklift cylinders have Lifetime Warranty on dip tubes.
- Permanently positioned relief valve with a clear path to the outside of the cylinder. No adapters, which can be lost or misdirected, are needed.
- Foot ring designed to withstand high impact.
- Stackable for increased capacity on your trucks.
- Aluminum cylinders are shot blasted resulting in a textured finish. This manufacturing process is environmentally friendly, creating a "Green" working environment for our employees.







33.5#/9315

43.5#/9161

Contact Cu	stomer Servic
for cutawa	ay availability.

	Product Data		Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description		Lb	Gal	Lb	In	In	In	In	Lb	
9305	20# LIQUID W/GAUGE Fills through the va	oor opening	20	4.6	47.6	20.4	14.9	12.3	9.5	17	48
9290	33.5# LIQUID, LESS GAUGE Fill/service through	the liquid opening	33.5	7.4	80	28.3	22.4	12.3	9.5	24	36
9310	33.5# LIQUID, W/GAUGE Fill/service through Has plugged vapor	the liquid opening opening	33.5	7.4	80	28.3	22.4	12.3	9.5	24	36
9315	33.5# LIQUID W/GAUGE Fills through the va	oor opening	33.5	7.4	80	28.3	22.4	12.3	9.5	24	36
9317	33.5# LIQUID, LESS GAUGE Fills through the va	oor opening	33.5	7.4	80	28.3	22.4	12.3	9.5	24	36
9161	43.5# LIQUID W/GAUGE Fills through the va	por opening	43.5	9.9	104	33.9	28.8	12.3	9.5	25	24
9162	43.5# LIQUID, LESS GAUGE Fill/service through	the liquid opening	43.5	9.9	104	33.9	28.8	12.3	9.5	25	24
9163	43.5# LIQUID, LESS GAUGE Fills through the va	por opening	43.5	9.9	104	33.9	28.8	12.3	9.5	25	24
9164	43.5# LIQUID, W/GAUGE Fill/service through Has plugged vapor	the liquid opening opening	43.5	9.9	104	33.9	28.8	12.3	9.5	25	24
Catalog No.	Description		kg	Liter	Kg	mm	mm	mm	mm	Kg	
9305	20# LIQUID W/GAUGE Fills through the va	oor opening	9	17	21.6	518	379	312	241	7.7	48
9290	33.5# LIQUID, LESS GAUGE Fill/service through	the liquid opening	15.2	28	36.3	717.6	569	312	241	10.9	36
9310	33.5# LIQUID, W/GAUGE Fill/service through Has plugged vapor	the liquid opening opening	15.2	28	36.3	717.6	569	312	241	10.9	36
9315	33.5# LIQUID W/GAUGE Fills through the va	por opening	15.2	28	36.3	717.6	569	312	241	10.9	36
9317	33.5# LIQUID, LESS GAUGE Fills through the va	oor opening	15.2	28	36.3	717.6	569	312	241	10.9	36
9161	43.5# LIQUID W/GAUGE Fills through the va	oor opening	19.7	37.5	47.2	862.1	732	312	241	11.3	24
9162	43.5# LIQUID, LESS GAUGE Fill/service through	the liquid opening	19.7	37.5	47.2	862.1	732	312	241	11.3	24
9163	43.5# LIQUID, LESS GAUGE Fills through the va	por opening	19.7	37.5	47.2	862.1	732	312	241	11.3	24
9164	43.5# LIQUID, W/GAUGE Fill/service through Has plugged vapor	the liquid opening opening	19.7	37.5	47.2	862.1	732	312	241	11.3	24

STEEL & ALUMINUM VERTICAL BUFFER CYLINDERS

20# STEEL/5456



20# ALUMINUM/9285



	Product Data	Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	In	In	In	In	Lb	
5455	20# STEEL VAPOR W/QUICK COUPLER - LESS FILL	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
5456	20# STEEL VAPOR SVC WITH FILL & GAUGE	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
5461TC	20# STEEL VAPOR SVC OPD/LESS FILL - GAUGE	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
9285	20# ALUMINUM LESS FILL WITH GAUGE	20.0	4.6	47.6	19	14.9	12.3	9.5	17	48
9287	20# ALUMINUM with fill valve	20.0	4.6	47.6	19	14.9	12.3	9.5	17	48
9257TC	20# ALUMINUM LESS FILL WITH OPD & SIGHT GAUGE	20.0	4.6	47.6	19	14.9	12.3	9.5	17	48
Catalog No.	Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
5455	20# STEEL VAPOR W/QUICK COUPLER - LESS FILL	9.1	17.4	21.6	483	345	310	260	12.2	48
5456	20# STEEL VAPOR SVC WITH FILL & GAUGE	9.1	17.4	21.6	483	345	310	260	12.2	48
5461TC	20# STEEL VAPOR SVC OPD/LESS FILL - GAUGE	9.1	17.4	21.6	483	345	310	260	12.2	48
9285	20# ALUMINUM LESS FILL WITH GAUGE	9.1	17.4	21.6	483	379	312	241	7.7	48
9287	20# ALUMINUM WITH FILL VALVE	9.1	17.4	21.6	483	379	312	241	7.7	48
9257TC	20# ALUMINUM LESS FILL WITH OPD & SIGHT GAUGE	9.1	17.4	21.6	483	379	312	241	7.7	48

PERMANENT MOUNTED ASME FORKLIFT TANKS

5090



Product Data			Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Description	Lb	Gal	Lb	In	In	In	In	Lb	
10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS.	25.4	5.8	60.8	24.0	15.3	10.0	N/A	41	15
12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS.	36.1	8.2	85.8	24.0	17.3	12.0	N/A	45	12
Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
	11.5	22.0	27.6	610	387	254	N/A	18.6	15
12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS.	16.4	31.0	38.9	610	440	305	N/A	20.4	12
	Description 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS.	Description 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. Description 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 11.5	Description 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. Description 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. Reg Liter 11.5 22.0	Capacities Capacity Description Lb Gal Lb 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 25.4 5.8 60.8 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 36.1 8.2 85.8 Description kg Liter Kg 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 11.5 22.0 27.6	Capacities Capacity OL Description Lb Gal Lb In 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 25.4 5.8 60.8 24.0 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 36.1 8.2 85.8 24.0 Description kg Liter Kg mm 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 11.5 22.0 27.6 610	Description Lb Gal Lb In In 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 25.4 5.8 60.8 24.0 15.3 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 36.1 8.2 85.8 24.0 17.3 Description kg Liter Kg mm mm 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 11.5 22.0 27.6 610 387	Capacities Capacity OL H D Description Lb Gal Lb In In <t< td=""><td>Capacities Capacity OL H D B Description Lb Gal Lb In <td< td=""><td>Capacities Capacity OL H D B Weight 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 25.4 5.8 60.8 24.0 15.3 10.0 N/A 41 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 36.1 8.2 85.8 24.0 17.3 12.0 N/A 45 Description kg Liter Kg mm mm mm mm Kg 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 11.5 22.0 27.6 610 387 254 N/A 18.6</td></td<></td></t<>	Capacities Capacity OL H D B Description Lb Gal Lb In In <td< td=""><td>Capacities Capacity OL H D B Weight 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 25.4 5.8 60.8 24.0 15.3 10.0 N/A 41 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 36.1 8.2 85.8 24.0 17.3 12.0 N/A 45 Description kg Liter Kg mm mm mm mm Kg 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 11.5 22.0 27.6 610 387 254 N/A 18.6</td></td<>	Capacities Capacity OL H D B Weight 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 25.4 5.8 60.8 24.0 15.3 10.0 N/A 41 12 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 36.1 8.2 85.8 24.0 17.3 12.0 N/A 45 Description kg Liter Kg mm mm mm mm Kg 10 X 24 ASME 312 PSI W/SIGHT GAUGE & BRKTS. 11.5 22.0 27.6 610 387 254 N/A 18.6

10#, 20# & 33.5# ALUMINUM MARINE CYLINDERS





20# HORIZONTAL/9061TC.1



10# HORIZONTAL/9059TC.1

	Product Data	Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	In	In	In	In	Lb	
9059TC.1	ACME/OPD HORIZONTAL - MARINE - BOXED	10	2.3	23.6	16.4	11.13	10.38	7.8	9.2	20
9058TC.2	ACME/OPD VERTICAL	10	2.3	23.6	16.4	11.13	10.38	7.8	9.4	20
9061TC.1	ACME/OPD HORIZONTAL - MARINE - BOXED	20	4.6	47.6	20.7	14.9	12.28	7.8	18.0	16
9060TC.1	ACME/OPD VERTICAL	20	4.6	47.6	20.7	14.9	12.28	7.8	13.0	16
9151TC	ACME/OPD VERTICAL - MARINE	33.5	7.4	80.0	28.2	22.38	12.28	7.8	18.0	12
Catalog No.	Description	Kg	Liter	Kg	mm	mm	mm	mm	Kg	
9059TC.1	ACME/OPD HORIZONTAL - MARINE - BOXED	4.54	8.9	10.70	416	283	264	197	4.2	20
9058TC.2	ACME/OPD VERTICAL	4.54	8.9	10.70	416	283	264	197	4.3	20
9061TC.1	ACME/OPD HORIZONTAL - MARINE - BOXED	9.07	17	21.59	526	379	312	197	8.2	16
9060TC.1	ACME/OPD VERTICAL	9.07	17	21.59	526	379	312	197	5.9	16
9151TC	ACME/OPD VERTICAL - MARINE	15.2	28	36.29	716	568	312	197	8.2	12

MANCHESTER PROPANE HAND BURNERS



POWER JET COMBO/8061



HANDIBOY COMBO/8062

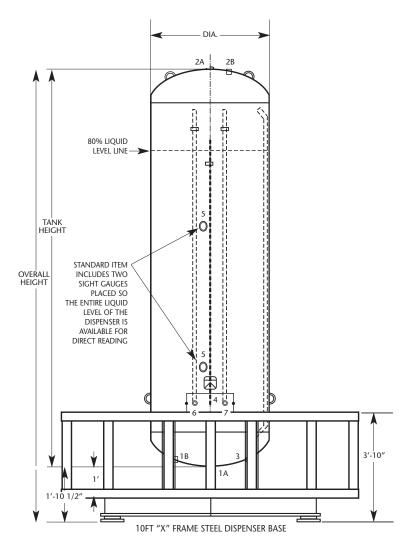


HANDIBOY/8053

Catalog No. 8062	Description HANDIBOY BURNER BUBBLE PACK KIT INCLUDES:	BTU	Kilojoule kJ	Shipping Weight	Pkg.
000_	Handiboy Burner, Excess Flow POL & 10' Hose Assembly. UL Listed.	500,000	527,500	4.5 Lb.	8
8053	HANDIBOY BURNER	500,000	527,520	2 Lb.	1
8017	3' POWER JET HAND BURNER	750,000	791,250	2.5 Lb.	4
8061	BUBBLE PACK KIT INCLUDES:				
	3' Power Jet Handburner, Regulator Gauge & 10' Hose.	750,000	791,250	5.8 Lb.	6
8012	SUPER 8' POWER JET HAND BURNER	2,000,000	2,110,000	4 Lb.	4

VERTICAL DISPENSER W/BASE & CRASH POSTS





Contact Customer Service for available paint options.

	Product Data	Water Capacity	Propane Capacity	Diameter	Overall Height	Working Pressure	Tare Weight
Catalog No.	Description	Gal	Lb	ln	In		Lb
29014	660 GALLON ASME VERTICAL DISPENSER	660	528	42"	119"	250	1999
22014	1150 GALLON ASME VERTICAL DISPENSER	1150	920	48"	159"	250	3000
29011	1250 GALLON ASME VERTICAL DISPENSER	1250	1000	48"	169"	250	3290
29016	1600 GALLON ASME VERTICAL DISPENSER	1600	1280	48"	216"	250	4150
23354*	2000 GALLON ASME VERTICAL DISPENSER	1999	1600	54"	220"	250	6020
29005	660, 1150, 1250 & 1600 TANK BASES	N/A	N/A	N/A	10.5"	N/A	413
22774	660, 1150, 1250 & 1600 CRASH POST & RAILING	N/A	N/A	120"	35.5"	N/A	590

^{*}Base, Crash Post & Railing is not available on this tank. Pumps and meters can be purchased at your local propane distributor.

POINT OF SALE DISPLAY

- Eye catching display to help increase your sales.
- Displays a variety of cylinders, 5 lb. thru 40 lb..
- All displays shipped with 2 of each cylinder. One for show, and one to go!
- Includes our 20 lb. SureFlame cylinder, featuring the industry's most accurate liquid level gauge.
- This great, space saving design gives greater visibility to multiple size cylinders.



Catalog No. B13425

THE ECONOMICS OF INNOVATION



LOW PRESSURE & INDUSTRIAL GYLINDERS



MAJOR FEATURES OF OUR CYLINDERS

- A full range of cylinders from
 5 pounds to 420 pounds, forklift and buffer cylinders.
- Manufactured by Manchester in the most up-to-date, state-of-the-art cylinder facilities in the U.S.A.
- All cylinders conform with strict compliance to DOT specifications 4BA, 4BW and 4E. In addition, most cylinders conform and are approved under Transport Canada specifications 4BAM, 4BWM and 4EM.
- OL H B

- All Manchester cylinders go through multiple testing procedures.
- All Manchester cylinders are steel shot-blasted prior to painting.
- All steel cylinders have Powder Coat Paint for maximum rust protection.
- HANDLE-EZ collar design. The only collar with a built-in, formed handle with no sharp edges.
- All include consumer warning decals that are easy to read for you and your customers' protection.

- Capacity gauges are available in 20#, 30#, 33#, 40#, 43#, 200#, and 420# cylinders.
- Cylinders are shrink-wrapped on pallets or boxed individually for protection and easy storage.

DIMENSIONS

<u>H = Height</u>

OL = Overall Length

D = Overall Diameter

B = Base Diameter

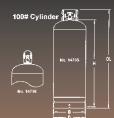
INDUSTRIAL WELDING CYLINDERS



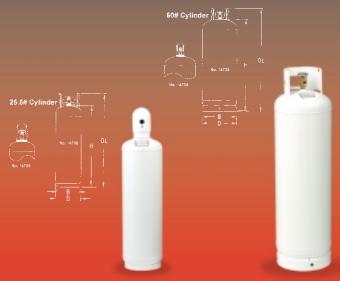
For low pressure welding gases such as: Propylene, HPG, FG2, Apache, Mapp, Flamex, Chem-o-line and Propane

Each Cylinder Features:

- DOT4BW260
- Powder coat finish
- Valves with 405 psi relief
- Cap or collar top
- Dipped (60# & 100# only)











14739/25.5# SCREW CAP

14733/60# COLLAR

14735/100# COLLAR

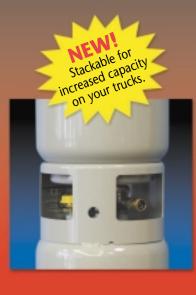
140097/420# PALLET BASE

	Product Data		oane cities	Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	ln	In	ln	In	Lb	,
Screw Cap	·									
14739	25.5# Screw Cap	25.5	5.8	60.7	35.3	29.0	9	8	27	24
14734	60# Screw Cap	60	13.8	143	44.8	37.4	12.2	12.2	58	24
14736	100# Screw Cap	100	22.8	238	50.7	43.7	14.5	14	72	18
Collar										
14738TC	25.5# Collar	25.5	5.8	60.7	33.6	29.0	9	8	27	20
14733	60# Collar	60	13.8	143	43.1	37.4	12.2	12.2	58	24
14735	100# Collar	100	22.8	238	49	43.7	14.5	14	75	18
140097	420# Collar	420	95.9	1000	57.5	45.6	30	4 way pallet base	379	9
								pallet base		
Catalog No.	Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
Screw Cap										
14739	25.5# Screw Cap	11.6	22.0	27.5	895	737	229	203	12.2	20
14734	60# Screw Cap	27.2	52.2	64.9	1137	949	309	309	26.3	24
14736	100# Screw Cap	45.4	86.5	108.0	1288	1110	368	356	32.7	18
Collar										
14738TC	25.5# Collar	11.6	22.0	27.5	852	737	229	203	12.2	24
14733	60# Collar	27.2	52.2	64.9	1095	950	309	309	26.3	24
14735	100# Collar	45.4	86.5	108.0	1245	1110	368	356	34	18
140097	420# Collar	190.5	363.0	453.6	1461	1159	762	4 way pallet base	171.9	9

STEEL FORKLIFT CYLINDERS

DOT4BA240 - 4BA260 - 4BAM16

- Quick Coupler installed on all Manchester forklift cylinders.
- Cylinders can be stamped with your company name at no extra charge for quantity orders.
- Manchester forklift cylinders have *Lifetime Warranty* on dip tubes.
- Permanently positioned relief valve with a clear path to the outside of the cylinder. No adapters, which can be lost or misdirected, are needed.
- Foot ring designed to withstand high impact.









20#/5560TC

33.5#/5580TC

43.5#/5595TC

	Product Data	Prop Capa		Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	In	In	In	In	Lb	
5550	20# LESS FILL VALVE	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
5560TC	20# WITH FILL VALVE	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
5570TC	33.5# LESS FILL VALVE	33.5	7.7	80.0	27.3	21.8	12.2	10.3	36	36
5580TC	33.5# WITH FILL VALVE	33.5	7.7	80.0	27.3	21.8	12.2	10.3	36	36
5590TC	43.5# LESS FILL VALVE	43.5	9.9	104.0	33.3	27.8	12.2	10.3	44	24
5595TC	43.5# WITH FILL VALVE	43.5	9.9	104.0	33.3	27.8	12.2	10.3	44	24
5305	14.25# LIQUID, GAUGE ,W/FILL VALVE	14.25	3.2	33.5	20.8	16.8	9	8	22	12
5306	14.25# VAPOR, GAUGE, W/FILL VALVE	14.25	3.2	33.5	20.8	16.8	9	8	22	12
Catalog No.	Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
5550	20# LESS FILL VALVE	9.1	17.4	22	483	345	310	260	12.2	48
5560TC	20# WITH FILL VALVE	9.1	17.4	22	483	345	310	260	12.2	48
5570TC	33.5# LESS FILL VALVE	15.2	29.1	36.3	692	554	310	260	16.3	36
5580TC	33.5# WITH FILL VALVE	15.2	29.1	36.3	692	554	310	260	16.3	36
5590TC	43.5# LESS FILL VALVE	19.7	37.5	47.2	845	706	310	260	20	24
5595TC	43.5# WITH FILL VALVE	19.7	37.5	47.2	845	706	310	260	20	24
5305	14.25# LIQUID, GAUGE ,W/FILL VALVE	6.5	12.1	15.2	527	425	229	203	10	12
5306	14.25# VAPOR, GAUGE, W/FILL VALVE	6.5	12.1	15.2	527	425	229	203	10	12

ALUMINUM FORKLIFT CYLINDERS

DOT4E240 - 4EM16

- Quick Coupler installed on all Manchester forklift cylinders.
- Cylinders are inspected and vacuum pre-purged.
- Cylinders can be stamped with your company name at no extra charge for quantity orders.
- Manchester forklift cylinders have *Lifetime Warranty* on dip tubes.
- Permanently positioned relief valve with a clear path to the outside of the cylinder. No adapters, which can be lost or misdirected, are needed.
- Foot ring designed to withstand high impact.
- Stackable for increased capacity on your trucks.
- Aluminum cylinders are shot blasted resulting in a textured finish. This manufacturing process is environmentally friendly,

creating a "Green" working environment for our employees.





33.5#/9315

43.5#/9161

	Product Data		pane cities	Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	In	In	ln	In	Lb	
9305	20# LIQUID W/GAUGE & FILL VALVE	20	4.6	47.6	20.4	14.9	12.3	9.5	17	48
9290	33.5# LESS FILL, LESS GAUGE	33.5	7.4	80.0	28.3	22.4	12.3	9.5	24	36
9310	33.5# LESS FILL WITH GAUGE	33.5	7.4	80.0	28.3	22.4	12.3	9.5	24	36
9315	33.5# WITH FILL VALVE & GAUGE	33.5	7.4	80.0	28.3	22.4	12.3	9.5	24	36
9317	33.5# NO GAUGE OPENING, WITH FILL	33.5	7.4	80.0	28.3	22.4	12.3	9.5	24	36
9161	43.5# 5 HOLE W/SIGHT GAUGE & FILL VALVE	43.5	9.9	104.0	33.9	28.8	12.3	9.5	25	24
9162	43.5# 3 HOLE NO VAPOR AND SIGHT GAUGE	43.5	9.9	104.0	33.9	28.8	12.3	9.5	25	24
9163	43.5# 4 HOLE LESS SIGHT GAUGE	43.5	9.9	104.0	33.9	28.8	12.3	9.5	25	24
9164	43.5# 5 HOLE LESS FILL WITH SIGHT GAUGE	43.5	9.9	104.0	33.9	28.8	12.3	9.5	25	24
Catalog No.	Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
9305	20# LIQUID W/GAUGE & FILL VALVE	9	17	21.6	518	379	312	241	7.7	48
9290	33.5# LESS FILL, LESS GAUGE	15.2	28	36.3	717.6	569	312	241	10.9	36
9310	33.5# LESS FILL WITH GAUGE	15.2	28	36.3	717.6	569	312	241	10.9	36
9315	33.5# WITH FILL VALVE & GAUGE	15.2	28	36.3	717.6	569	312	241	10.9	36
9317	33.5# NO GAUGE OPENING, WITH FILL	15.2	28	36.3	717.6	569	312	241	10.9	36
9161	43.5# 5 HOLE W/SIGHT GAUGE & FILL VALVE	19.7	37.5	47.2	862.1	732	312	241	11.3	24
9162	43.5# 3 HOLE NO VAPOR AND SIGHT GAUGE	19.7	37.5	47.2	862.1	732	312	241	11.3	24
9163	43.5# 4 HOLE LESS SIGHT GAUGE	19.7	37.5	47.2	862.1	732	312	241	11.3	24
9164	43.5# 5 HOLE LESS FILL WITH SIGHT GAUGE	19.7	37.5	47.2	862.1	732	312	241	11.3	24

STEEL & ALUMINUM BUFFER CYLINDERS

DOT4BA240 - 4E240

20# STEEL 5456





20# ALUMINUM 9285

	Product Data	Pro _l Capa	oane cities	Water Capacity	Length OL	Height H	Diameter D	Diameter B	Tare Weight	Skid Quantity
Catalog No.	Description	Lb	Gal	Lb	ln	ln	ln	In	Lb	
5455	20# STEEL VAPOR W/QUICK COUPLER - LESS FILL	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
5456	20# STEEL VAPOR SVC WITH FILL & GAUGE	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
5461TC	20# STEEL VAPOR SVC OPD/LESS FILL - GAUGE	20.0	4.6	47.6	19	13.6	12.2	10.3	27	48
9285	20# ALUMINUM LESS FILL WITH GAUGE	20.0	4.6	47.6	19	14.9	12.3	9.5	17	48
9287TC	20# ALUMINUM with fill valve	20.0	4.6	47.6	19	14.9	12.3	9.5	17	48
9257TC	20# ALUMINUM LESS FILL WITH OPD & SIGHT GAUGE	20.0	4.6	47.6	19	14.9	12.3	9.5	17	48
Catalog No.	Description	kg	Liter	Kg	mm	mm	mm	mm	Kg	
5455	20# STEEL VAPOR W/QUICK COUPLER - LESS FILL	9.1	17.4	21.6	483	345	310	260	12.2	48
5456	20# STEEL VAPOR SVC WITH FILL & GAUGE	9.1	17.4	21.6	483	345	310	260	12.2	48
5461TC	20# STEEL VAPOR SVC OPD/LESS FILL - GAUGE	9.1	17.4	21.6	483	345	310	260	12.2	48
9285	20# ALUMINUM LESS FILL WITH GAUGE	9.1	17.4	21.6	483	379	312	241	7.7	48
9287TC	20# ALUMINUM with fill valve	9.1	17.4	21.6	483	379	312	241	7.7	48
9257TC	20# ALUMINUM LESS FILL WITH OPD & SIGHT GAUGE	9.1	17.4	21.6	483	379	312	241	7.7	48

PLUMBER'S POT

10511



Product Data		Propane Capacities (Length OL	Height H	Diameter D			Skid Quantity
Description VERTICAL LP CYLINDER DOT4BA240 PLUMBERS POT VALVE OPD - WHITE	Lb 20	Gal 4.6	Lb 47.6	In 19	In 13.6	In 12.2	In 10.3	Lb 23	48
	kg 9.1	Liter 17.4	Kg 21.6	mm 483	mm 345	mm 310	mm 260	Kg 10.4	48

MANCHESTER PROPANE HAND BURNERS





HANDIBOY COMBO/8062



POWER JET COMBO/8061

Catalog No. 8062	Descripton HANDIBOY BURNER BUBBLE PACK KIT INCLUDES:	BTU	Kilojoule kJ	Shipping Weight	Pkg.
	Handiboy Burner, Excess Flow POL & 10' Hose Assembly. UL Listed.	500,000	527,500	4.5 Lb.	8
8053	HANDIBOY BURNER	500,000	527,520	2 Lb.	1
8017	3' POWER JET HAND BURNER	750,000	791,250	2.5 Lb.	4
8061	BUBBLE PACK KIT INCLUDES:				
	3' Power Jet Handburner, Regulator Gauge & 10' Hose.	750,000	791,250	5.8 Lb.	6
8012	SUPER 8' POWER JET HAND BURNER	2,000,000	2,110,000	4 Lb.	4



Pressure Vessels & Air Receivers



Setting the Standard for Quality and Reliability

Pressure Vessel Codes & Registrations:

The items listed in this catalog have been designed and constructed in accordance with the ASME Section VIII Division I Code latest edition and are registered with the National Board of Boiler and Pressure Vessel Inspectors. Most of the items listed in this catalog are also approved for use in Canada (CRN).

Manchester Tank has the capability to also design and construct pressure vessels to many other codes, such as:

American Bureau of Shipping (ABS)
United States Coast Guard (USCG)
Department of Transportation (DOT)
Transport Canada (TC)
European Pressure Equipment Directive (PED)
Transportable European Pressure Equipment Directive (TPED)
Malaysia – Department of Occupational & Health (DOSH)
Singapore – Ministry of Manpower (MOM)
Australia Design Approval
Brazilian NR-13
UN-Portable
Intermediate Bulk Container (IBC)
And many other international codes

Manufacturing Capabilities:

Manchester Tank is capable of producing pressure vessels made from carbon steel, stainless steel and aluminum material with sizes ranging from 3" diameter at 3,000 PSI to 120" diameter at 200 PSI.

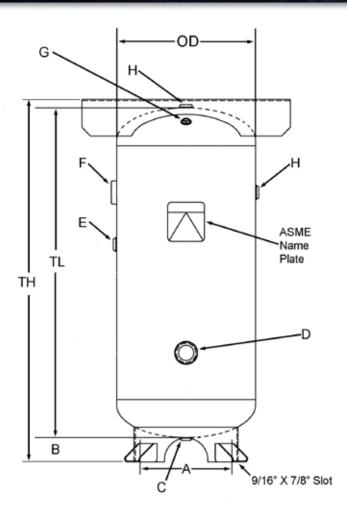
Engineering Capabilities:

Manchester Tank's engineering professionals are highly trained in AutoCAD & SolidWorks 3D CAD to support your organization's technical design requirements. With 15 design stations and a Professional Engineer on staff, Manchester Tank is committed to fulfill your organization's custom equipment needs in a timely manner.

Paint Specifications:

The exterior surface of the items listed in this catalog has been painted with one coat of standard shop primer to serve as a temporary rust preventative. A wide variety of custom interior and exterior coatings are available.

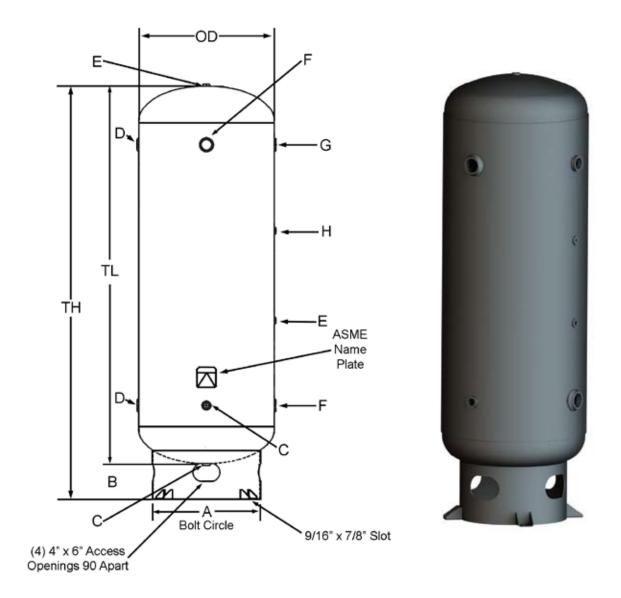
Vertical Air Receivers / 10-120 Gallons





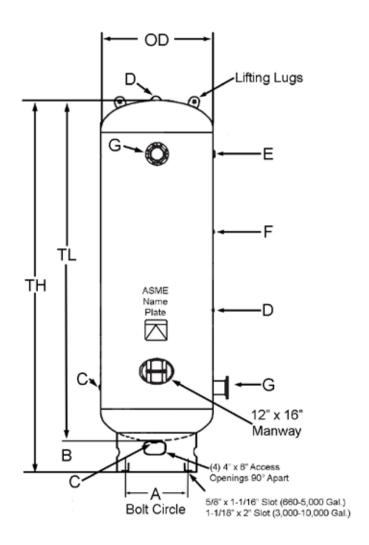
NO	М САР	Dout #	MAWD	Ton Dista	TW	D	IMENS	IONS IN	INCHE	S		N	PT OP	ENINGS	,	
Gal	Cu Ft	Part #	MAWP	Top Plate	I VV	OD	TL	TH	Α	В	С	D	Е	F	G	Н
10	1.34	302400	200	NONE	37	10	30	32.38	11.25	2.38	1/2	N/A	N/A	3/4	1/4	3/4
10	1.34	302401	300	NONE	41	10	30	32.38	11.25	2.38	1/2	N/A	N/A	3/4	1/4	3/4
15	2.01	302402	200	NONE	46	12	33	35.38	12.75	2.38	1/2	N/A	N/A	3/4	1/4	3/4
15	2.01	302403	300	NONE	60	12	33	35.38	12.75	2.38	1/2	N/A	N/A	3/4	1/4	3/4
20	2.67	302404	200	NONE	60	14	33	35.25	15.00	2.25	1/2	1 1/2	N/A	1 1/2	1/4	3/4
20	2.67	302405	300	NONE	97	14	33	35.25	15.00	2.25	1/2	1 1/2	N/A	1 1/2	1/4	3/4
30	4.01	302406	200	NONE	85	16	38	40.81	15.00	2.81	1/2	1 1/2	3/4	1 1/2	1/4	3/4
30	4.01	302407	300	NONE	117	16	38	40.81	15.00	2.81	1/2	1 1/2	3/4	1 1/2	1/4	3/4
30	4.01	302408	200	.18 x 10 x 24	107	16	38	41.81	15.00	2.81	1/2	1 1/2	3/4	1 1/2	1/4	3/4
30	4.01	302409	300	.18 x 10 x 24	139	16	38	41.81	15.00	2.81	1/2	1 1/2	3/4	1 1/2	1/4	3/4
60	8.02	302410	200	NONE	159	20	48	50.75	17.00	2.75	1/2	2	3/4	2	1/4	3/4
60	8.02	302411	300	NONE	219	20	48	50.75	17.00	2.75	1/2	2	3/4	2	1/4	3/4
60	8.02	302412	200	.18 x 13.5 x 30	192	20	48	52.06	17.00	2.75	1/2	2	3/4	2	1/4	3/4
60	8.02	302413	300	.18 x 13.5 x 30	253	20	48	52.06	17.00	2.75	1/2	2	3/4	2	1/4	3/4
80	10.70	302414	200	NONE	198	20	63	65.75	17.00	2.75	1/2	2	1 1/4	2	1/4	1 1/4
80	10.70	302415	300	NONE	268	20	63	65.75	17.00	2.75	1/2	2	1 1/4	2	1/4	1 1/4
80	10.70	302417	200	NONE	220	24	46	49.19	21.00	3.19	1/2	2	1 1/4	2	1/4	1 1/4
80	10.70	302418	300	NONE	282	24	46	49.19	21.00	3.19	1/2	2	1 1/4	2	1/4	1 1/4
80	10.70	302419	200	.18 x 13.5 x 30	257	24	46	51.25	21.00	3.19	1/2	2	1 1/4	2	1/4	1 1/4
80	10.70	302420	300	.18 x 13.5 x 30	319	24	46	51.25	21.00	3.19	1/2	2	1 1/4	2	1/4	1 1/4
120	16.04	302423	200	NONE	355	30	46	54.00	27.00	8.00	1/2	2	2	2	1/4	2
120	16.04	302424	200	.25 x 15 x 40	415	30	46	55.50	27.00	8.00	1/2	2	2	2	1/4	2
120	16.04	302425	300	.25 x 15 x 40	535	30	46	55.50	27.00	8.00	1/2	2	2	2	1/4	2

Vertical Air Receivers / 120-500 Gallons



NOI	М САР	Dovet #	MAWP	TW	DI	MENSI	ONS IN	INCHE	S			NPT O	PENIN	IGS	
Gal	Cu Ft	Part #	WAWP	I VV	OD	TL	TH	Α	В	C	D	E	F	G	Н
120	16.04	302421	200	329	24	67	75	21	8	1	2	1/2	2	1 1/2	1/4
120	16.04	302422	300	379	24	67	75	21	8	1	2	1/2	2	1 1/2	1/4
200	26.74	302426	200	421	30	72	80	27	8	1	2	1/2	2	1 1/2	1/4
200	26.74	302427	300	720	30	72	80	27	8	1	2	1/2	2	1 1/2	1/4
240	32.09	302428	200	497	30	84	92	27	8	1	2	1/2	2	1 1/2	1/4
240	32.09	302429	300	930	30	84	92	27	8	1	2	1/2	2	1 1/2	1/4
400	53.48	302432	165	660	36	93	101	33	8	1	2	1/2	3	1 1/2	1/4
400	53.48	302433	200	783	36	93	101	33	8	1	2	1/2	3	1 1/2	1/4
500	66.84	302436	165	950	36	116	124	33	8	1	2	1/2	3	1 1/2	1/4
500	66.84	302437	200	910	36	116	124	33	8	1	2	1/2	3	1 1/2	1/4

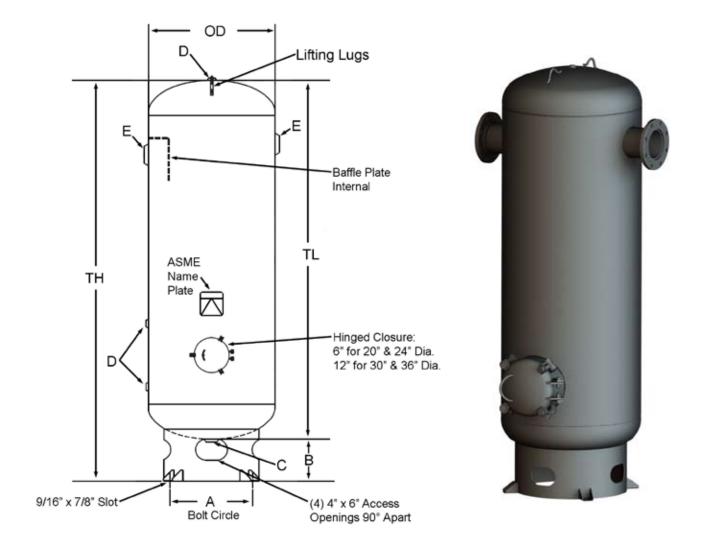
Vertical Air Receivers / 660-10,000 Gallons





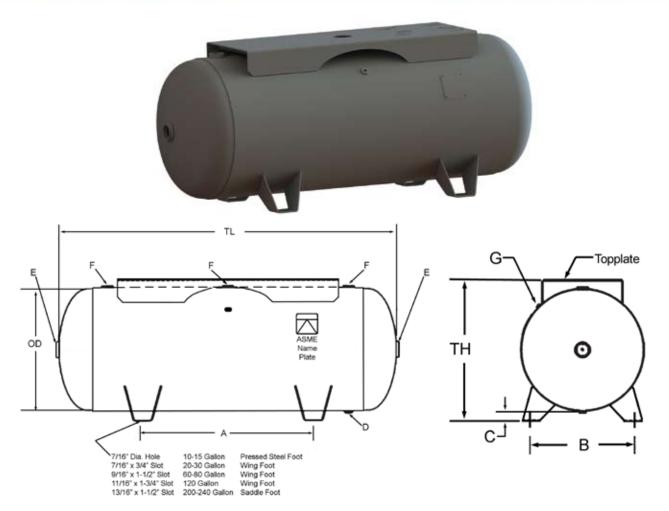
NO	М САР	Dowt #	MANA	T\A/	D	IMENSIC	ONS IN I	NCHES			NP	OPEN	IINGS	
Gal	Cu Ft	Part #	MAWP	TW	OD	TL	TH	Α	В	С	D	Е	F	G
660	88.24	302439	165	1365	42	117	125	36.50	8	1	1	3	1/4	3
660	88.24	302440	200	1570	42	117	125	36.50	8	1	1	3	1/4	3
1060	141.71	302443	165	1780	48	144	152	42.50	8	1	1	3	1/4	6"RFSO
1060	141.71	302444	200	2036	48	144	152	42.50	8	1	1	3	1/4	6"RFSO
1550	207.22	302446	165	2580	54	166	174	42.50	8	1 1/4	1	3	1/4	6"RFSO
1550	207.22	302447	200	3089	54	166	174	42.50	8	1 1/4	1	3	1/4	6"RFSO
2200	294.12	302449	165	3932	60	190	198	48.50	8	1 1/4	1	3	1/4	6"RFSO
2200	294.12	302450	200	4100	60	190	198	48.50	8	1 1/4	1	3	1/4	6"RFSO
2560	242.25	302452	165	4362	60	220	228	48.50	8	1 1/4	1	3	1/4	6"RFSO
2560	242.25	302453	200	4375	60	220	228	48.50	8	1 1/4	1	3	1/4	6"RFSO
3000	401.07	302454	137	5700	66	214	222	53.00	8	1 1/4	1	3	1/4	6"RFSO
3000	401.07	302455	165	5700	66	214	222	53.00	8	1 1/4	1	3	1/4	6"RFSO
3800	508.02	302457	165	6800	72	228	236	59.00	8	1 1/4	1	3	1/4	6"RFSO
5000	668.45	305653	165	8500	72	305	313	59.00	8	1 1/4	1	3	1/4	6"RFSO
5000	668.45	305995	200	11200	72	305	313	59.00	8	1 1/4	1	3	1/4	6"RFSO
5000	668.45	302459	165	10500	84	232	240	70.00	8	1 1/4	1	3	1/4	6"RFSO
5000	668.45	304718	200	10800	84	232	240	70.00	8	1 1/4	1	3	1/4	6"RFSO
8000	1069.52	305138	150	12300	84	355	363	70.00	8	1 1/4	1	3	1/4	6"RFSO
8000	1069.52	304807	137	14000	96	276	284	78.00	8	1 1/4	1	3	1/4	6"RFSO
10000	1336.90	303970	137	15700	108	275	283	87.00	8	1 1/4	1	3	1/4	6"RFSO

Vacuum Receivers / 60-400 Gallons



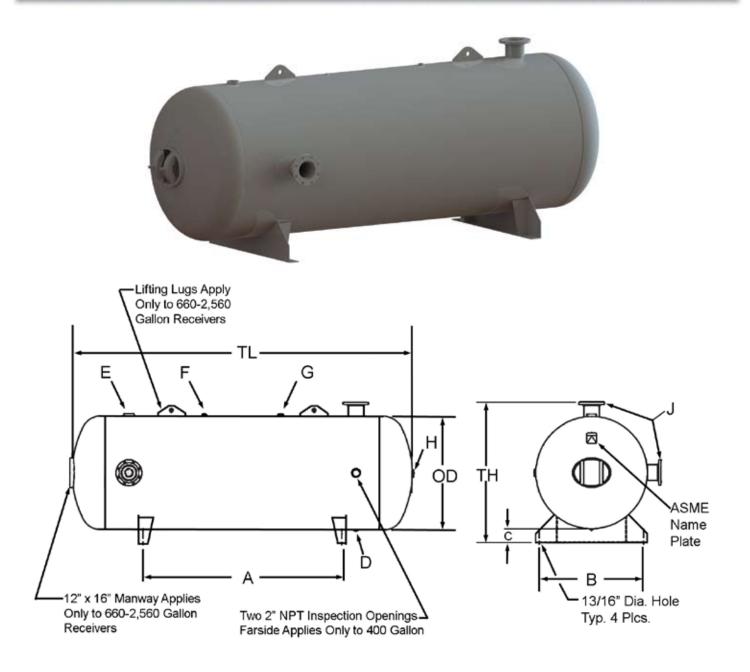
NOI	М САР	Part #	MAWP	Vacuum	TW	DI	MENSI	ONS IN	INCHE	S	NPT	OPEN	INGS
Gal	Cu Ft	Part#	IVIAVVP	Rating	I VV	OD	TL	TH	Α	В	C	D	E
60	8.02	300956	150	29.9" Hg.	205	20	48	56	17	8	2	1/2	3
80	10.70	300957	150	29.9" Hg.	220	20	63	71	17	8	2	1/2	3
120	16.04	300958	150	29.9" Hg.	385	24	67	75	21	8	2	1/2	3
240	32.09	300959	150	29.9" Hg.	750	30	84	92	27	8	2	1/2	6" RFSO
400	53.48	300960	150	29.9" Hg.	900	36	93	101	31	8	2	1/2	6" RFSO

Horizontal Air Receivers / 10-240 Gallons



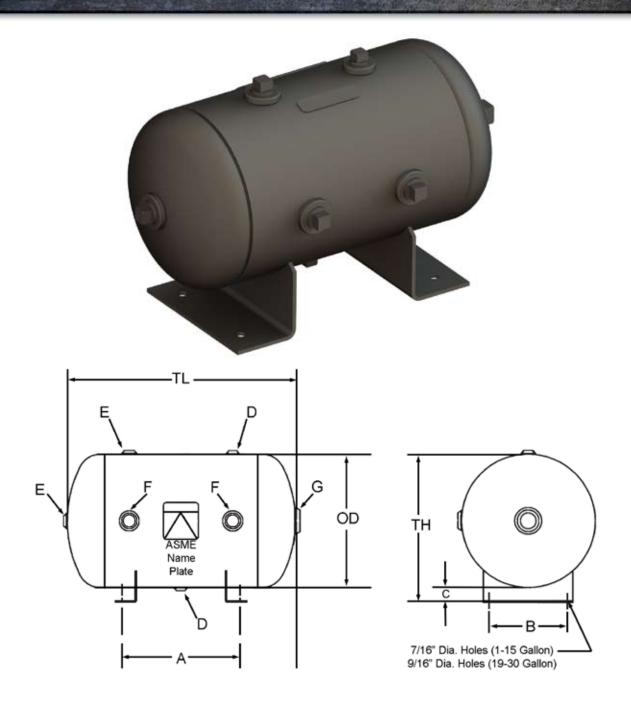
NOI	М САР	Dowt #	MANAD	Ton Diete	T14/		DIM	ENSION	S IN IN	NCHES			NPT OP	ENING	S
Gal	Cu Ft	Part #	MAWP	Top Plate	TW	OD	TL	TH	Α	В	C	D	Е	F	G
10	1.34	302460	200	NONE	32	10	30	11.56	18	9.25	1.56	1/4	3/4	1/2	N/A
10	1.34	302461	200	.13 x 9 x 16	43	10	30	13.06	18	9.25	1.56	1/4	3/4	1/2	N/A
10	1.34	302462	300	.13 x 9 x 16	46	10	30	13.06	18	9.25	1.56	1/4	3/4	1/2	N/A
15	2.01	302463	200	NONE	51	12	33	13.06	20	11.00	1.06	1/4	3/4	1/2	N/A
15	2.01	302464	200	.13 x 9 x 18	51	12	33	14.56	20	11.00	1.06	1/4	3/4	1/2	N/A
15	2.01	302465	300	.13 x 9 x 18	66	12	33	14.56	20	11.00	1.06	1/4	3/4	1/2	N/A
20	2.67	302466	200	NONE	66	14	33	16.00	16	11.69	2.00	1/2	1 1/2	1/2	1/4
20	2.67	302467	200	.13 x 9 x 20	79	14	33	16.00	16	11.69	2.00	1/2	1 1/2	1/2	1/4
20	2.67	302468	300	.13 x 9 x 20	95	14	33	16.00	16	11.69	2.00	1/2	1 1/2	1/2	1/4
30	4.01	302469	200	NONE	89	16	38	18.00	20	12.81	2.00	1/2	1 1/2	3/4	1/4
30	4.01	302470	200	.18 x 10 x 24	111	16	38	20.63	20	12.81	2.00	1/2	1 1/2	3/4	1/4
30	4.01	302471	300	.18 x 10 x 24	140	16	40	20.63	20	12.81	2.00	1/2	1 1/2	3/4	1/4
60	8.02	302473	200	NONE	170	20	48	22.31	24	16.50	2.31	1/2	2	3/4	1/4
60	8.02	302474	200	.18 x 13.5 x 30	204	20	48	24.44	24	16.50	2.31	1/2	2	3/4	1/4
60	8.02	302475	300	.18 x 13.5 x 30	225	20	48	24.44	24	16.50	2.31	1/2	2	3/4	1/4
80	10.70	302476	200	NONE	214	20	63	22.31	32	16.50	2.31	1/2	2	1	1/4
80	10.70	302477	200	.25 x 15 x 40	263	20	63	24.06	32	16.50	2.31	1/2	2	1	1/4
80	10.70	302478	300	.25 x 15 x 40	350	20	63	24.06	32	16.50	2.31	1/2	2	1	1/4
120	16.04	302479	200	NONE	311	24	67	26.25	34	20.63	2.25	3/4	2	1 1/2	1/4
120	16.04	302480	200	.25 x 16 x 44	382	24	67	27.94	34	20.63	2.25	3/4	2	1 1/2	1/4
200	26.74	302482	200	NONE	538	30	72	33.00	38	23.50	3.00	1	2	2	1/4
200	26.74	302483	200	.25 x 19 x 48	632	30	72	35.69	38	23.50	3.00	1	2	2	1/4
240	32.09	302484	200	NONE	618	30	84	33.00	44	23.50	3.00	1	2	2	1/4
240	32.09	302485	200	.25 x 19 x 48	716	30	84	35.69	44	23.50	3.00	1	2	2	1/4

Horizontal Air Receivers / 400-2,560 Gallons



NO	М САР	Part #	MAWP	TW		DIME	NSION	S IN IN	CHES			ľ	NPT OF	PENING	S	
Gal	Cu Ft	Part#	IVIAVVP	I VV	OD	TL	TH	Α	В	C	D	E	F	G	Н	J
400	53.48	302487	165	750	36	93	42	52	33	6	3/4	1 1/2	1/4	1/2	2	3
400	53.48	302488	200	925	36	93	42	52	33	6	3/4	1 1/2	1/4	1/2	2	3
660	88.24	302490	165	1375	42	117	48	70	39	6	3/4	3	1/4	1	2	3
660	88.24	302491	200	1375	42	117	48	70	39	6	3/4	3	1/4	1	2	3
1060	141.71	302493	165	2200	48	144	60	84	45	6	3/4	3	1/4	1	2	6" RFSO
1060	141.71	302494	200	2500	48	144	60	84	45	6	3/4	3	1/4	1	2	6" RFSO
1550	207.22	302496	165	2700	54	166	66	98	51	6	3/4	3	1/4	1	2	6" RFSO
2200	294.12	302498	165	4200	60	190	72	116	57	6	3/4	3	1/4	1	2	6" RFSO
2560	342.25	302500	165	4500	60	220	72	131	57	6	3/4	3	1/4	1	2	6" RFSO

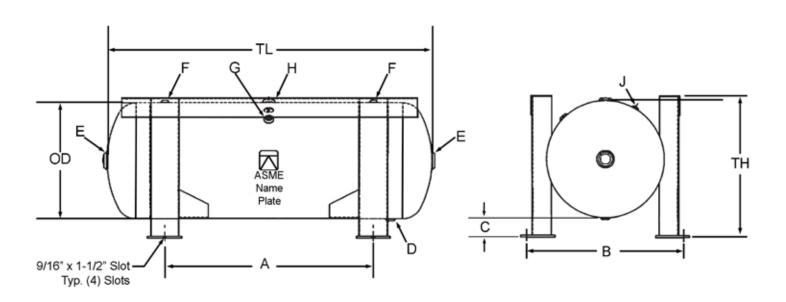
Universal Horizontal Air Receivers / 1-30 Gallons



NOI	М САР	Part #	MAWP	TW		DIME	NSION	S IN IN	CHES		N	PT OPI	NINGS	
Gal	Cu Ft	Parl#	IVIAVVP	I VV	OD	TL	TH	Α	В	C	D	Ε	F	G
1	0.13	304978	200	15	6	11	8	7	3.5	2	1/2	3/4	3/4	1
2	0.27	304980	200	17	8	11	10	7	4.5	2	1/2	3/4	3/4	1
3	0.40	304982	200	22	8	16	10	10	4.5	2	1/2	3/4	3/4	1
5	0.67	304932	200	25	10	16	12	10	6.5	2	1/2	3/4	3/4	1
7	0.94	304934	200	29	12	17	14	10	6.5	2	1/2	3/4	3/4	1
10	1.34	304936	200	35	12	23	14	10	6.5	2	1/2	3/4	3/4	1
13	1.74	304938	200	45	14	23	16	15	8.5	2	1/2	3/4	1 1/2	1
15	2.01	304940	200	51	14	26	16	15	8.5	2	1/2	3/4	1 1/2	1
19	2.54	304942	200	59	16	25	18	16	10.5	2	1/2	3/4	1 1/2	2
24	3.21	304944	200	72	16	31	18	16	10.5	2	1/2	3/4	1 1/2	2
30	4.01	304946	200	85	18	31	20	16	10.5	2	1/2	3/4	1 1/2	2

Horizontal Grasshopper Tanks / 30-240 Gallons

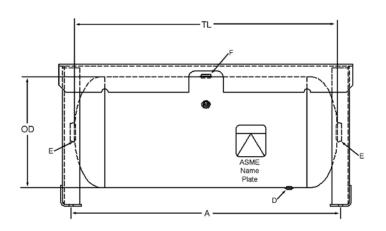


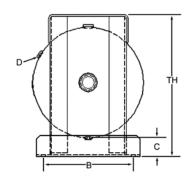


NOI	М САР	Dout #	MAWP	T\A/		DIME	NSION	S IN IN	CHES			ı	NPT OF	PENING	iS	
Gal	Cu Ft	Part #	IVIAVVP	TW	OD	TL	TH	Α	В	C	D	E	F	G	Н	J
30	4.01	305438	200	125	16	38	21	22	22.0	4	1/4	1 1/2	1/2	3/4	1 1/2	1/8
60	8.02	305439	200	260	20	48	25	27	26.5	4	3/4	2	1/2	3/4	1 1/2	1/8
80	10.70	305440	200	300	20	63	25	42	26.5	4	3/4	2	1/2	3/4	1 1/2	1/8
120	16.04	302481	200	435	24	67	29	43	32.0	4	3/4	2	1/2	3/4	1 1/2	1/8
200	26.74	302643	200	780	30	72	35	42	40.0	4	1	2	1/2	3/4	1 1/2	1/8
240	32.09	302652	200	820	30	84	35	54	40.0	4	1	2	1/2	3/4	1 1/2	1/8

Horizontal Gas Driven Tanks





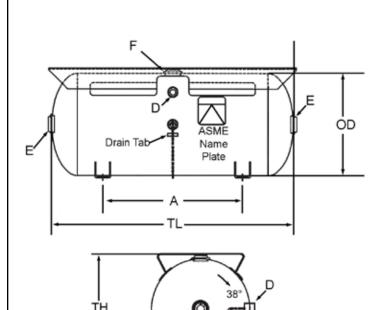


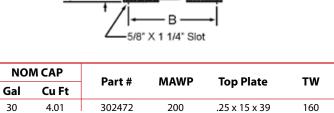
NOI	M CAP	Part #	MAWP	Top Plate	TW
Gal	Cu Ft	rait#	IVIAVVE	iop riate	1 VV
30	4.01	34917	200	.25 x 11.5 x 42.5	161

	DIM	ENSION	S IN IN	CHES		NP.	T OPENII	NGS
OD	TL	TH	Α	В	C	D	E	F
16	38	20.56	38.94	13.00	2.75	1/4	1 1/2	3/4

Part #34917 approved for use in California



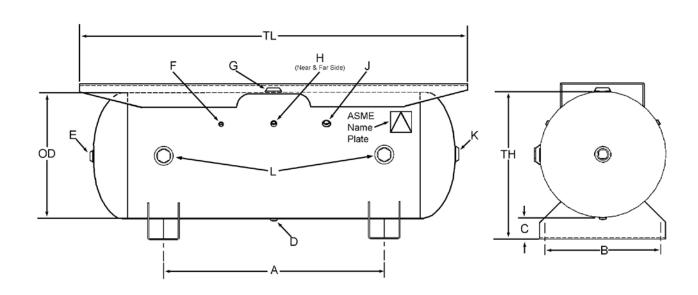




	DIM	ENSION	S IN IN	CHES		NP.	T OPENII	NGS
OD	TL	TH	Α	В	C	D	E	F
16	38	17.25	22.00	13.13	0.38	1/4	1 1/2	1 1/4

Extended Top Plate Horizontal Air Receivers / 30-240 Gallons





NOI	И САР	Part #	MAWP	Ton Dista	TW	D	IMEN	ISIONS	IN IN	ICHES	;			NI	PT OPEN	NINGS			
Gal	Cu Ft	Part#	IVIAVVP	Top Plate	I VV	OD	TL	TH	Α	В	C	D	E	F	G	Н	J	K	L
30	4.01	302686	200	.18 x 12 x 40	117	16	38	20.63	22	14	3	1/4	1/2	3/8	3/4	1/4	1/4	3/4	1 1/2
60	8.02	302693	200	.25 x 16 x 54	216	20	48	25.56	26	18	4	1/2	1/2	3/8	1	1/4	1/4	1	2
80	10.70	303977	200	.25 x 16 x 69	375	20	63	25.63	36	18	4	3/4	3/4	3/8	1 1/2	1/4	1/4	1 1/4	2
120	16.04	302700	200	.25 x 16 x 74	475	24	69	29.63	42	22	4	3/4	1	3/8	1 1/2	1/4	1/2	1 1/2	2
200	26.74	302701	200	.25 x 18 x 86	706	30	72	35.75	42	28	4	1	1	3/8	2	1/4	1/2	2	2
240	32.09	303181	200	.25 x 18 x 86	728	30	84	35.75	54	28	4	1	1	3/8	2	1/4	1/2	2	2

Technical Aids

Vertical NEMA Frame Sizes

GALLONS	56	56H	143T	145T	182T	184T	213T	215T	254T
30	Х	Х	Х	Х					
60				Χ	Χ	Х	Χ		
80				Χ	X	Х	X		
120						Χ	Χ	Χ	X

Horizontal NEMA Frame Sizes

GALLONS	56	56H	143T	145T	182T	184T	213T	215T	254T
30	Х	Х	Х	Х					
60				Χ	Χ	X	X		
80						X	X	Χ	X
120						Х	Χ	Χ	X

Air Receiver Capacity in Cubic Feet of Free Air at Various Pressures

	. ,						
CAPAC	ITY			PRESSURI	E (in pounds)		
GALLONS	CU. FT.	75	100	125	150	200	250
30	4.0	4.0	27.3	34.2	41.0	54.7	68.3
60	8.0	8.0	54.7	68.2	82.0	109.4	136.7
80	10.7	10.7	73.0	10.7	109.4	146.0	182.4
120	16.1	16.1	109.3	92.2	164.0	218.7	273.3
200	26.8	26.8	182.2	136.2	273.4	364.5	455.6
240	32.2	32.2	218.7	227.8	328.0	437.4	546.7
400	53.6	53.6	364.5	455.6	546.7	729.0	911.2
660	88.4	88.4	601.4	751.7	902.1	1202.8	1503.4
1060	142.0	142.0	965.9	1207.3	1448.8	1931.7	2414.5
1600	214.4	214.4	1457.9	1822.4	2186.9	2915.8	3644.8
2560	343.0	343.0	2333.0	2916.0	3499.0	4655.0	5832.0

Capacites at other pressures are exactly in proportion.

Example: At 200 lbs. pressure the capacity of a given size tank is exactly double the capacity at 100 lbs. pressure.

Gallons =
$$\frac{\text{Cu. Ft.}}{0.134}$$
 · · · Cu. Ft. = Gallons X 0.134

Useful Formulas - Sizing a Tank

A Constant Speed Operation: Tank Size (ft3) = Compressor Flow (CFM)
7

B Typical Sizing Formula: $VR = \frac{14.7 \text{ t } (Qr - Qc)}{Pmax - Pmin}$ where t = time (min) that receiver can supply required amount of air,

Qr = consumption rate of pneumatic system (cfm), Qc = output flow rate of compressor (cfm),

Pmax = maximum pressure level in receiver (psi),

Pmin = minimum pressure level in receiver (psi),

Vr = receiver size (ft3)

 $\mathbf{E} \quad 35 \, \mathsf{CFM} = \frac{1 \, \mathsf{Meter3}}{\mathsf{Min}}$

14.5 psi = Bar

7.48 Gallons = 1 ft3 Volume

F Pump Up Time: Example - 5 hp compressor on an 80 gallon tank, pumping from 0-100 psig

 $\frac{80 \text{ Gallon Tank}}{7.5 \text{ gl./ft3}} \quad \text{X} \quad (100 \text{ psig} - 0 \text{ psig}) = \frac{1066.67}{14.7 \text{ (the ATM Pressure)}} \quad \text{X} \quad 18 \text{ (the CFM of Unit)} = 4 \text{ min}$

Vessel Installation and Maintenance Recommendations

I. INSTALLATION RECOMMENDATIONS

Vertical Vessels

- 1. Vessels with a capacity of 660 gallons and above should be placed on a suitable concrete foundation.
- a) Refer to Table 1 for recommended minimum concrete footing depths for vertical receivers.
- b) For larger vessels or vessels with higher MAWP's, greater weights, or vessels subjected to external seismic or wind loadings consult a certified contractor or civil engineer for foundation requirements.
- c) Vessels should be lifted into position using both lifting lugs. A 2-branch chain or wire rope sling should be used having a lift angle not less than 60 degrees from grade. Once the vessel is in position, torque anchor bolting until a tight, snug fit is achieved.

Table 1: Minimum Recommended concrete footing depths for Vertical Air Receivers

TANK SIZE	MAWP (PSI)	W.C. (GAL)	APPROX. WT. (LBS.)	SERVICE	SUPPORT	DEPTH (IN)
42" X 117"	165	660	1365	AIR	SKIRT	4
48" X 144"	165	1060	2100	AIR	SKIRT	4
54" X 166"	165	1550	2600	AIR	SKIRT	4
60" X 190"	165	2200	3650	AIR	SKIRT	4
60" X 220"	165	2560	4500	AIR	SKIRT	4
66" X 214"	165	3000	5700	AIR	SKIRT	6
72" X 228"	137	3800	6800	AIR	SKIRT	6

Horizontal Vessels

- 1. Vessels with a capacity of 660 gallons and above should be placed on a suitable concrete foundation.
- a) Refer to Table 2 for recommended minimum concrete footing depths for horizontal receivers.
- b) For larger vessels or vessels with higher MAWP's, greater weights, or vessels subjected to external seismic or wind loadings consult a certified contractor or civil engineer for foundation requirements.

Table 1: Minimum Recommended concrete footing depths for Horizontal Air Receivers

TANK SIZE	MAWP (PSI)	W.C. (GAL)	APPROX. WT. (LBS.)	SERVICE	SUPPORT	DEPTH (IN)
42" X 117"	165	660	1365	AIR	SADDLE	3
48" X 144"	165	1060	2100	AIR	SADDLE	3
54" X 166"	165	1550	2600	AIR	SADDLE	3
60" X 190"	165	2200	3650	AIR	SADDLE	4
60" X 220"	165	2560	4500	AIR	SADDLE	4
66" X 214"	165	3000	5700	AIR	SADDLE	4
72" X 228"	137	3800	6800	AIR	SADDLE	6

Vessel Installation and Maintenance Recommendations

There should be at least one high quality pressure indicating device attached directly to an opening in the vessel.

A relief valve must be selected and installed. The valve must be sized according to the maximum flow rate into the vessel such that over-pressurization cannot occur. See ASME Section VIII, Division 1, Paragraph UG-125 for details on relief valves.

An automatic drain device is recommended to regularly drain any condensate from the vessel. In lieu of an automatic device, the user should be cautioned to regularly drain the receiver manually.

Notes: Reinforced concrete 28 day ultimate strength – 2500 psi minimum

Uniform gravel and soil base beneath footing. Footing surface shall be flat and level in all directions.

Anchoring the vessel to the concrete footing is necessary to stabilize the receiver only and is not intended to provide resistance against wind, seismic, or other external loadings that may create a vessel tipping condition. The above table represents footing depths for compressive loading only.

Check local construction codes, fire codes, or building standards.

Use an appropriately sized anchor bolt of SA-325 material or better, a wrought steel washer, and a heavy hex nut.

Footings exposed to freezing temperatures should be sufficiently sized in depth to prevent cracking.

Larger vessels not covered in the table, saddles may be provided which have holes on one end of the vessel and slots on the other end of the vessel. When bolting saddles to the foundation, anchor bolting should be fixed by first hand-tightening the nut and then locking the threads by staking, double nutting, or tack welding.

VESSEL MAINTENANCE

All Pressure Vessels

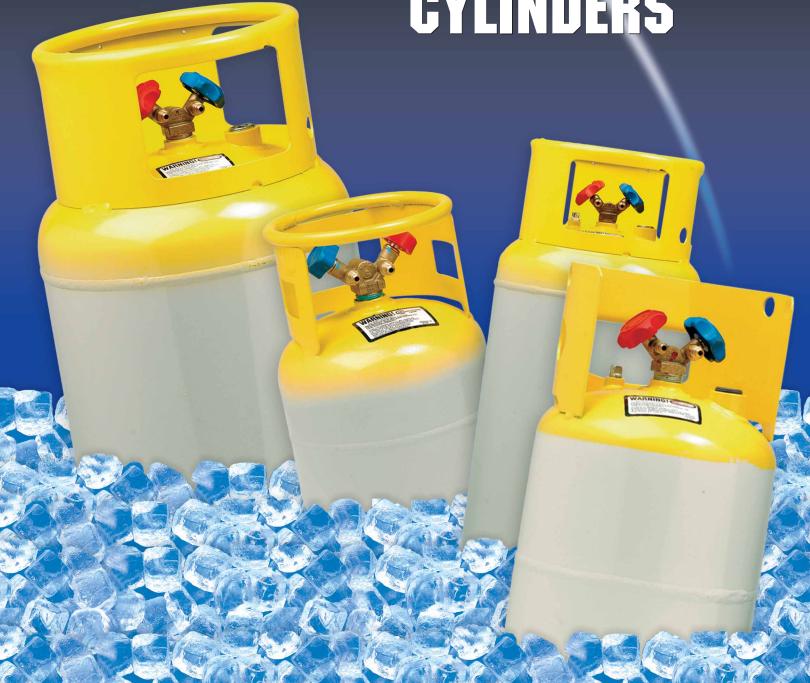
Maintaining a pressure vessel includes proper inspection. Many states have adopted the National Board Inspection Code (NB-23) for rules concerning post-construction activities. Check with your local authorities having jurisdiction over pressure vessel installations and operations for any additional requirements concerning in-service inspection.



Setting the Standard for Quality and Reliability



REFRIGERANT CYLINDERS





Manchester Tank is the premier manufacturer of small pressure vessels. Founded in 1946, Manchester Tank produces quality pressure vessels in North America and Australia.

Manchester Tank product lines include:

- DOT Propane Cylinders, ranging in size from 5-420 lbs., with a variety of domestic, recreational, commercial and industrial applications.
- ASME Propane Tanks, used in Recreational Vehicles to fuel appliances, and as fuel tanks for propane engines in trucks and automobiles.
- Specialty Cylinders for recovery, reclaiming and storage of refrigerants.
- Fire Suppressant Cylinders for dry chemical extinguishers and Halon replacement agents.
- Chemical Cylinders for safe storage and transportation.
- Air Receivers, ranging in size from very small tanks for portable air compressors up to 30,000 gallons water capacity.
- Hand-held torches ranging in sizes from 500,000 to 2,000,000 BTUs.
- HVAC expansion and bladder tanks.
- Engineered custom tanks

Manchester Tank's commitment is to remain a market leader in small pressure vessel manufacturing by dedicating itself to fulfilling its customers' needs, which in turn will benefit company sales, growth, profits and employees.

Using Manchester cylinders for protecting our earth's ozone

is a positive step in providing a solid recovery system. They are reusable, meet D.O.T. specifications 4BA and 4BW, and have working pressures from 260 to 400 PSI.

Our 30, 50 and 100# cylinders include extra 3/4" openings (plugged) for future installation of automatic stop/fill liquid level switches.

For additional information, contact your sales representative.

Code Descriptions of Valves and Openings

This helpful table has descriptions of valves and openings that correspond with each of the refrigerant cylinders.

A Y-VALVE

3/4" plugged opening for liquid level switch and 1/4" air valve installed

B Y-VALVE

3/4" plugged opening for liquid level switch and plugged 1/4" opening for air valve

C DUAL PORT VALVE

3/4" plugged opening for liquid level switch and 1/4" air valve installed

D DUAL PORT VALVE

3/4" plugged opening for liquid level switch and 1/4" opening for air valve

E DUAL PORT VALVE

Separate relief valve, 3/4" plugged opening for liquid level switch, 3/4" plugged opening in bottom

F DUAL PORT VALVE

Separate relief valve, visible liquid level gauge

G DUAL PORT VALVE

Separate relief valve, visible liquid level gauge and two 3/4" plugged openings: top vapor and in bottom liquid

Y-VALVE with ACME CONNECTIONS

3/4" plugged opening for liquid level switch and 1/4" Acme air valve installed

Y-VALVE

DUAL PORT VALVE
Separate relief

K DUAL PORT VALVE

With 515 PSI relief

3/4" NPT VAPOR SERVICE VALVE

3/4" NPT liquid service valve, 1" NPT 450 PSI relief valve & 3/4" plugged opening for liquid level switch

M 3/4" NPT VAPOR SERVICE VALVE

3/4" NPT liquid service valve, 1" NPT 450 PSI relief valve, liquid level gauge and two 3/4" plugged openings: top vapor and in bottom liquid

N 3/4" NPT LIQUID SERVICE VALVE

3/4 NPT vapor service valve, two 3/4 NPT 600 PSI relief valves and one plugged 3/4 NPT opening



Manchester Tank stocks several brands of stop/fill liquid level switches.

They can be installed later by utilizing cylinders with the extra plugged, 3/4" opening, cutting inventory costs on cylinders.



REFRIGERANT CYLINDERS D.O.T. 15#-1000#

All Manchester Tank Recovery Cylinders 15# to 1000# meet D.O.T. Specifications 4BA and 4BW Cylinders for R11, R12, R22, R134A, R500, R502, R410A* and others.

Cylinders for K11, K12, K22, K1347, K300, K302, K410A and others.											
Size Lbs.	Catalog Part No.	Description	Water Capacity lbs.	Diameter Inches	Length Inches	Overall Length	Footring Diameter	Service Pressure lbs.	**Tare Weight	Bottom Drain	Powder Coat Paint
15	14390.3	DOT 4BA350, WITH Y VALVE	11.9	8	8 3/8	12 1/6	6 1/2	350	12	no	yes
30	10282.3	DOT 4BA350, WITH Y VALVE, 3/4" & 1/4" PLUGGED OPENING		8 7/8		18 3/16	8	350	16	no	yes
	10282.7	DOT 4BA350, SIMILAR TO 10282.3 BUT Y VALVE: RED VAPOR, BLUE LIQUID (AUTOMOTIVE)			13 3/4						
	14522.3	DOT 4BA350, WITH Y VALVE, 3/4" PLUGGED OPENING, AIR TANK VALVE	26.2								
	14522.6	DOT 4BA350 , SIMILAR TO 14522.3, BUT Y VALVE: RED VAPOR, BLUE LIQUID (AUTOMOTIVE)									
	10299.1	DOT 4BA350 , WITH ACME Y VALVE, 3/4" PLUGGED OPENING, ACME AIR TANK VALVE, BLUE PAINT									
30	10507.3	DOT 4BA400 WITH 3/4" & 1/4" PLUGGED OPENINGS	26.2	8 7/8	13 3/4	18 3/16	8	400	16	no	yes
	14523.3	DOT 4BA350, WITH Y VALVE, 3/4" & 1/4" PLUGGED OPENINGS	47.6	12 3/16	13 5/8	18 5/8	8	350	28	no	yes
	14524.3	DOT 4BA350, WITH Y VALVE, 3/4" PLUGGED OPENING, AIR TANK VALVE	77.0								
50#	10285.3	DOT 4BA400, WITH Y VALVE, 3/4" & 1/4" PLUGGED OPENINGS		12 3/16	13 5/8	18 5/8	8	400	28	no	yes
30	10266.3	DOT 4BA400, WITH Y VALVE, 3/4" PLUGGED OPENING, AIR TANK VALVE, 12" x 13 - 5/8"	47.6								
	10266.5	DOT 4BA400 - SIMILAR TO 10266.3, Y VALVE: RED VAPOR, BLUE LIQUID (AUTOMOTIVE)	47.0								
	10276.1	DOT 4BA400, WITH ACME Y VALVE, 3/4" PLUGGED OPENING, ACME AIR TANK VALVE, BLUE PAINT									
	14527.3	DOT 4BW350, WITH Y VALVE, 3/4" & 1/4" PLUGGED OPENINGS	93.5	12 3/16	25 1/8	30 13/16	10 1/4	350	40	no	yes
100#	14530.3	DOT 4BW400, WITH DUAL PORT & 3/4" & 1/4" PLUGGED OPENINGS	93.5	12 3/16	25 1/8	30 13/16	10 1/4	400	45	no	yes
	14531.3	DOT 4BW400, WITH DUAL PORT, AIR TANK VALVE, 3/4" PLUGGED OPENING									
123#	14506.3	DOT 4BW300, 10" DIAMETER, CEODEUX 9225, DUAL PORT VALVE WITH 3-1/8" CAP	123	10	47 3/8	55 5/16	10	300	47	no	yes
	140034TC	DOT 4BW400 & TC4BWM27, WITH DUAL PORT & 3 1/8" CAP	123	10	47 3/8	55 5/16	10	400	53	no	yes
	14515.3	DOT 4BW260, WITH DUAL PORT & SEPARATE RELIEF	220	14 1/2	43 11/16	49 7/8	14	260	78	yes	yes
250#	14652.3	DOT 4BW260, SEPARATE VAPOR, LIQUID & RELIEF VALVES, 1" RELIEF, 3/4" PLUG IN HEAD AND BOTTOM OF CYL.	238								
	14396.3	DOT 4BW400, WITH DUAL PORT & SEPARATE RELIEF, PLUGGED 3/4 OPENING	238	16	37 1/4	43 3/16	14	400	160	no	yes
500#	14397.3	DOT 4BW400, WITH DUAL PORT, WITH SEPARATE RELIEF & GAUGE, LIFT LUGS	472	24	34 3/8	42 5/16	18	400	265	no	yes
1000#	14674.3	DOT 4BW260, SEPARATE RELIEF, VAPOR AND LIQUID VALVES, 3/4" PLUG IN TOP & BTM, GAUGE, LIFT LUGS & 4 WAY PALLET BASE	1000	30	45 5/8	58 1/2	24	260	350	yes	yes
	14398.3	DOT 4BW260, WITH DUAL PORT, SEPARATE RELIEF, 3/4" PLUGGED OPÉNING IN TOP & BTM, GAUGE, LIFT LUGS & 4 WAY PALLET BASE	. 500								
	14694TC	DOT4BW400 & TC4BWM27, SEPARATE RELIEF, VAPOR & LIQUIDVALVES, 3/4" PLUGGED OPENING, GAUGE, LIFT LUGS & 4 WAYPALLET BASE, GRAY PAINT	1000	30	45 5/8	58 1/2	24	400	505	no	yes
Replacement Parts & Accessories											

Don	acomont	Daute St	Accessories
Tree La	acemen	raris & A	40062201162

NA	V20503	LIQUID LEVEL SWITCH FOR 30# & 50# REFRIGERANT CYLINDERS, WITH 3 PRONG BRAD HARRISON CONNECTION
NA	V20565	Y VALVE 600 PSI SDP 13 .1/8 KYNAR TUBING FROM BOTTOM VALVE THREAD - RED VAPOR - BLUE LIQUID
NA	V20811	Y VALVE 600 PSI SDP 13 .1/8 KYNAR TUBING FROM BOTTOM VALVE THREAD - BLUE VAPOR - RED LIQUID
NA	V20566.1	ACME Y VALVE 600 PSI RELIEF, LIQUID BLUE - RED VAPOR

R410A REQUIRES 400 PSI

TARE WT'S SHOWN ARE APPROXIMATE AND VARY WITH PRODUCTION ALL CYLINDERS ARE PAINTED YELLOW/GRAY EXCEPT WHERE NOTED









MANCHESTER TANK & EQUIPMENT CO., a division of McWane, Inc., is a global leader in the design and manufacture of steel and aluminum pressure vessels for the containment of propane, compressed air and chemical applications. Manchester Tank's mission is to set the industry standard for quality and reliability while providing customers with the resources, service and technical support necessary to be profitable in an increasingly competitive global market.

- Capable of manufacturing a diverse product line, which includes Department of Transportation (DOT) approved steel and aluminum cylinders ranging in size from 1 to 420 pounds and American Society of Mechanical Engineers (ASME) approved steel tanks ranging in size from 1 to 30,000 gallons.
- State-of-the-art manufacturing facilities and distribution points strategically positioned in North America, Australia and the Republic of Chile to guarantee timely delivery and convenience worldwide.
- Strong business development group with extensive knowledge and experience in providing solutions and ensuring customer needs are met efficiently and cost effectively.
- Highly trained, professional engineering and design team prepared to support any organization's innovative pressure vessel and equipment requirements.
- Long-time, loyal partners also committed to customer satisfaction and overall success.
- Years of active involvement with National Fire Protection Association (NFPA), Department of Transportation (DOT), Transport Canada (TC) and Air-Conditioning, Heating & Refrigeration Institute (AHRI) professional associations to ensure product, operations and manufacturing requirements and issues meet the codes and standards that impact the industry.

Manchester Tank's REFRIGERANT CYLINDERS contain the following features:

- Cylinder designs are available for transport and storage of new and recovered refrigerant.
- Available in sizes ranging from 15# 1000#.
- All cylinders meet DOT and/or TC specifications.
- Use with R11, R12, R22, R134A, R500, R502, R410A and many others.
- Reusable and refillable uses.
- Wide range of working pressures offered for various types of refrigerants.
- For your convenience, liquid level switches are in stock for various size cylinders.

- 30#, 50#, 100#, 250# and 1000# cylinders include an extra ³/₄ NPT opening (plugged) for future installation of an automatic stop-fill liquid level switch.
- Stackable 30# & 50# refrigerant cylinders offer:
 - Efficient, safe storage
 - New collar design for handling ease
 - Stacks with any manufacturer's refrigerant/recovery 30# and 50# cylinders
- Cylinders are available for Automotive or HVAC use.
- Powder coat paint finish for maximum rust protection.
- Stainless steel gauges in 500# and 1000# cylinders.

REFRIGERANT CYLINDERS - RECOVERY REFILLABLE									
Size (Pounds)	Part #	Description	Valve & Opening Type	Water Capacity (Pounds)	Diameter (Inches)	Overall Length (Inches)	Service Pressure (Pounds)	Approximate Tare Weight (Pounds)	
15	10573.3	HVAC, Y-Valve	А	13	8	12 1/4	400	11	
	10282.3 ♦	HVAC, Y-Valve	В	26.2	8 7/8	18 7/16	350	16	
	10282.16	HVAC, Y-Valve	С	26.2	8 7/8	18 7/16	350	16	
	14522.3	HVAC, Y-Valve	D	26.2	8 7/8	18 7/16	350	16	
	10299.1	HVAC, ACME Y-Valve - Blue Powder Paint	E	26.2	8 7/8	18 3/16	350	16	
30	10507.3 ♦	AUTOMOTIVE, Y-Valve (Red-Vapor/Blue-Liquid)	В	26.2	8 7/8	18 7/16	400	17	
	10282.7 ♦	AUTOMOTIVE, Y-Valve (Red-Vapor/Blue-Liquid)	В	26.2	8 7/8	18 3/16	350	16	
	10282.17	AUTOMOTIVE, Y-Valve (Red-Vapor/Blue-Liquid)	С	26.2	8 7/8	18 3/16	350	16	
	10507TC.6	AUTOMOTIVE, Y-Valve (Red-Vapor/Blue-Liquid)	С	26.2	8 7/8	18 7/16	400	17	
	14522.6	AUTOMOTIVE, Y-Valve (Red-Vapor/Blue-Liquid)	D	26.2	8 7/8	18 7/16	350	16	
	10507.3SW ◆	AUTOMOTIVE, Y-Valve (Red-Vapor/Blue-Liquid)	F	26.2	8 7/8	18 7/16	400	17	
	10507.7SW	AUTOMOTIVE, Y-Valve (Red-Vapor/Blue-Liquid)	G	26.2	8 7/8	18 7/16	400	17	
	10285.3 ♦	HVAC, Y Valve	В	47.6	12	18 5/8	400	28	
	10285.11	HVAC, Y Valve	С	47.6	12	18 5/8	400	28	
	10266.3	HVAC, Y Valve	D	47.6	12	18 5/8	400	28	
50	10285.3SW ◆	HVAC, Y Valve	F	47.6	12	18 5/8	400	28	
	10285.30SW	HVAC, Y Valve	G	47.6	12	18 5/8	400	28	
	10266.5	AUTOMOTIVE, Y Valve (Red-Vapor/Blue-Liquid)	D	47.6	12	18 5/8	400	28	
	10276TC.1	AUTOMOTIVE, ACME Y-Valve (Red-Vapor/Blue-Liquid), Blue Powder Paint	E	47.6	12	18 5/8	400	28	
100	14527.3	HVAC, Y Valve	В	93.5	12	30 3/16	350	50	
	14530.3	HVAC, Dual Port Valve	Н	93.5	12	30 3/16	400	50	
	14531.3	HVAC, Dual Port Valve	J	93.5	12	30 3/16	400	50	
123	14508.3	HVAC, Dual Port Valve	K	124	10	55 5/16	350	49	
123	140034	HVAC, Dual Port Valve	K	123	10	55 5/16	400	52	
	14515.3	HVAC, Dual Port Valve & Drain Installed	L	238	14 1/2	49 7/8	260	78	
250	14652.3	HVAC, Liquid & Vapor Service Valves & Drain Installed	М	238	14 1/2	50 1/8	260	78	
	14396.3	HVAC, Dual Port Valve	N	238	16	43 3/16	400	105	
500	14397.3	HVAC, Dual Port Valve	Р	472	24	42 5/16	400	202	
	14674.3	HVAC, Liquid & Vapor Valves, 4-Way Pallet Base, Plugged Bottom Drain, Lift Lugs, Sight Gauge	Q	1000	30	57 1/4	260	349	
1000	14398.3	HVAC, Dual Port Valve, 4-Way Pallet Base, Plugged Bottom Drain, Lift Lugs, Sight Gauge	R	1000	30	57 1/4	260	354	
1000	140315TC	HVAC, Liquid & Vapor Valves, 4-way Pallet Base, Lift Lugs	S	1000	30	57 1/4	400	508	
	140316TC	HVAC, Liquid & Vapor Valves, 4-Way Pallet Base, Plugged Bottom Drain, Lift Luqs, Sight Gauge	Т	1000	30	57 1/4	400	508	
Replacement Parts & Accessories									
Replacement Part # Description									
V20503		Liquid Level Switch for 30# & 50# Refrigerant Cylinders with 3 Prong Brad Harrison Connection							
V20507		Liquid Level Switch for 100# Refrigerant Cylinders with 3 Prong Brad Harrison Connection							
V20615		Liquid Level Switch for 250# Refrigerant Cylinders with 3 Prong Brad Harrison Connection							
V20483		Air Valve - Dill Shrader - 1/4"							
A74868		Air Valve - Dill Shrader - 1/2" ACME (R134A)							
V20565		Automotive Type Y-Valve (Red-Vapor/Blue-Liquid), 600 PSI SDP, 13 1/8" Kynar Tubing from Bottom Valve Thread							
V20811		HVAC Type Y-Valve (Blue-Vapor/Red-Liquid), 600 PSI SDP, 13 1/8" Kynar Tubing from Bottom Valve Thread							
V20566.1		ACME Connection HVAC Type Y-Valve (Blue- Liquid/Red-Vapor), 600 PSI Relief, 13 1/8" Kynar Tubing from Bottom Valve Thread							

NOTE: All cylinders are painted yellow / gray except where noted. ◆ These items available with additional lead time.

Using Manchester cylinders for protecting our earth's ozone

Manchester Tank continues to do its part to protect the environment from the harmful hydrofluorocarbons (HFCs) and chlorofluorocarbons (CFCs) that if left unchecked or improperly disposed of will deplete the earth's stratospheric ozone layer. For years HVAC technicians have been using MANCHESTER TANK'S REFRIGERANT CYLINDERS in their refrigerant recovery systems for the purpose of recovery, reclamation, transportation, recycling and storage.

Refrigerant Cylinder Valve and Opening Descriptions

This helpful guide has descriptions of valves and openings that correspond with each of the refrigerant cylinders.

- A Y-VALVE
- Y-VALVE

 34 NPT plugged opening (for liquid level

34 NPT plugged opening (for liquid level switch) and 14 NPT plugged opening (for air valve)

- C Y VALVE
 - 3/4 NPT plugged opening (for liquid level switch)
- Y-VALVE & AIR VALVE

 3/4 NPT plugged opening (for liquid level switch)
- Y-VALVE & 1/2" ACME AIR VALVE

 3/4 NPT plugged opening (for liquid level switch)
- Y-VALVE & LIQUID LEVEL SWITCH
 1/4 NPT plugged opening (for air valve)
- **G** Y-VALVE & LIQUID LEVEL SWITCH
- DUAL PORT VALVE
 34 NPT plugged opening (for liquid level switch) and ¼ NPT plugged opening (for air valve)
- **DUAL PORT VALVE & AIR VALVE**34 NPT plugged opening (for liquid level switch)
- K DUAL PORT VALVE
- DUAL PORT VALVE & 1/2" ACME AIR VALVE
 3/4 NPT plugged opening (for liquid level switch)
- M LIQUID & VAPOR SERVICE VALVES, 1 NPT RELIEF VALVE

34 NPT plugged opening (for liquid level switch) and 34 NPT plugged drain

DUAL PORT VALVE W/RELIEF & 1/4 NPT RUPTURE DISK

3/4 NPT plugged opening (for liquid level switch)

- P DUAL PORT VALVE W/RELIEF, SIGHT GAUGE & 1/4 NPT RUPTURE DISK
- Q LIQUID & VAPOR SERVICE VALVES, RELIEF VALVE, SIGHT GAUGE

34 NPT plugged opening (for liquid level switch) and 34 NPT plugged drain

R DUAL PORT VALVE, RELIEF VALVE, SIGHT GAUGE

3/4 NPT plugged opening (for liquid level switch) and 3/4 NPT plugged drain

S LIQUID & VAPOR SERVICE VALVES, RELIEF VALVE

3/4 NPT plugged opening (for liquid level switch)

T LIQUID & VAPOR SERVICE VALVES, RELIEF VALVE, SIGHT GAUGE

³/₄ NPT plugged opening (for liquid level switch) and ³/₄ NPT plugged drain



Manchester Tank stocks several brands of stop/fill liquid level switches.

They can be installed later by utilizing cylinders with the extra plugged 34 NPT opening, cutting inventory costs on cylinders.







- **B** 10282.3
- **B** 10507.3
- **B** 10282.7
- **D** 14522.3
- **D** 14522.6
- **E** 10299.1
- **F** 10507.3SW



- **C** 10282.16
- **C** 10282.17
- **1**0507TC.6
- 10507.7SW



30#



- **B** 10285.3
- **D** 10266.3
- **D** 10266.5
- **E** 10276TC.1
- **F** 10285.3SW



- **C** 10285TC.11
- **G** 10285.30SW



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B 14527.3



A 10573.3