

T H E E C O N O M I C S O F I N N O V A T I O N



**PRESSURE
VESSELS
& AIR
RECEIVERS**



WHY MANCHESTER TANK?

ASME Code:

All pressure vessels and air receivers listed in this catalog have been built in accordance with the ASME Section VIII Division I code latest addition. Vessels listed are "U" stamped and registered with the National Board.

Other Codes:

Manchester Tank also builds pressure vessels to many other codes such as ABS, USCG, DOT, UN, SAE-J10 and others.

Canadian Registration Number:

Most all pressure vessels and air receivers listed in this catalog are already approved for use in Canada. Please contact a customer service representative for further details.

Paint Specifications:

The exterior surface of all vessels listed in this catalog have been painted with one coat of standard shop primer. Special interior and exterior coatings per customer specifications can be quoted.

Capabilities:

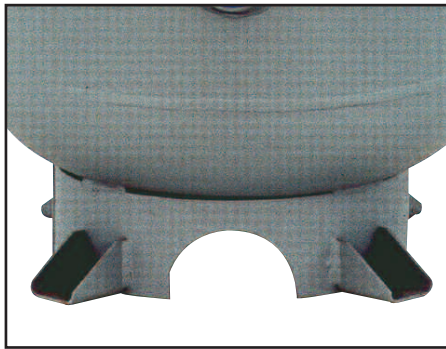
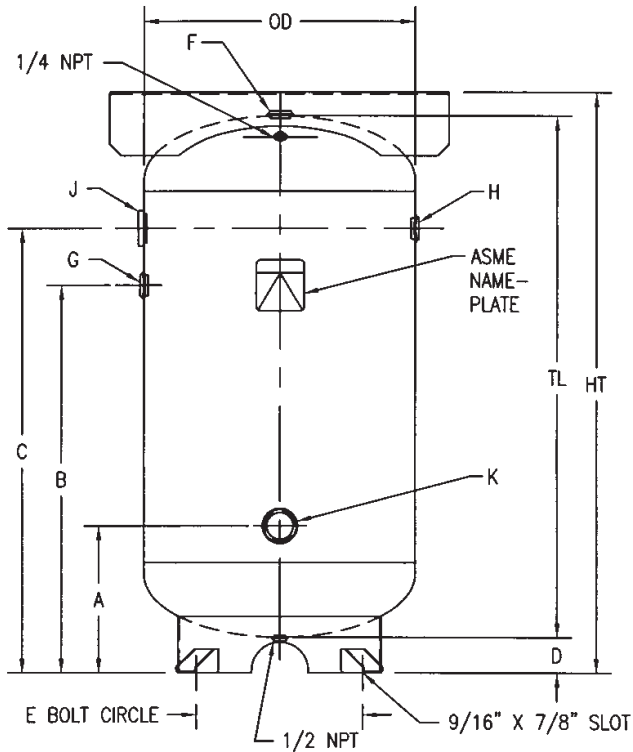
Manchester Tank is capable of producing carbon and stainless steel pressure vessels as small as 3" in diameter, rated @ 3,000-psi, to as large as 120" in diameter rated @ 200-psi. Please contact a customer service representative to confirm your particular needs or requirements.

Custom Designs:

With a generous scope of size and working pressure ranges, Manchester Tank has the ability to fabricate a variety of private designs. We have a full engineering staff willing and able to assist you in any way necessary. For fast and thorough attention, simply submit your requirements to one of our customer service representatives.



VERTICAL AIR RECEIVERS 10-120 GALLONS



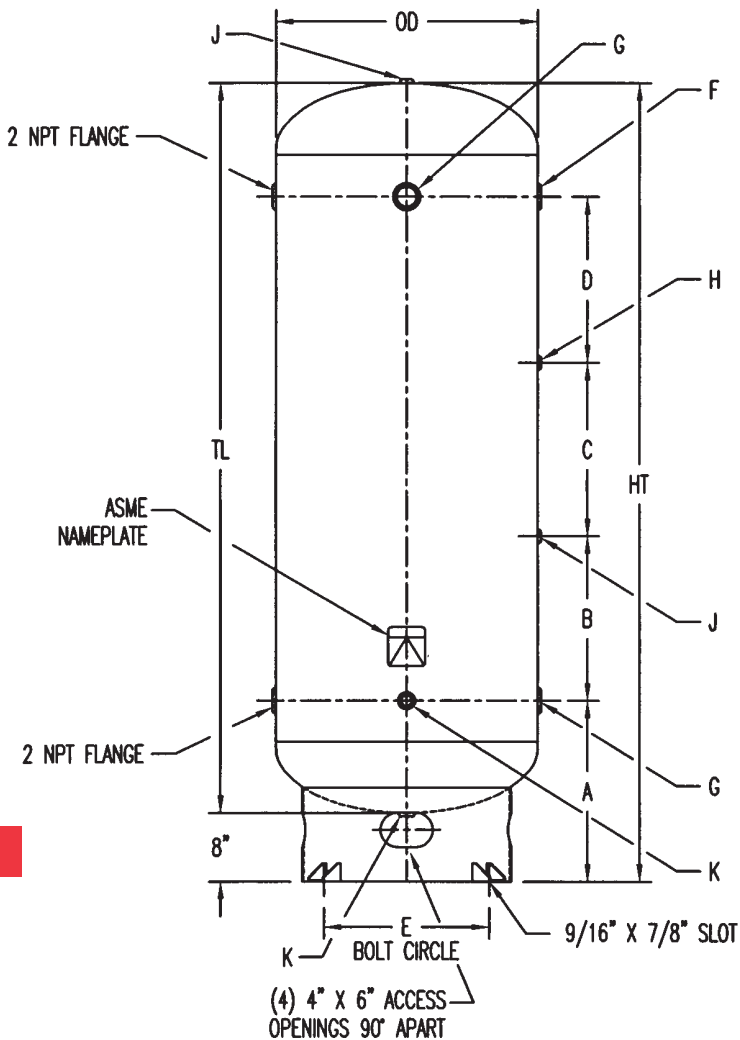
Base Ring



See NEMA Frame Sizes on p. 14

NOM. CAP.		PART NO.	MAWP	TOP PLATE	T.W.	DIMENSIONS IN INCHES										N.P.T. OPENINGS				
GAL.	CU.FT.					OD	TL	HT	A	B	C	D	E	F	G	H	J	K		
10	1.34	302400	200	NONE	37	10.00	30.00	32.38	N/A	N/A	24.38	2.38	11.25	3/4	N/A	3/4	3/4	N/A		
10	1.34	302401	300	NONE	41	10.00	30.00	32.38	N/A	N/A	24.38	2.38	11.25	3/4	N/A	3/4	3/4	N/A		
15	2.01	302402	200	NONE	46	12.00	33.00	35.38	N/A	N/A	27.38	2.38	12.75	3/4	N/A	3/4	3/4	N/A		
15	2.01	302403	300	NONE	60	12.00	33.00	35.38	N/A	N/A	27.38	2.38	12.75	3/4	N/A	3/4	3/4	N/A		
20	2.67	302404	200	NONE	60	14.00	33.00	35.25	10.25	N/A	27.25	2.25	15.00	3/4	N/A	3/4	1-1/2	1-1/2		
20	2.67	302405	300	NONE	97	14.00	33.00	35.25	10.25	N/A	27.25	2.25	15.00	3/4	N/A	3/4	1-1/2	1-1/2		
30	4.01	302406	200	NONE	85	16.00	38.00	40.81	12.56	25.06	30.06	2.81	15.00	3/4	3/4	3/4	1-1/2	1-1/2		
30	4.01	302407	300	NONE	117	16.00	38.00	40.81	12.56	25.06	30.06	2.81	15.00	3/4	3/4	3/4	1-1/2	1-1/2		
30	4.01	302408	200	.18X10X24	107	16.00	38.00	41.81	12.56	25.06	30.06	2.81	15.00	3/4	3/4	3/4	1-1/2	1-1/2		
30	4.01	302409	300	.18X10X24	139	16.00	38.00	41.81	12.56	25.06	30.06	2.81	15.00	3/4	3/4	3/4	1-1/2	1-1/2		
60	8.02	302410	200	NONE	159	20.00	48.00	50.75	13.75	33.75	39.75	2.75	17.00	3/4	3/4	3/4	2	2		
60	8.02	302411	300	NONE	219	20.00	48.00	50.75	13.75	33.75	39.75	2.75	17.00	3/4	3/4	3/4	2	2		
60	8.02	302412	200	.18X13.5X30	192	20.00	48.00	52.06	13.75	33.75	39.75	2.75	17.00	3/4	3/4	3/4	2	2		
60	8.02	302413	300	.18X13.5X30	253	20.00	48.00	52.06	13.75	33.75	39.75	2.75	17.00	3/4	3/4	3/4	2	2		
80	10.70	302414	200	NONE	198	20.00	63.00	65.75	13.25	49.25	55.25	2.75	17.00	1-1/4	1-1/4	1-1/4	2	2		
80	10.70	302415	300	NONE	268	20.00	63.00	65.75	13.25	49.25	55.25	2.75	17.00	1-1/4	1-1/4	1-1/4	2	2		
80	10.70	302417	200	NONE	220	24.00	46.00	49.19	13.06	34.31	39.31	3.19	21.00	1-1/4	1-1/4	1-1/4	2	2		
80	10.70	302418	300	NONE	282	24.00	46.00	49.19	13.06	34.31	39.31	3.19	21.00	1-1/4	1-1/4	1-1/4	2	2		
80	10.70	302419	200	.18X13.5X30	257	24.00	46.00	51.25	13.06	34.31	39.31	3.19	21.00	1-1/4	1-1/4	1-1/4	2	2		
80	10.70	302420	300	.18X13.5X30	319	24.00	46.00	51.25	13.06	34.31	39.31	3.19	21.00	1-1/4	1-1/4	1-1/4	2	2		
120	16.04	302423	200	NONE	355	30.00	46.00	54.00	21.00	35.00	41.00	8.00	27.00	2	2	2	2	2		
120	16.04	302424	200	.25X15X40	415	30.00	46.00	55.50	21.00	35.00	41.00	8.00	27.00	2	2	2	2	2		
120	16.04	302425	300	.25X15X40	535	30.00	46.00	55.50	21.00	35.00	41.00	8.00	27.00	2	2	2	2	2		

VERTICAL AIR RECEIVERS 120-500 GALLONS

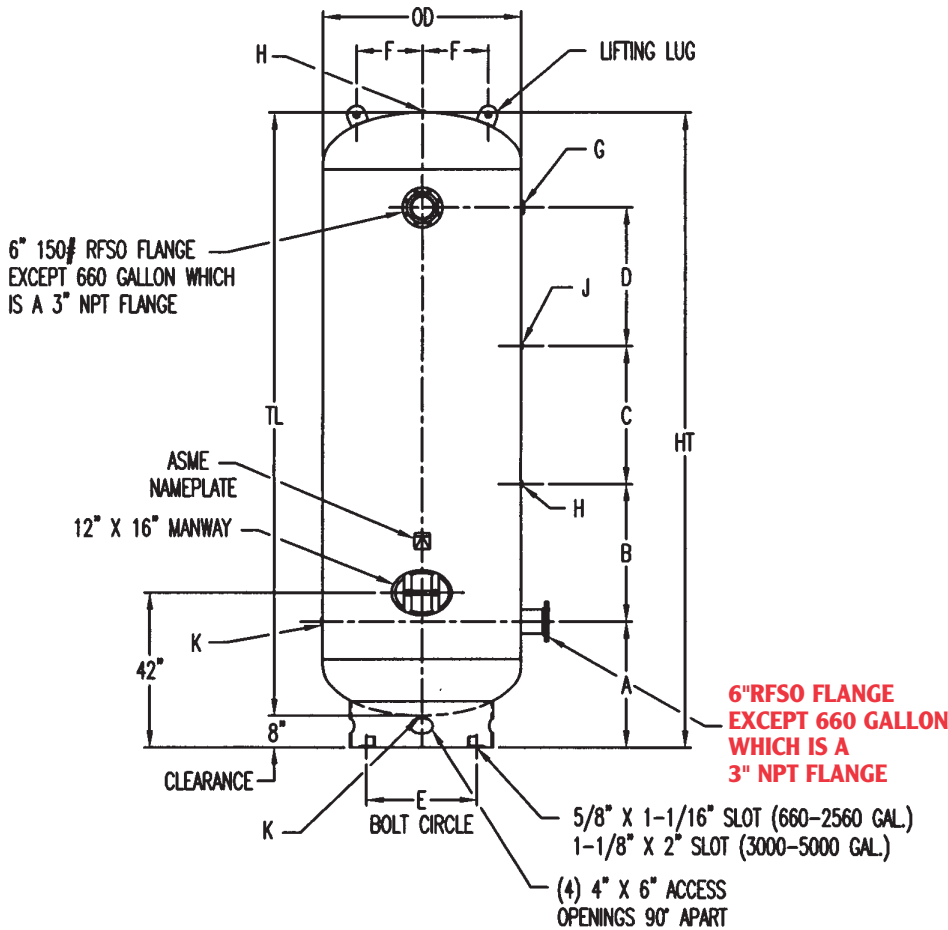


Industrial Base Ring

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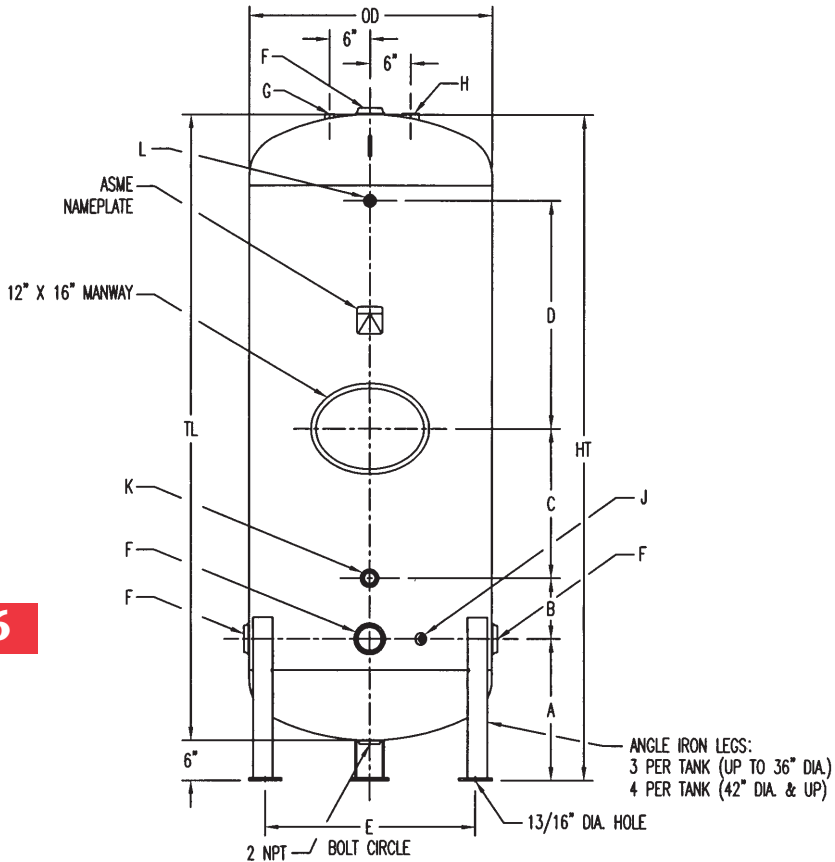
NOM. CAP. GAL.	CU.FT.	PART NO.	MAWP	T.W.	DIMENSIONS IN INCHES										N.P.T. OPENINGS				
					OD	TL	HT	A	B	C	D	E	F	G	H	J	K		
120	16.04	302421	200	329	24.00	67.00	75.00	21.00	13.00	14.00	13.00	21.00	1-1/2	2	1/4	1/2	1		
120	16.04	302422	300	379	24.00	67.00	75.00	21.00	13.00	14.00	13.00	21.00	1-1/2	2	1/4	1/2	1		
200	26.74	302426	200	525	30.00	72.00	80.00	21.00	15.00	16.00	15.00	27.00	1-1/2	3	1/4	1/2	1		
200	26.74	302427	300	720	30.00	72.00	80.00	21.00	15.00	16.00	15.00	27.00	1-1/2	3	1/4	1/2	1		
240	32.09	302428	200	670	30.00	84.00	92.00	21.00	19.00	20.00	19.00	27.00	1-1/2	3	1/4	1/2	1		
240	32.09	302429	300	930	30.00	84.00	92.00	21.00	19.00	20.00	19.00	27.00	1-1/2	3	1/4	1/2	1		
400	53.48	302432	165	660	36.00	93.00	101.00	23.00	21.00	21.00	21.00	33.00	1 1/2	3	1/4	1/2	1		
400	53.48	302433	200	881	36.00	93.00	101.00	23.00	21.00	21.00	21.00	33.00	1 1/2	3	1/4	1/2	1		
400	53.48	302434	300	1100	36.00	93.00	101.00	23.00	21.00	21.00	21.00	33.00	1 1/2	3	1/4	1/2	1		
500	66.84	302436	165	950	36.00	116.00	124.00	26.00	28.00	24.00	29.00	33.00	1-1/2	3	1/4	1/2	1		
500	66.84	302437	200	1050	36.00	116.00	124.00	26.00	28.00	24.00	29.00	33.00	1-1/2	3	1/4	1/2	1		

VERTICAL AIR RECEIVERS 660-5000 GALLONS



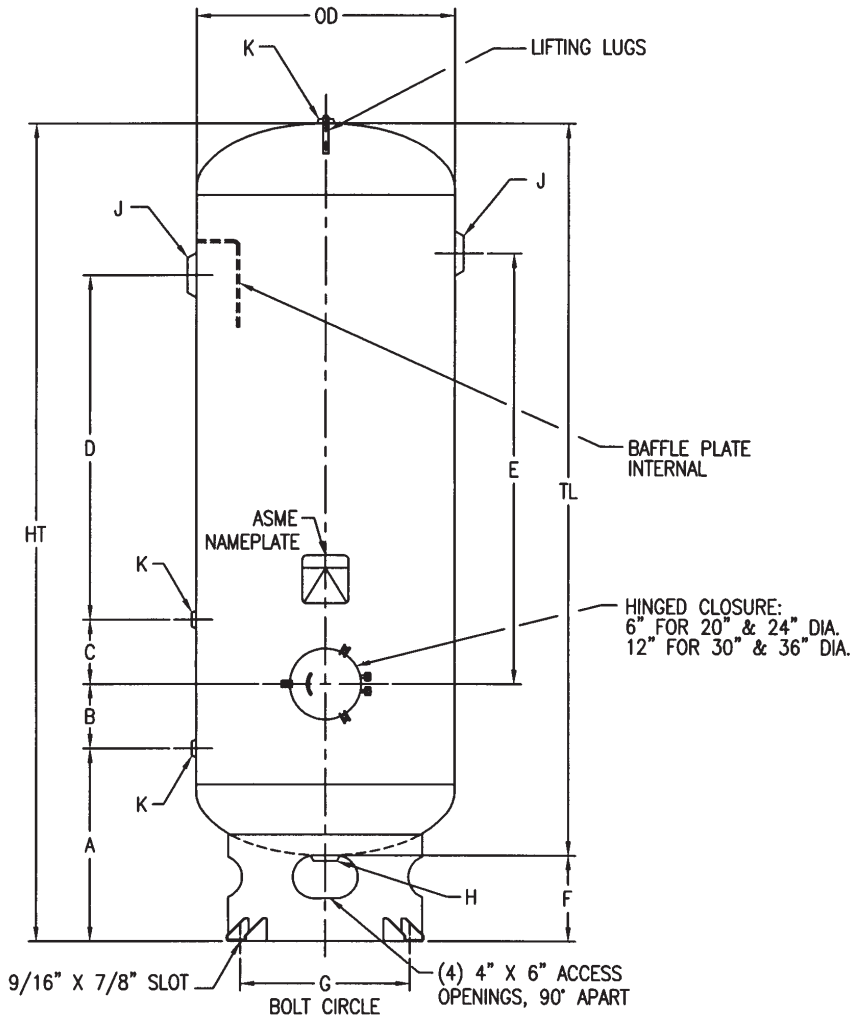
NOM. CAP.		PART NO.	MAWP	T.W.	DIMENSIONS IN INCHES										N.P.T. OPENINGS				
GAL.	CU.FT.				OD	TL	HT	A	B	C	D	E	F	G	H	J	K		
660	88.24	302438	137	1180	42.00	117.00	125.00	28.00	26.00	26.00	25.00	36.50	14.00	3	1	1/4	1		
660	88.24	302439	165	1365	42.00	117.00	125.00	28.00	26.00	26.00	25.00	36.50	14.00	3	1	1/4	1		
660	88.24	302440	200	1570	42.00	117.00	125.00	28.00	26.00	26.00	25.00	36.50	14.00	3	1	1/4	1		
660	88.24	302441	300	1964	42.00	117.00	125.00	28.00	26.00	26.00	25.00	36.50	14.00	3	1	1/4	1		
1060	141.71	302442	137	1780	48.00	144.00	152.00	32.00	32.00	32.00	32.00	42.50	18.00	3	1	1/4	1		
1060	141.71	302443	165	1780	48.00	144.00	152.00	32.00	32.00	32.00	32.00	42.50	18.00	3	1	1/4	1		
1060	141.71	302444	200	1780	48.00	144.00	152.00	32.00	32.00	32.00	32.00	42.50	18.00	3	1	1/4	1		
1550	207.22	302445	150	2560	54.00	166.00	174.00	34.00	38.00	38.00	38.00	42.50	18.00	3	1	1/4	1-1/4		
1550	207.22	302446	165	2580	54.00	166.00	174.00	34.00	38.00	38.00	38.00	42.50	18.00	3	1	1/4	1-1/4		
1550	207.22	302447	200	2700	54.00	166.00	174.00	34.00	38.00	38.00	38.00	42.50	18.00	3	1	1/4	1-1/4		
2200	294.12	302448	137	3450	60.00	190.00	198.00	34.00	42.00	48.00	48.00	48.50	20.00	3	1	1/4	1-1/4		
2200	294.12	302449	165	3535	60.00	190.00	198.00	34.00	42.00	48.00	48.00	48.50	20.00	3	1	1/4	1-1/4		
2200	294.12	302450	200	4100	60.00	190.00	198.00	34.00	42.00	48.00	48.00	48.50	20.00	3	1	1/4	1-1/4		
2560	342.25	302451	137	3600	60.00	220.00	228.00	34.00	56.00	56.00	56.00	48.50	20.00	3	1	1/4	1-1/4		
2560	342.25	302452	165	3750	60.00	220.00	228.00	34.00	56.00	56.00	56.00	48.50	20.00	3	1	1/4	1-1/4		
2560	342.25	302453	200	4375	60.00	220.00	228.00	34.00	56.00	56.00	56.00	48.50	20.00	3	1	1/4	1-1/4		
3000	401.07	302454	137	5700	66.00	214.00	222.00	36.00	56.00	56.00	46.00	53.00	22.00	3	1	1/4	1-1/4		
3000	401.07	302455	165	5700	66.00	214.00	222.00	36.00	56.00	56.00	46.00	53.00	22.00	3	1	1/4	1-1/4		
3800	508.02	302456	137	6800	72.00	228.00	236.00	38.00	56.00	56.00	56.00	59.00	24.00	3	1	1/4	1-1/4		
3800	508.02	302457	165	6800	72.00	228.00	236.00	38.00	56.00	56.00	56.00	59.00	24.00	3	1	1/4	1-1/4		
5000	668.45	302458	137	7950	84.00	232.00	240.00	46.00	50.00	50.00	56.00	70.00	28.00	3	1	1/4	1-1/4		
5000	668.45	302459	165	10500	84.00	232.00	240.00	46.00	50.00	50.00	56.00	70.00	28.00	3	1	1/4	1-1/4		

EPOXY-LINED WATER TANKS 140-535 GALLONS



NOM. CAP.		PART NO.	MAWP	T.W.	DIMENSIONS IN INCHES										N.P.T. OPENINGS				
GAL.	CU.FT.				OD	TL	HT	A	B	C	D	E	F	G	H	J	K		
140	18.72	302512	150	350	24.00	75.00	81.00	16.88	10.00	16.63	28.13	24.00	2-1/2	3/4	1-1/2	1/2	1-1/4		
190	25.40	302513	150	460	30.00	66.00	72.00	18.75	8.00	16.25	17.75	30.00	2-1/2	3/4	1-1/2	1/2	1-1/4		
225	30.08	302514	150	510	30.00	78.00	84.00	18.75	10.00	16.25	27.75	30.00	2-1/2	3/4	1-1/2	1/2	1-1/4		
268	35.83	302515	150	810	36.00	68.00	74.00	20.94	6.69	16.38	16.88	36.00	3	3/4	1-1/2	1/2	1-1/4		
320	42.78	302516	150	890	36.00	80.00	86.00	21.06	8.69	16.25	26.75	36.00	3	3/4	1-1/2	1/2	1-1/4		
388	51.87	302517	150	900	36.00	93.00	99.00	21.19	9.06	22.25	33.75	36.00	3	3/4	1-1/2	1/2	1-1/4		
375	50.13	302518	150	980	42.00	70.75	76.75	23.38	6.00	14.00	18.00	42.00	3	3/4	1-1/2	1/2	1-1/4		
450	60.16	302519	150	1110	42.00	83.75	89.75	22.31	9.69	13.88	28.00	42.00	3	3/4	1-1/2	1/2	1-1/4		
535	71.52	302520	150	1225	42.00	96.00	102.00	22.44	9.69	13.88	41.38	42.00	3	3/4	1-1/2	1/2	1-1/4		

VACUUM RECEIVERS 60-400 GALLONS



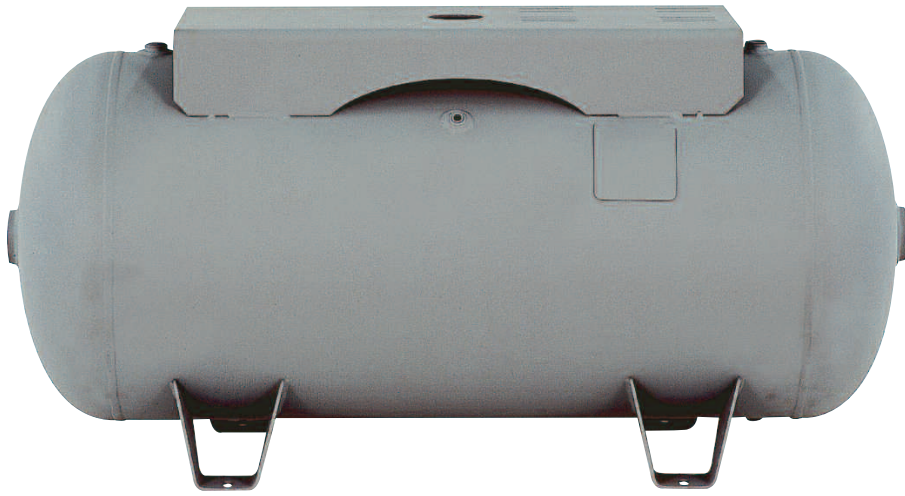
7



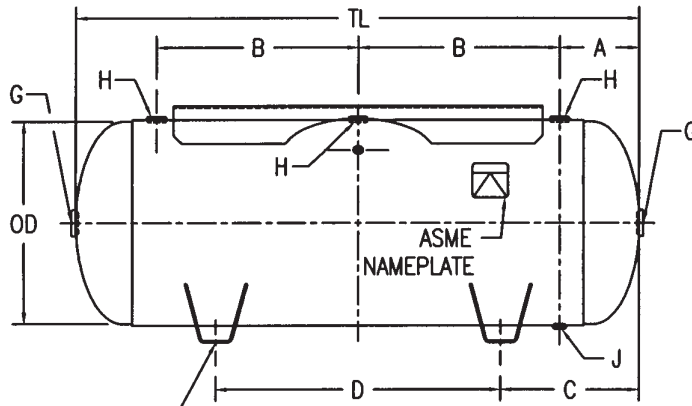
Clean Out

NOM. CAP. GAL.	CU.FT.	PART NO.	MAWP	VACUUM RATING	T.W.	DIMENSIONS IN INCHES										N.P.T. OPENINGS		
						OD	TL	HT	A	B	C	D	E	F	G	H	J	K
60	8.02	300956	150	29.9" Hg.	205	20.00	48.00	56.00	17.00	6.00	6.00	14.00	22.00	8.00	17.00	2	3	1/2
80	10.70	300957	150	29.9" Hg.	220	20.00	63.00	71.00	17.00	3.00	9.00	29.00	38.00	8.00	17.00	2	3	1/2
120	16.04	300958	150	29.9" Hg.	385	24.00	67.00	75.00	18.00	6.00	6.00	31.00	39.00	8.00	21.00	2	3	1/2
240	32.09	300959	150	29.9" Hg.	750	30.00	84.00	92.00	19.00	6.00	6.00	44.00	52.00	8.00	27.00	2	6RFSO	1/2
400	53.48	300960	150	29.9" Hg.	900	36.00	93.00	101.00	21.00	8.00	4.00	50.00	56.00	8.00	31.00	2	6RFSO	1/2

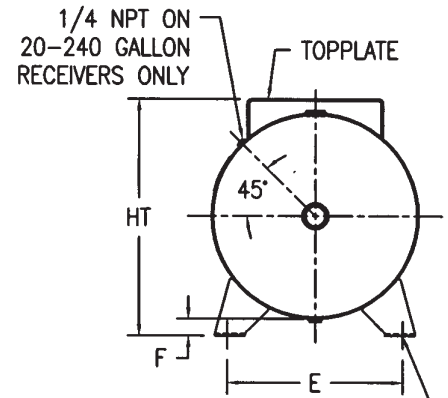
HORIZONTAL AIR RECEIVERS 10-240 GALLONS



Wing Feet



- 7/16" DIA. HOLE (10-15 GALLON)
- 7/16" X 3/4" SLOT (20-30 GALLON)
- 9/16" X 1-1/2" SLOT (60-80 GALLON)
- 11/16" X 1-3/4" SLOT (120 GALLON)
- 13/16" X 1-1/2" SLOT (200-240 GALLON)



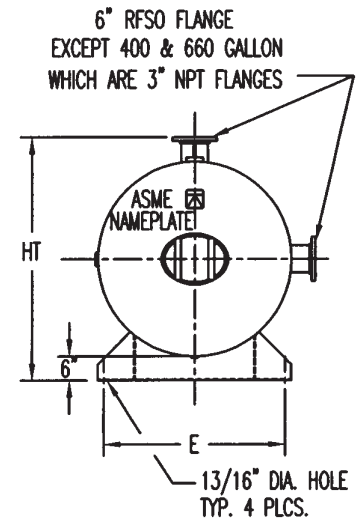
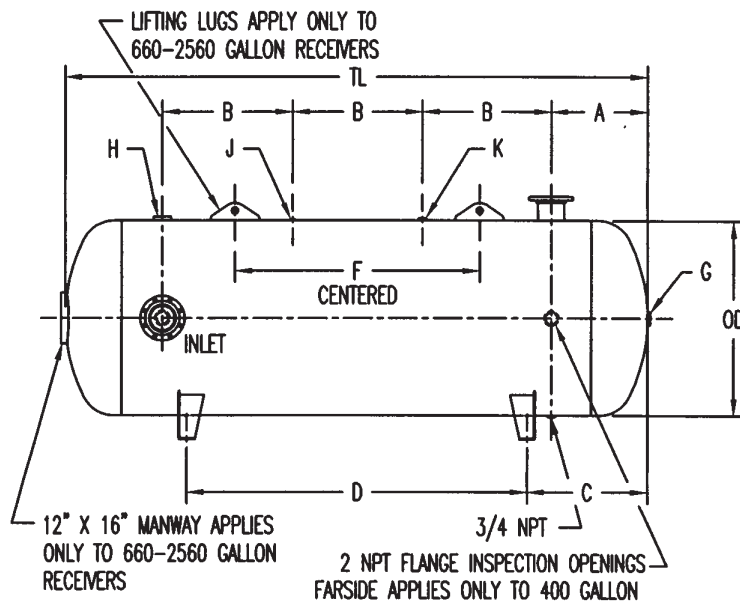
- PRESSED STEEL FEET (10-15 GALLON)
- WING FEET (20-120 GALLON)
- SADDLES (200-240 GALLON)

NOM. CAP. GAL.	CU.FT.	PART NO.	MAWP	TOP PLATE	T.W.	DIMENSIONS IN INCHES										N.P.T. OPENINGS		
						OD	TL	HT	A	B	C	D	E	F	G	H	J	
10	1.34	302460	200	NONE	32	10.00	30.00	11.56	5.50	9.50	6.00	18.00	9.25	1.56	3/4	1/2	1/4	
10	1.34	302461	200	.13X9X16	43	10.00	30.00	13.06	5.50	9.50	6.00	18.00	9.25	1.56	3/4	1/2	1/4	
10	1.34	302462	300	.13X9X16	46	10.00	30.00	13.06	5.50	9.50	6.00	18.00	9.25	1.56	3/4	1/2	1/4	
15	2.01	302463	200	NONE	51	12.00	33.00	13.06	5.50	11.00	6.50	20.00	11.00	1.06	3/4	1/2	1/4	
15	2.01	302464	200	.13X9X18	51	12.00	33.00	14.56	5.50	11.00	6.50	20.00	11.00	1.06	3/4	1/2	1/4	
15	2.01	302465	300	.13X9X18	66	12.00	33.00	14.56	5.50	11.00	6.50	20.00	11.00	1.06	3/4	1/2	1/4	
20	2.67	302466	200	NONE	66	14.00	33.00	16.00	5.88	10.63	8.50	16.00	11.69	2.00	1-1/2	1/2	1/2	
20	2.67	302467	200	.13X9X20	79	14.00	33.00	18.00	5.88	10.63	8.50	16.00	11.69	2.00	1-1/2	1/2	1/2	
20	2.67	302468	300	.13X9X20	95	14.00	33.00	18.00	5.88	10.63	8.50	16.00	11.69	2.00	1-1/2	1/2	1/2	
30	4.01	302469	200	NONE	89	16.00	38.00	18.00	5.75	13.25	9.00	20.00	12.81	2.00	1-1/2	3/4	1/2	
30	4.01	302470	200	.18X10X24	111	16.00	38.00	20.63	5.75	13.25	9.00	20.00	12.81	2.00	1-1/2	3/4	1/2	
30	4.01	302471	300	.18X10X24	140	16.00	38.00	20.63	5.75	13.25	9.00	20.00	12.81	2.00	1-1/2	3/4	1/2	
60	8.02	302473	200	NONE	170	20.00	48.00	22.31	7.75	16.25	12.00	24.00	16.50	2.31	2	3/4	1/2	
60	8.02	302474	200	.18X13.5X30	204	20.00	48.00	24.44	7.75	16.25	12.00	24.00	16.50	2.31	2	3/4	1/2	
60	8.02	302475	300	.18X13.5X30	225	20.00	48.00	24.44	7.75	16.25	12.00	24.00	16.50	2.31	2	3/4	1/2	
80	10.70	302476	200	NONE	214	20.00	63.00	22.31	9.00	22.50	15.50	32.00	16.50	2.31	2	1	1/2	
80	10.70	302477	200	.25X15X40	263	20.00	63.00	24.06	9.00	22.50	15.50	32.00	16.50	2.31	2	1	1/2	
80	10.70	302478	300	.25X15X40	350	20.00	63.00	24.06	9.00	22.50	15.50	32.00	16.50	2.31	2	1	1/2	
120	16.04	302479	200	NONE	311	24.00	67.00	26.25	9.50	24.00	16.50	34.00	20.63	2.25	2	1-1/2	3/4	
120	16.04	302480	200	.25X16X44	382	24.00	67.00	27.94	9.50	24.00	16.50	34.00	20.63	2.25	2	1-1/2	3/4	
200	26.74	302482	200	NONE	538	30.00	72.00	33.00	11.63	24.38	17.00	38.00	23.50	3.00	2	2	1	
200	26.74	302483	200	.25X19X48	632	30.00	72.00	35.69	11.63	24.38	17.00	38.00	23.50	3.00	2	2	1	
240	32.09	302484	200	NONE	618	30.00	84.00	33.00	11.63	30.38	20.00	44.00	23.50	3.00	2	2	1	
240	32.09	302485	200	.25X19X48	716	30.00	84.00	35.69	11.63	30.38	20.00	44.00	23.50	3.00	2	2	1	

HORIZONTAL AIR RECEIVERS 400-2560 GALLONS

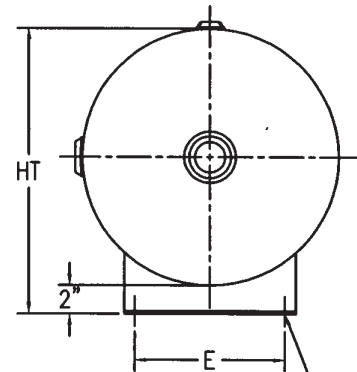
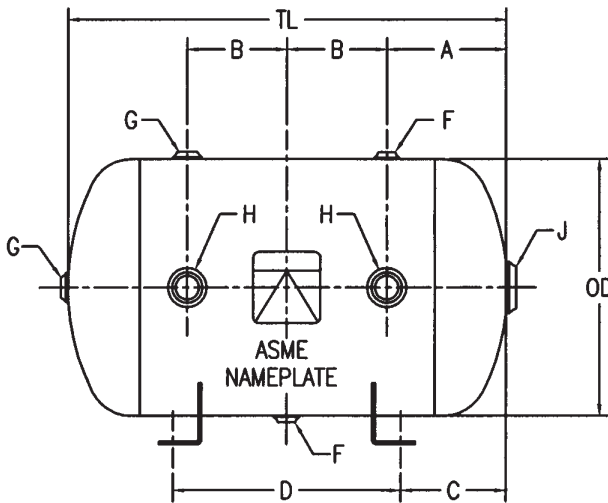


Tank Saddles



NOM. CAP. GAL.	CU.FT.	PART NO.	MAWP	T.W.	DIMENSIONS IN INCHES								N.P.T. OPENINGS				
					OD	TL	HT	A	B	C	D	E	F	G	H	J	K
400	53.48	302486	137	670	36.00	93.00	42.00	15.00	21.00	20.50	52.00	33.00	N/A	2	2-1/2	1/4	1/2
400	53.48	302487	165	750	36.00	93.00	42.00	15.00	21.00	20.50	52.00	33.00	N/A	2	2-1/2	1/4	1/2
400	53.48	302488	200	925	36.00	93.00	42.00	15.00	21.00	20.50	52.00	33.00	N/A	2	2-1/2	1/4	1/2
660	88.24	302489	137	1375	42.00	117.00	48.00	18.00	27.00	23.50	70.00	39.00	57.00	2	3	1/4	1
660	88.24	302490	165	1375	42.00	117.00	48.00	18.00	27.00	23.50	70.00	39.00	57.00	2	3	1/4	1
660	88.24	302491	200	1375	42.00	117.00	48.00	18.00	27.00	23.50	70.00	39.00	57.00	2	3	1/4	1
1060	141.71	302492	137	2150	48.00	144.00	60.00	24.00	32.00	30.00	84.00	45.00	60.00	2	3	1/4	1
1060	141.71	302493	165	2200	48.00	144.00	60.00	24.00	32.00	30.00	84.00	45.00	60.00	2	3	1/4	1
1060	141.71	302494	200	2500	48.00	144.00	60.00	24.00	32.00	30.00	84.00	45.00	60.00	2	3	1/4	1
1550	207.22	302495	137	2600	54.00	166.00	66.00	26.00	38.00	34.00	98.00	51.00	76.00	2	3	1/4	1
1550	207.22	302496	165	2700	54.00	166.00	66.00	26.00	38.00	34.00	98.00	51.00	76.00	2	3	1/4	1
2200	294.12	302497	137	4000	60.00	190.00	72.00	29.00	44.00	37.00	116.00	57.00	98.00	2	3	1/4	1
2200	294.12	302498	165	4200	60.00	190.00	72.00	29.00	44.00	37.00	116.00	57.00	98.00	2	3	1/4	1
2560	342.25	302499	137	4500	60.00	220.00	72.00	29.00	54.00	44.50	131.00	57.00	118.00	2	3	1/4	1
2560	342.25	302500	165	4500	60.00	220.00	72.00	29.00	54.00	44.50	131.00	57.00	118.00	2	3	1/4	1

HORIZONTAL AIR RECEIVERS 1-30 GALLONS

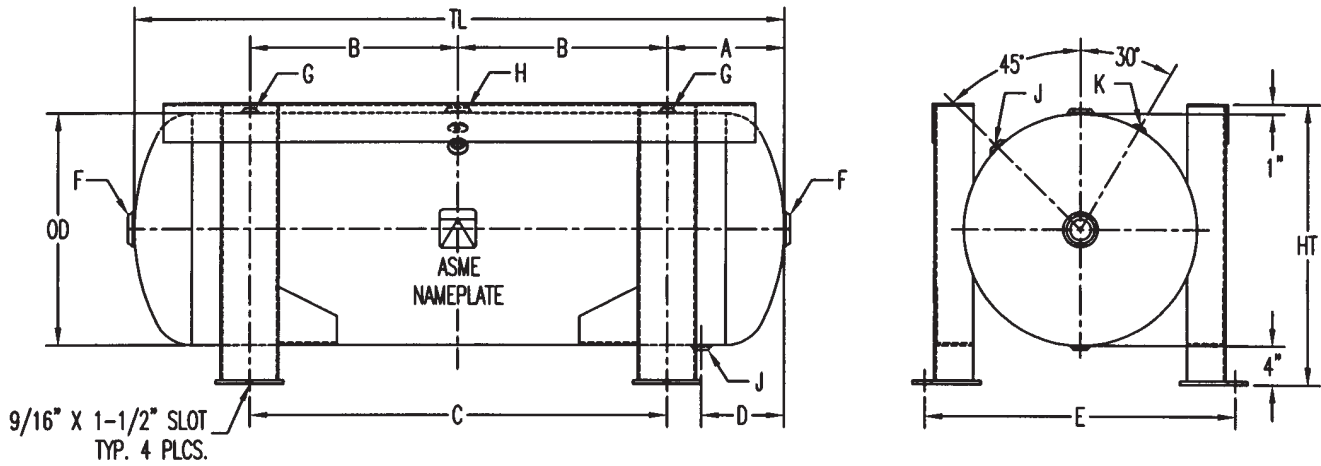


7/16" DIA. HOLES (1-15 GALLON)
9/16" DIA. HOLES (19-30 GALLON)

10

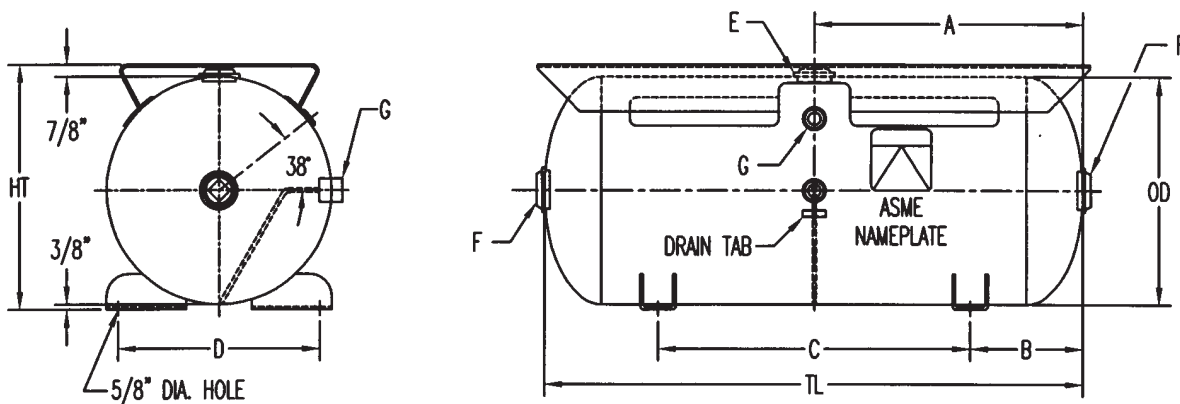
NOM. CAP.		PART NO.	MAWP	T.W.	DIMENSIONS IN INCHES										N.P.T. OPENINGS			
GAL.	CU.FT.				OD	TL	HT	A	B	C	D	E	F	G	H	J		
1	0.13	304978	200	15	6.00	11.00	8.00	4.00	1.50	2.00	7.00	3.50	1/2	3/4	3/4	1		
2	0.27	304980	200	17	8.00	11.00	10.00	4.50	1.00	2.00	7.00	4.50	1/2	3/4	3/4	1		
3	0.40	304982	200	22	8.00	16.00	10.00	5.50	2.50	3.00	10.00	4.50	1/2	3/4	3/4	1		
5	0.67	304932	200	25	10.00	16.00	12.00	4.88	3.13	3.00	10.00	6.50	1/2	3/4	3/4	1		
7	0.94	304934	200	29	12.00	17.00	14.00	6.00	2.50	3.50	10.00	6.50	1/2	3/4	3/4	1		
10	1.34	304936	200	35	12.00	23.00	14.00	6.00	5.50	6.50	10.00	6.50	1/2	3/4	3/4	1		
13	1.74	304938	200	45	14.00	23.00	16.00	6.38	5.13	4.00	15.00	8.50	1/2	3/4	1-1/2	1		
15	2.01	304940	200	51	14.00	26.00	16.00	7.00	6.00	5.50	15.00	8.50	1/2	3/4	1-1/2	1		
19	2.54	304942	200	59	16.00	25.00	18.00	7.00	5.50	4.50	16.00	10.50	1/2	3/4	1-1/2	2		
24	3.21	304944	200	72	16.00	31.00	18.00	7.00	8.50	7.50	16.00	10.50	1/2	3/4	1-1/2	2		
30	4.01	304946	200	85	18.00	31.00	20.00	7.50	8.00	7.50	16.00	10.50	1/2	3/4	1-1/2	2		

HORIZONTAL GRASSHOPPER TANK



NOM. CAP. GAL.	CU.FT.	PART NO.	MAWP	T.W.	DIMENSIONS IN INCHES								N.P.T. OPENINGS				
					OD	TL	HT	A	B	C	D	E	F	G	H	J	K
120	16.04	302481	200	460	24.00	67.00	29.00	12.00	21.50	43.00	8.50	32.00	2	1/2	1-1/2	3/4	1/8

HORIZONTAL GAS DRIVEN TANK



NOM. CAP. GAL.	CU.FT.	PART NO.	MAWP	TOP PLATE	T.W.	DIMENSIONS IN INCHES								N.P.T. OPENINGS		
						OD	TL	HT	A	B	C	D	E	F	G	
30	4.01	302472	200	.25X8.88X39	160	16.00	38.00	17.25	19.00	8.00	22.00	13.13	1-1/4	1-1/2	1/4	

CROSS REFERENCE LIST: VERTICAL AIR RECEIVERS

NOM. CAP. GAL.	CU.FT.	DESCRIPTION	SIZE	MAWP	PART NUMBERS			COMMENTS
					OLD MT&E	OLD BRUNNER	NEW MT&E	
10	1.34	Basing Only	10 x 30	200	N/A	261003000027	302400	Brunner design with MT&E basing.
		"	"	300	N/A	261003000030	302401	"
15	2.01	Basing Only	12 x 33	200	N/A	261203300062	302402	Brunner design with MT&E basing.
		"	"	300	N/A	261203300065	302403	"
20	2.67	Basing Only	14 x 33	200	N/A	261403300083	302404	Brunner design with MT&E basing.
		"	"	300	N/A	261403300086	302405	"
30	4.01	Basing Only	16 x 38	200	35543	261603800125	302406	Brunner design with MT&E basing.
		"	"	300	N/A	261603800128	302407	"
		Basing & TP	"	200	33622.1	201603801314	302408	Brunner design with MT&E basing and 10x24 platform.
60	8.02	Basing Only	20 x 48	200	35545	262004800149	302410	Brunner design with MT&E basing.
		"	"	300	N/A	262004800152	302411	"
		Basing & TP	"	200	33258.3	202004801594	302412	Brunner design with MT&E basing and 13.5x30 platform.
80	10.70	Basing Only	20 x 63	200	N/A	262006300165	302414	Brunner design with MT&E basing.
		"	"	300	N/A	262006300168	302415	"
		Basing Only	24 x 46	200	35555	262404800179	302417	Brunner design with MT&E basing.
		"	"	300	N/A	262404800182	302418	"
		Basing & TP	"	200	33262.1	252404801098	302419	Brunner design with MT&E basing and 13.5x30 platform.
120	16.04	Basing Only	30 x 46	200	35557	263004600215	302423	Brunner design - Basing "clips" with slot in place of hole.
		Basing & TP	"	200	33624.1	203004601530	302424	Same changes as above, plus used MT&E's 15x40 platform.
		"	"	300	N/A	253004600211	302425	"
		Basing Only	24 x 67	200	3230	262406900201	302421	Brunner design - Basing "clips" with slot in place of hole.
		"	"	300	N/A	262406900204	302422	"
200	26.74	Basing Only	30 x 72	200	3240	273007200236	302426	Brunner design - Basing "clips" with slot in place of hole.
		"	"	300	N/A	273007200239	302427	"
240	32.09	Basing Only	30 x 84	200	3249	273008400257	302428	Brunner design - Basing "clips" with slot in place of hole.
		"	"	300	N/A	273008400260	302429	"
400	53.48	Basing Only	36 x 93	137	3164	273609300266	N/A	Replaced by the 165-psi version.
		"	"	165	3127	273609300270	302432	Brunner design - Basing "clips" with slot in place of hole.
		"	"	200	3129	273609300271	302433	"
		"	"	300	3131	273609300274	302434	"
500	66.84	Basing Only	36 x 116	137	N/A	273611600226	N/A	Replaced by the 165-psi version.
		"	"	165	N/A	273611600227	302436	Brunner design - Basing "clips" with slot in place of hole.
		"	"	200	N/A	273611600228	302437	"
660	88.24	Basing Only	42 x 117	137	3175	284211700280	302438	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	3132	284211700284	302439	"
		"	"	200	3133	284211700285	302440	"
		"	"	300	37402	284211700288	302441	"
1060	141.71	Basing Only	48 x 144	137	3177	284814400294	302442	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	3135	284814400297	302443	"
		"	"	200	3136	284814400298	302444	"
1550	207.22	Basing Only	54 x 166	137	3179	285416600305	N/A	Replaced by the 150-psi version.
		"	"	150	3138	N/A	302445	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	N/A	285416600308	302446	"
		"	"	200	3139	285416600309	302447	"
2200	294.12	Basing Only	60 x 190	137	N/A	286019000316	302448	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	N/A	286019000319	302449	"
		"	"	200	N/A	286019000320	302450	"
2560	342.25	Basing Only	60 x 220	137	3181	286022000327	302451	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	N/A	286022000330	302452	"
		"	"	200	3141	286022000331	302453	"
3000	401.07	Basing Only	66 x 214	137	N/A	286621400333	302454	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	N/A	286621400334	302455	"
3800	508.02	Basing Only	72 x 228	137	N/A	287222800335	302456	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	N/A	287222800336	302457	"
5000	668.45	Basing Only	84 x 232	137	N/A	288423200337	302458	Brunner design - Basing "clips" with slot in place of hole.
		"	"	165	N/A	288423200338	302459	"
140	18.72	Epoxy-Lined	24 x 75	150	N/A	202407503368	302512	Brunner design.
190	25.40	"	30 x 66	150	N/A	203006603369	302513	"
225	30.08	"	30 x 78	150	N/A	203007803370	302514	"
275	35.83	"	36 x 68	150	N/A	203606803371	302515	"
320	42.78	"	36 x 80	150	N/A	203608003372	302516	"
388	51.87	"	36 x 93	150	N/A	203609303373	302517	"
375	50.13	"	42 x 70	150	N/A	204207003374	302518	"
450	60.16	"	42 x 83	150	N/A	204208303375	302519	"
535	71.52	"	42 x 96	150	N/A	204209603376	302520	"
60	8.02	Vacuum A/R's	20 x 48	150	300956	N/A	300956	MT&E design.
80	10.70	"	20 x 63	150	300957	N/A	300957	"
120	16.04	"	24 x 67	150	300958	N/A	300958	"
240	32.09	"	30 x 84	150	300959	N/A	300959	"
400	53.48	"	36 x 93	150	300960	N/A	300960	"

CROSS REFERENCE LIST: HORIZONTAL AIR RECEIVERS

NOM. CAP.		DESCRIPTION	SIZE	MAWP	PART NUMBERS			COMMENTS
GAL.	CU.FT.				OLD MT&E	OLD BRUNNER	NEW MT&E	
10	1.34	Legs Only	10 x 30	200	N/A	231003000020	302460	Brunner design except moved inspection ports from shell to heads.
		Legs & TP	"	200	N/A	221003000013	302461	"
		"	"	300	N/A	221003000016	302462	"
15	2.01	Legs Only	12 x 33	200	N/A	231203300055	302463	Brunner design except moved inspection ports from shell to heads.
		Legs & TP	"	200	N/A	221203300048	302464	"
		"	"	300	N/A	221203300051	302465	"
20	2.67	Legs Only	14 x 33	200	35527	231403300076	302466	MT&E design except rated at 200-psi.
		Legs & TP	"	200	35527.1	221403300069	302467	"
		"	"	300	N/A	221403300072	302468	"
30	4.01	Legs Only	16 x 38	200	35529	231603800111	302469	MT&E design except rated at 200-psi.
		Legs & TP	"	200	33615.2	221603801092	302470	"
		"	"	300	N/A	221603800107	302471	"
		Gas Eng. Dr.	"	200	3273	201603800988	302472	MT&E design with inspection ports moved to center heads.
60	8.02	Legs Only	20 x 48	200	35532	232004800135	302473	MT&E design.
		Legs & TP	"	200	33252.3	202004801518	302474	"
		"	"	300	N/A	222004800134	302475	"
80	10.70	Legs Only	20 x 63	200	35534	232006300158	302476	MT&E design.
		Legs & TP	"	200	33254.4	222006301051	302477	"
		"	"	300	N/A	222006300157	302478	"
120	16.04	Legs Only	24 x 67	200	35536	232406900189	302479	MT&E design.
		Legs & TP	"	200	33256.3	202406901339	302480	"
		Grasshopper	"	200	N/A	202406903244	302481	Brunner design.
200	26.74	Legs Only	30 x 72	200	35538	233007200229	302482	MT&E design.
		Legs & TP	"	200	33617.2	203007201303	302483	"
240	32.09	Legs Only	30 x 84	200	35541	233008400250	302484	MT&E design.
		Legs & TP	"	200	33619.1	203008401752	302485	"
400	53.48	Legs Only	36 x 93	137	3264	243609300235	302486	Brunner design.
		"	"	165	3265	243609300263	302487	"
		"	"	200	3267	243609300264	302488	"
660	88.24	Legs Only	42 x 117	137	3275	244211700339	302489	Brunner design.
		"	"	165	3282	244211700277	302490	"
		"	"	200	3283	244211700278	302491	"
1060	141.71	Legs Only	48 x 144	137	3277	244814400340	302492	Brunner design.
		"	"	165	3285	244814400291	302493	"
		"	"	200	3286	244814400292	302494	"
1550	207.22	Legs Only	54 x 166	137	3279	245416600341	302495	Brunner design.
		"	"	165	N/A	245416600302	302496	"
2200	294.12	Legs Only	60 x 190	137	N/A	246019000342	302497	Brunner design.
		"	"	165	N/A	246019000313	302498	"
2560	342.25	Legs Only	60 x 220	137	3281	246022000343	302499	Brunner design.
		"	"	165	N/A	246022000324	302500	"
1	0.13	Legs Only	6 x 11	200	N/A	280601100588	302501	Brunner design.
2	0.27	"	8 x 11	200	N/A	280801100589	302502	"
3	0.40	"	8 x 16	200	N/A	280801600590	302503	"
5	0.67	"	10 x 16	200	N/A	281001600662	302504	"
7	0.94	"	12 x 17	200	N/A	281201700736	302505	"
10	1.34	"	12 x 23	200	N/A	281202300741	302506	"
13	1.74	"	14 x 23	200	N/A	281402300585	302507	"
15	2.01	"	14 x 26	200	N/A	281402600586	302508	"
19	2.54	"	16 x 25	200	N/A	281602500521	302509	"
24	3.21	"	16 x 38	200	N/A	281603100789	302510	"
30	4.01	"	18 x 31	200	N/A	281803100671	302511	"



TECHNICAL AIDS

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

Capacity		Pressures (in pounds)					
Gals.	Cu.Ft.	75	100	125	150	200	250
30	4.0	20.5	27.3	34.2	41.0	54.7	68.3
60	8.0	41.0	54.7	68.2	82.0	109.4	136.7
80	10.7	54.7	73.0	91.2	109.4	146.0	182.4
120	16.1	82.0	109.3	136.2	164.0	218.7	273.3
200	26.8	136.7	182.2	227.8	273.4	364.5	455.6
240	32.2	164.0	218.7	273.4	328.0	437.4	546.7
400	53.6	273.4	364.5	455.6	546.7	729.0	911.2
660	88.4	451.0	601.4	751.7	902.1	1202.8	1503.4
1060	142.0	724.4	965.9	1207.3	1448.8	1931.7	2414.5
1600	214.4	1093.4	1457.9	1822.4	2186.9	2915.8	3644.8
2560	343.0	1749.0	2333.0	2916.0	3499.0	4665.0	5832.0

Capacities 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 = $\frac{\text{cu.ft.}}{.134}$ ••• cu.ft. = Gallons x .134.

USEFUL FORMULAS - Sizing a Tank

A) Constant Speed Operation: Tank Size (ft³) = $\frac{\text{Compressor Flow (CFM)}}{7}$

B) Typical Sizing Formula: $V_r = \frac{14.7t(Q_r - Q_c)}{P_{max} - P_{min}}$ where t = time (min) that receiver can supply required amount of air,
 Q_r = consumption rate of pneumatic system (cfm),
 Q_c = output flow rate of compressor (cfm),
 P_{max} = maximum pressure level in receiver (psi),
 P_{min} = minimum pressure level in receiver (psi),
 V_r = receiver size (ft³)

C) 7.48 Gallons = 1ft³ Volume

D) 14.5 psi = 1 BAR

E) 35 CFM = $\frac{1 \text{ Meter}^3}{\text{Min.}}$

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

$$\frac{80 \text{ Gallon Tank}}{7.5 \text{ gal./ft}^3} \times (100 \text{ psig} - 0 \text{ psig}) = \frac{1066.67}{14.7 \text{ (the ATM Pressure)} \times 18 \text{ (the CFM of Unit)}} = 4 \text{ min}$$

NOM. CAP.		Horz. Vert.	No Slots	NEMA Frame Sizes								
GAL.	CU.FT.			56	56H	143T	145T	182T	184T	213T	215T	254T
10	1.34	H	X									
15	2.01	H	X									
20	2.67	H	X									
30	4.01	H&V		X	X	X	X					
60	8.02	H&V					X	X	X	X		
80	10.70	V					X	X	X	X		
80	10.70	H							X	X	X	X
120	16.04	H&V							X	X	X	X
200	26.74	H	X									
240	32.09	H	X									

DID YOU KNOW?

Manchester Tank is the largest manufacturer of receivers in North America!

Manchester Tank offers a more diverse product line than its competitors!

A majority of our product line is sold to original equipment manufacturers. We take our customer product requirements seriously. Plus, we offer a large engineering department to work directly with customers to design the correct product for their application.

Here are some examples of our diverse product line:

- Air brake reservoirs for mass transit vehicles
- Dental instruments
- Air/Oil separators
- Valve and system activators
- Air starter tanks
- Sandblast tanks
- Tire changers
- Portable carry tanks
- Surge tanks
- Bladder tanks
- Over-the-road tire trucks
- A variety of tanks for every day industrial and commercial use

We manufacture the largest capacity of different size and design pressures!

From 3" diameter at 3000-psi design up to 120" diameter at 200-psi.

Ask our engineering department to design to your requirements.

We maintain active involvement in the industry!

Manchester Tank stays on top of industry products, requirements and issues by serving on committees in the following organizations: ASME, PVMA, and the National Board.

We will work hard to earn your business!

Manchester Tank is dedicated to serving its customers in every way possible.

Be sure to call us before you buy anywhere else!

MANCHESTER TANK & EQUIPMENT, CO. DISTRIBUTION MAP



To place orders and check current availability,
Contact Customer Service:

800-399-5628

Fax: 800-877-9988

Or visit the Manchester web site:

www.mantank.com

E-mail: sales@mantank.com