



# BARGE "HFL 220 SS"

## ULLAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>
1 CENTER	- 00-1/8	00-1/8	- 00-1/4	00-1/4	- 00-3/8	00-3/8	- 00-1/2	00-1/2	- 00-5/8	00-5/8	- 00-7/8	00-7/8
2 CENTER	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-5/8	- 00-5/8	00-3/4	- 00-3/4
3 CENTER	- 00-1/8	00-1/8	- 00-1/4	00-1/4	- 00-3/8	00-3/8	- 00-1/2	00-1/2	- 00-5/8	00-5/8	- 00-3/4	00-3/4

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 2'-00"  
 AFT DRAFT = 4'-00"  
 DIFF. = 2'-00" (DOWN BY STERN)

THE CORRECTION FOR 2'-00" TRIM DOWN BY STERN FOR 3 CENTER IS 00-1/4"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 3 CENTER, THE TRIM CORRECTED ULLAGE IS 4'-00 1/4"

LENGTH BETWEEN DRAFT MARKS: 162'-09"

April 4, 2014

PRECISION MEASUREMENT  
 & ANALYSIS, INC.  
 P.O. Box 2092  
 Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 220 SS"

## 1 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 15'-10"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	3,294.12	0	3,078.62	0	2,863.11	0	2,645.60	0	2,397.96	0	2,150.90	0	1,903.81	0	1,656.82
1/4		1/4		1/4	3,289.63	1/4	3,074.13	1/4	2,858.63	1/4	2,640.43	1/4	2,392.82	1/4	2,145.75	1/4	1,898.66	1/4	1,651.68
1/2		1/2		1/2	3,285.14	1/2	3,069.64	1/2	2,854.14	1/2	2,635.27	1/2	2,387.67	1/2	2,140.61	1/2	1,893.51	1/2	1,646.54
3/4		3/4		3/4	3,280.65	3/4	3,065.15	3/4	2,849.65	3/4	2,630.11	3/4	2,382.52	3/4	2,135.47	3/4	1,888.36	3/4	1,641.40
1		1		1	3,276.16	1	3,060.66	1	2,845.16	1	2,624.95	1	2,377.37	1	2,130.32	1	1,883.21	1	1,636.25
1/4		1/4		1/4	3,271.67	1/4	3,056.17	1/4	2,840.67	1/4	2,619.78	1/4	2,372.22	1/4	2,125.18	1/4	1,878.06	1/4	1,631.11
1/2		1/2		1/2	3,461.60	1/2	3,267.18	1/2	3,051.68	1/2	2,836.18	1/2	2,614.62	1/2	2,367.08	1/2	2,120.03	1/2	1,872.92
3/4		3/4		3/4	3,461.56	3/4	3,262.69	3/4	3,047.19	3/4	2,831.69	3/4	2,609.46	3/4	2,361.93	3/4	2,114.89	3/4	1,867.77
2		2		2	3,461.52	2	3,258.20	2	3,042.70	2	2,827.20	2	2,604.30	2	2,356.78	2	2,109.74	2	1,862.62
1/4		1/4		1/4	3,459.59	1/4	3,253.71	1/4	3,038.21	1/4	2,822.71	1/4	2,599.14	1/4	2,351.63	1/4	2,104.60	1/4	1,857.47
1/2		1/2		1/2	3,457.66	1/2	3,249.22	1/2	3,033.72	1/2	2,818.22	1/2	2,593.97	1/2	2,346.48	1/2	2,099.45	1/2	1,852.32
3/4		3/4		3/4	3,455.73	3/4	3,244.73	3/4	3,029.23	3/4	2,813.73	3/4	2,588.81	3/4	2,341.34	3/4	2,094.31	3/4	1,847.17
3		3		3	3,453.80	3	3,240.24	3	3,024.74	3	2,809.24	3	2,583.65	3	2,336.19	3	2,089.16	3	1,842.02
1/4		1/4		1/4	3,449.80	1/4	3,235.75	1/4	3,020.25	1/4	2,804.75	1/4	2,578.49	1/4	2,331.04	1/4	2,084.02	1/4	1,836.87
1/2		1/2		1/2	3,445.79	1/2	3,231.26	1/2	3,015.76	1/2	2,800.26	1/2	2,573.32	1/2	2,325.89	1/2	2,078.87	1/2	1,831.73
3/4		3/4		3/4	3,441.79	3/4	3,226.77	3/4	3,011.27	3/4	2,795.77	3/4	2,568.16	3/4	2,320.74	3/4	2,073.72	3/4	1,826.58
4		4		4	3,437.78	4	3,222.28	4	3,006.78	4	2,791.28	4	2,563.00	4	2,315.60	4	2,068.57	4	1,821.43
1/4		1/4		1/4	3,433.29	1/4	3,217.79	1/4	3,002.29	1/4	2,786.79	1/4	2,557.84	1/4	2,310.45	1/4	2,063.42	1/4	1,816.28
1/2		1/2		1/2	3,428.80	1/2	3,213.30	1/2	2,997.80	1/2	2,782.30	1/2	2,552.68	1/2	2,305.30	1/2	2,058.28	1/2	1,811.13
3/4		3/4		3/4	3,424.31	3/4	3,208.81	3/4	2,993.31	3/4	2,777.81	3/4	2,547.51	3/4	2,300.15	3/4	2,053.13	3/4	1,805.98
5		5		5	3,419.83	5	3,204.32	5	2,988.82	5	2,773.32	5	2,542.35	5	2,295.00	5	2,047.98	5	1,800.83
1/4		1/4		1/4	3,415.34	1/4	3,199.83	1/4	2,984.33	1/4	2,768.83	1/4	2,537.19	1/4	2,289.86	1/4	2,042.83	1/4	1,795.68
1/2		1/2		1/2	3,410.85	1/2	3,195.35	1/2	2,979.84	1/2	2,764.34	1/2	2,532.03	1/2	2,284.71	1/2	2,037.68	1/2	1,790.54
3/4		3/4		3/4	3,406.36	3/4	3,190.86	3/4	2,975.35	3/4	2,759.85	3/4	2,526.86	3/4	2,279.56	3/4	2,032.53	3/4	1,785.39
6		6		6	3,401.87	6	3,186.37	6	2,970.87	6	2,755.36	6	2,521.70	6	2,274.41	6	2,027.38	6	1,780.24
1/4		1/4		1/4	3,397.38	1/4	3,181.88	1/4	2,966.38	1/4	2,750.87	1/4	2,516.54	1/4	2,269.26	1/4	2,022.23	1/4	1,775.09
1/2		1/2		1/2	3,392.89	1/2	3,177.39	1/2	2,961.89	1/2	2,746.39	1/2	2,511.38	1/2	2,264.12	1/2	2,017.08	1/2	1,769.94
3/4		3/4		3/4	3,388.40	3/4	3,172.90	3/4	2,957.40	3/4	2,741.90	3/4	2,506.22	3/4	2,258.97	3/4	2,011.93	3/4	1,764.79
7		7		7	3,383.91	7	3,168.41	7	2,952.91	7	2,737.41	7	2,501.05	7	2,253.82	7	2,006.79	7	1,759.64
1/4		1/4		1/4	3,379.42	1/4	3,163.92	1/4	2,948.42	1/4	2,732.92	1/4	2,495.89	1/4	2,248.67	1/4	2,001.64	1/4	1,754.50
1/2		1/2		1/2	3,374.93	1/2	3,159.43	1/2	2,943.93	1/2	2,728.43	1/2	2,490.73	1/2	2,243.52	1/2	1,996.49	1/2	1,749.36
3/4		3/4		3/4	3,370.44	3/4	3,154.94	3/4	2,939.44	3/4	2,723.94	3/4	2,485.57	3/4	2,238.38	3/4	1,991.34	3/4	1,744.21
8		8		8	3,365.95	8	3,150.45	8	2,934.95	8	2,719.45	8	2,480.41	8	2,233.23	8	1,986.19	8	1,739.07
1/4		1/4		1/4	3,361.46	1/4	3,145.96	1/4	2,930.46	1/4	2,714.96	1/4	2,475.24	1/4	2,228.08	1/4	1,981.04	1/4	1,733.93
1/2		1/2		1/2	3,356.97	1/2	3,141.47	1/2	2,925.97	1/2	2,710.47	1/2	2,470.08	1/2	2,222.93	1/2	1,975.89	1/2	1,728.79
3/4		3/4		3/4	3,352.48	3/4	3,136.98	3/4	2,921.48	3/4	2,705.98	3/4	2,464.92	3/4	2,217.78	3/4	1,970.74	3/4	1,723.65
9		9		9	3,347.99	9	3,132.49	9	2,916.99	9	2,701.49	9	2,459.76	9	2,212.64	9	1,965.59	9	1,718.51
1/4		1/4		1/4	3,343.50	1/4	3,128.00	1/4	2,912.50	1/4	2,697.00	1/4	2,454.60	1/4	2,207.49	1/4	1,960.45	1/4	1,713.37
1/2		1/2		1/2	3,339.01	1/2	3,123.51	1/2	2,908.01	1/2	2,692.51	1/2	2,449.45	1/2	2,202.35	1/2	1,955.30	1/2	1,708.23
3/4		3/4		3/4	3,334.52	3/4	3,119.02	3/4	2,903.52	3/4	2,688.02	3/4	2,444.30	3/4	2,197.20	3/4	1,950.15	3/4	1,703.09
10		10		10	3,330.03	10	3,114.53	10	2,899.03	10	2,683.53	10	2,439.15	10	2,192.05	10	1,945.00	10	1,697.95
1/4		1/4		1/4	3,325.54	1/4	3,110.04	1/4	2,894.54	1/4	2,679.04	1/4	2,434.00	1/4	2,186.91	1/4	1,939.85	1/4	1,692.80
1/2		1/2		1/2	3,321.05	1/2	3,105.55	1/2	2,890.05	1/2	2,674.55	1/2	2,428.85	1/2	2,181.77	1/2	1,934.70	1/2	1,687.66
3/4		3/4		3/4	3,316.56	3/4	3,101.06	3/4	2,885.56	3/4	2,670.06	3/4	2,423.70	3/4	2,176.62	3/4	1,929.55	3/4	1,682.52
11		11		11	3,312.07	11	3,096.57	11	2,881.07	11	2,665.57	11	2,418.56	11	2,171.48	11	1,924.40	11	1,677.38
1/4		1/4		1/4	3,307.59	1/4	3,092.08	1/4	2,876.58	1/4	2,660.58	1/4	2,413.41	1/4	2,166.33	1/4	1,919.26	1/4	1,672.24
1/2		1/2		1/2	3,303.10	1/2	3,087.59	1/2	2,872.09	1/2	2,655.58	1/2	2,408.26	1/2	2,161.19	1/2	1,914.11	1/2	1,667.10
3/4		3/4		3/4	3,298.61	3/4	3,083.11	3/4	2,867.60	3/4	2,650.59	3/4	2,403.11	3/4	2,156.04	3/4	1,908.96	3/4	1,661.96

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.  
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.  
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.  
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE.  
GAUGE POINT: (MMC) LOCATED ON CENTERLINE AND 25'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "HFL 220 SS"

## 1 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 15'-10"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	1,409.91	0	1,162.88	0	915.84	0	668.82	0	424.71	0	180.56	0		0		0		0	
1/4	1,404.76	1/4	1,157.73	1/4	910.70	1/4	663.67	1/4	419.73	1/4	175.43	1/4		1/4		1/4		1/4	
1/2	1,399.61	1/2	1,152.58	1/2	905.55	1/2	658.52	1/2	414.74	1/2	170.29	1/2		1/2		1/2		1/2	
3/4	1,394.47	3/4	1,147.44	3/4	900.40	3/4	653.38	3/4	409.76	3/4	165.16	3/4		3/4		3/4		3/4	
1	1,389.32	1	1,142.29	1	895.26	1	648.23	1	404.77	1	160.02	1		1		1		1	
1/4	1,384.18	1/4	1,137.14	1/4	890.11	1/4	643.08	1/4	399.79	1/4	154.90	1/4		1/4		1/4		1/4	
1/2	1,379.03	1/2	1,132.00	1/2	884.96	1/2	637.94	1/2	394.80	1/2	149.77	1/2		1/2		1/2		1/2	
3/4	1,373.88	3/4	1,126.85	3/4	879.82	3/4	632.79	3/4	389.82	3/4	144.64	3/4		3/4		3/4		3/4	
2	1,368.74	2	1,121.70	2	874.67	2	627.64	2	384.83	2	139.52	2		2		2		2	
1/4	1,363.59	1/4	1,116.56	1/4	869.53	1/4	622.50	1/4	379.85	1/4	134.37	1/4		1/4		1/4		1/4	
1/2	1,358.44	1/2	1,111.41	1/2	864.38	1/2	617.35	1/2	374.86	1/2	129.22	1/2		1/2		1/2		1/2	
3/4	1,353.30	3/4	1,106.26	3/4	859.23	3/4	612.21	3/4	369.88	3/4	124.07	3/4		3/4		3/4		3/4	
3	1,348.15	3	1,101.12	3	854.09	3	607.06	3	364.89	3	118.92	3		3		3		3	
1/4	1,343.00	1/4	1,095.97	1/4	848.94	1/4	601.91	1/4	359.91	1/4	113.77	1/4		1/4		1/4		1/4	
1/2	1,337.86	1/2	1,090.82	1/2	843.79	1/2	596.77	1/2	354.92	1/2	108.62	1/2		1/2		1/2		1/2	
3/4	1,332.71	3/4	1,085.68	3/4	838.65	3/4	591.62	3/4	349.94	3/4	103.48	3/4		3/4		3/4		3/4	
4	1,327.56	4	1,080.53	4	833.50	4	586.47	4	344.95	4	98.33	4		4		4		4	
1/4	1,322.42	1/4	1,075.39	1/4	828.35	1/4	581.33	1/4	339.95	1/4	93.19	1/4		1/4		1/4		1/4	
1/2	1,317.27	1/2	1,070.24	1/2	823.21	1/2	576.18	1/2	334.95	1/2	88.06	1/2		1/2		1/2		1/2	
3/4	1,312.12	3/4	1,065.09	3/4	818.06	3/4	571.03	3/4	329.94	3/4	82.93	3/4		3/4		3/4		3/4	
5	1,306.98	5	1,059.95	5	812.92	5	565.89	5	324.94	5	77.80	5		5		5		5	
1/4	1,301.83	1/4	1,054.80	1/4	807.77	1/4	560.74	1/4	319.82	1/4	72.69	1/4		1/4		1/4		1/4	
1/2	1,296.68	1/2	1,049.65	1/2	802.62	1/2	555.60	1/2	314.69	1/2	67.59	1/2		1/2		1/2		1/2	
3/4	1,291.54	3/4	1,044.51	3/4	797.48	3/4	550.45	3/4	309.57	3/4	62.48	3/4		3/4		3/4		3/4	
6	1,286.39	6	1,039.36	6	792.33	6	545.30	6	304.45	6	57.38	6		6		6		6	
1/4	1,281.25	1/4	1,034.21	1/4	787.18	1/4	540.15	1/4	299.29	1/4	52.32	1/4		1/4		1/4		1/4	
1/2	1,276.10	1/2	1,029.07	1/2	782.04	1/2	534.99	1/2	294.12	1/2	47.25	1/2		1/2		1/2		1/2	
3/4	1,270.95	3/4	1,023.92	3/4	776.89	3/4	529.84	3/4	288.96	3/4	42.19	3/4		3/4		3/4		3/4	
7	1,265.81	7	1,018.77	7	771.74	7	524.68	7	283.80	7	37.13	7		7		7		7	
1/4	1,260.66	1/4	1,013.63	1/4	766.60	1/4	519.64	1/4	278.64	1/4	32.65	1/4		1/4		1/4		1/4	
1/2	1,255.51	1/2	1,008.48	1/2	761.45	1/2	514.59	1/2	273.48	1/2	28.17	1/2		1/2		1/2		1/2	
3/4	1,250.37	3/4	1,003.33	3/4	756.30	3/4	509.55	3/4	268.31	3/4	23.69	3/4		3/4		3/4		3/4	
8	1,245.22	8	998.19	8	751.16	8	504.50	8	263.15	8	19.21	8		8		8		8	
1/4	1,240.07	1/4	993.04	1/4	746.01	1/4	499.51	1/4	257.99	1/4	16.20	1/4		1/4		1/4		1/4	
1/2	1,234.93	1/2	987.89	1/2	740.87	1/2	494.52	1/2	252.83	1/2	13.19	1/2		1/2		1/2		1/2	
3/4	1,229.78	3/4	982.75	3/4	735.72	3/4	489.53	3/4	247.67	3/4	10.18	3/4		3/4		3/4		3/4	
9	1,224.63	9	977.60	9	730.57	9	484.54	9	242.51	9	7.17	9		9		9		9	
1/4	1,219.49	1/4	972.46	1/4	725.43	1/4	479.55	1/4	237.34	1/4	5.88	1/4		1/4		1/4		1/4	
1/2	1,214.34	1/2	967.31	1/2	720.28	1/2	474.57	1/2	232.18	1/2	4.59	1/2		1/2		1/2		1/2	
3/4	1,209.19	3/4	962.16	3/4	715.13	3/4	469.58	3/4	227.02	3/4	3.30	3/4		3/4		3/4		3/4	
10	1,204.05	10	957.02	10	709.99	10	464.60	10	221.86	10	2.01	10		10		10		10	
1/4	1,198.90	1/4	951.87	1/4	704.84	1/4	459.61	1/4	216.70	1/4		1/4		1/4		1/4		1/4	
1/2	1,193.75	1/2	946.72	1/2	699.69	1/2	454.62	1/2	211.54	1/2		1/2		1/2		1/2		1/2	
3/4	1,188.61	3/4	941.58	3/4	694.55	3/4	449.64	3/4	206.37	3/4		3/4		3/4		3/4		3/4	
11	1,183.46	11	936.43	11	689.40	11	444.65	11	201.21	11		11		11		11		11	
1/4	1,178.32	1/4	931.28	1/4	684.26	1/4	439.67	1/4	196.05	1/4		1/4		1/4		1/4		1/4	
1/2	1,173.17	1/2	926.14	1/2	679.11	1/2	434.68	1/2	190.89	1/2		1/2		1/2		1/2		1/2	
3/4	1,168.02	3/4	920.99	3/4	673.96	3/4	429.70	3/4	185.73	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 04/02/2014 CL  
CALCULATED: 04/04/2014 CL  
REPRINTED: 03/18/2015 SW

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2015

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "HFL 220 SS"

## 2 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 15'-10"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	3,785.23	0	3,509.01	0	3,232.78	0	2,956.56	0	2,680.33	0	2,404.11	0	2,127.88	0	1,851.66
1/4		1/4		1/4	3,779.48	1/4	3,503.25	1/4	3,227.03	1/4	2,950.80	1/4	2,674.58	1/4	2,398.35	1/4	2,122.13	1/4	1,845.90
1/2		1/2		1/2	3,773.73	1/2	3,497.50	1/2	3,221.27	1/2	2,945.05	1/2	2,668.82	1/2	2,392.60	1/2	2,116.37	1/2	1,840.15
3/4		3/4		3/4	3,767.97	3/4	3,491.75	3/4	3,215.52	3/4	2,939.29	3/4	2,663.07	3/4	2,386.84	3/4	2,110.62	3/4	1,834.39
1		1		1	3,762.22	1	3,485.99	1	3,209.76	1	2,933.54	1	2,657.31	1	2,381.09	1	2,104.86	1	1,828.64
1/4		1/4		1/4	3,756.46	1/4	3,480.24	1/4	3,204.01	1/4	2,927.78	1/4	2,651.56	1/4	2,375.33	1/4	2,099.11	1/4	1,822.88
1/2		1/2		1/2	4,003.06	1/2	3,750.71	1/2	3,474.48	1/2	3,198.26	1/2	2,922.03	1/2	2,369.58	1/2	2,093.35	1/2	1,817.13
3/4		3/4		3/4	4,002.45	3/4	3,744.95	3/4	3,468.73	3/4	3,192.50	3/4	2,916.28	3/4	2,363.82	3/4	2,087.60	3/4	1,811.37
2		2		2	4,001.85	2	3,739.20	2	3,462.97	2	3,186.75	2	2,910.52	2	2,634.29	2	2,358.07	2	2,081.84
1/4		1/4		1/4	3,998.95	1/4	3,733.44	1/4	3,457.22	1/4	3,180.99	1/4	2,904.77	1/4	2,628.54	1/4	2,352.31	1/4	2,076.09
1/2		1/2		1/2	3,996.05	1/2	3,727.69	1/2	3,451.46	1/2	3,175.24	1/2	2,899.01	1/2	2,622.79	1/2	2,346.56	1/2	2,070.33
3/4		3/4		3/4	3,993.15	3/4	3,721.93	3/4	3,445.71	3/4	3,169.48	3/4	2,893.26	3/4	2,617.03	3/4	2,340.81	3/4	2,064.58
3		3		3	3,990.25	3	3,716.18	3	3,439.95	3	3,163.73	3	2,887.50	3	2,611.28	3	2,335.05	3	2,058.82
1/4		1/4		1/4	3,985.03	1/4	3,710.42	1/4	3,434.20	1/4	3,157.97	1/4	2,881.75	1/4	2,605.52	1/4	2,329.30	1/4	2,053.07
1/2		1/2		1/2	3,979.82	1/2	3,704.67	1/2	3,428.44	1/2	3,152.22	1/2	2,875.99	1/2	2,599.77	1/2	2,323.54	1/2	2,047.32
3/4		3/4		3/4	3,974.60	3/4	3,698.91	3/4	3,422.69	3/4	3,146.46	3/4	2,870.24	3/4	2,594.01	3/4	2,317.79	3/4	2,041.56
4		4		4	3,969.39	4	3,693.16	4	3,416.93	4	3,140.71	4	2,864.48	4	2,588.26	4	2,312.03	4	2,035.81
1/4		1/4		1/4	3,963.63	1/4	3,687.40	1/4	3,411.18	1/4	3,134.95	1/4	2,858.73	1/4	2,582.50	1/4	2,306.28	1/4	2,030.05
1/2		1/2		1/2	3,957.88	1/2	3,681.65	1/2	3,405.42	1/2	3,129.20	1/2	2,852.97	1/2	2,576.75	1/2	2,300.52	1/2	2,024.30
3/4		3/4		3/4	3,952.12	3/4	3,675.90	3/4	3,399.67	3/4	3,123.44	3/4	2,847.22	3/4	2,570.99	3/4	2,294.77	3/4	2,018.54
5		5		5	3,946.37	5	3,670.14	5	3,393.92	5	3,117.69	5	2,841.46	5	2,565.24	5	2,289.01	5	2,012.79
1/4		1/4		1/4	3,940.61	1/4	3,664.39	1/4	3,388.16	1/4	3,111.93	1/4	2,835.71	1/4	2,559.48	1/4	2,283.26	1/4	2,007.03
1/2		1/2		1/2	3,934.86	1/2	3,658.63	1/2	3,382.41	1/2	3,106.18	1/2	2,829.95	1/2	2,553.73	1/2	2,277.50	1/2	2,001.28
3/4		3/4		3/4	3,929.10	3/4	3,652.88	3/4	3,376.65	3/4	3,100.43	3/4	2,824.20	3/4	2,547.97	3/4	2,271.75	3/4	1,995.52
6		6		6	3,923.35	6	3,647.12	6	3,370.90	6	3,094.67	6	2,818.45	6	2,542.22	6	2,265.99	6	1,989.77
1/4		1/4		1/4	3,917.59	1/4	3,641.37	1/4	3,365.14	1/4	3,088.92	1/4	2,812.69	1/4	2,536.46	1/4	2,260.24	1/4	1,984.01
1/2		1/2		1/2	3,911.84	1/2	3,635.61	1/2	3,359.39	1/2	3,083.16	1/2	2,806.94	1/2	2,530.71	1/2	2,254.48	1/2	1,978.26
3/4		3/4		3/4	3,906.08	3/4	3,629.86	3/4	3,353.63	3/4	3,077.41	3/4	2,801.18	3/4	2,524.96	3/4	2,248.73	3/4	1,972.50
7		7		7	3,900.33	7	3,624.10	7	3,347.88	7	3,071.65	7	2,795.43	7	2,519.20	7	2,242.98	7	1,966.75
1/4		1/4		1/4	3,894.57	1/4	3,618.35	1/4	3,342.12	1/4	3,065.90	1/4	2,789.67	1/4	2,513.45	1/4	2,237.22	1/4	1,960.99
1/2		1/2		1/2	3,888.82	1/2	3,612.59	1/2	3,336.37	1/2	3,060.14	1/2	2,783.92	1/2	2,507.69	1/2	2,231.47	1/2	1,955.24
3/4		3/4		3/4	3,883.06	3/4	3,606.84	3/4	3,330.61	3/4	3,054.39	3/4	2,778.16	3/4	2,501.94	3/4	2,225.71	3/4	1,949.49
8		8		8	3,877.31	8	3,601.08	8	3,324.86	8	3,048.63	8	2,772.41	8	2,496.18	8	2,219.96	8	1,943.73
1/4		1/4		1/4	3,871.56	1/4	3,595.33	1/4	3,319.10	1/4	3,042.88	1/4	2,766.65	1/4	2,490.43	1/4	2,214.20	1/4	1,937.98
1/2		1/2		1/2	3,865.80	1/2	3,589.58	1/2	3,313.35	1/2	3,037.12	1/2	2,760.90	1/2	2,484.67	1/2	2,208.45	1/2	1,932.22
3/4		3/4		3/4	3,860.05	3/4	3,583.82	3/4	3,307.59	3/4	3,031.37	3/4	2,755.14	3/4	2,478.92	3/4	2,202.69	3/4	1,926.47
9		9		9	3,854.29	9	3,578.07	9	3,301.84	9	3,025.61	9	2,749.39	9	2,473.16	9	2,196.94	9	1,920.71
1/4		1/4		1/4	3,848.54	1/4	3,572.31	1/4	3,296.09	1/4	3,019.86	1/4	2,743.63	1/4	2,467.41	1/4	2,191.18	1/4	1,914.96
1/2		1/2		1/2	3,842.78	1/2	3,566.56	1/2	3,290.33	1/2	3,014.11	1/2	2,737.88	1/2	2,461.65	1/2	2,185.43	1/2	1,909.20
3/4		3/4		3/4	3,837.03	3/4	3,560.80	3/4	3,284.58	3/4	3,008.35	3/4	2,732.12	3/4	2,455.90	3/4	2,179.67	3/4	1,903.45
10		10		10	3,831.27	10	3,555.05	10	3,278.82	10	3,002.60	10	2,726.37	10	2,450.14	10	2,173.92	10	1,897.69
1/4		1/4		1/4	3,825.52	1/4	3,549.29	1/4	3,273.07	1/4	2,996.84	1/4	2,720.62	1/4	2,444.39	1/4	2,168.16	1/4	1,891.94
1/2		1/2		1/2	3,819.76	1/2	3,543.54	1/2	3,267.31	1/2	2,991.09	1/2	2,714.86	1/2	2,438.64	1/2	2,162.41	1/2	1,886.18
3/4		3/4		3/4	3,814.01	3/4	3,537.78	3/4	3,261.56	3/4	2,985.33	3/4	2,709.11	3/4	2,432.88	3/4	2,156.65	3/4	1,880.43
11		11		11	3,808.25	11	3,532.03	11	3,255.80	11	2,979.58	11	2,703.35	11	2,427.13	11	2,150.90	11	1,874.67
1/4		1/4		1/4	3,802.50	1/4	3,526.27	1/4	3,250.05	1/4	2,973.82	1/4	2,697.60	1/4	2,421.37	1/4	2,145.15	1/4	1,868.92
1/2		1/2		1/2	3,796.74	1/2	3,520.52	1/2	3,244.29	1/2	2,968.07	1/2	2,691.84	1/2	2,415.62	1/2	2,139.39	1/2	1,863.17
3/4		3/4		3/4	3,790.99	3/4	3,514.76	3/4	3,238.54	3/4	2,962.31	3/4	2,686.09	3/4	2,409.86	3/4	2,133.64	3/4	1,857.41

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED ON CENTERLINE AND 31'-09" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "HFL 220 SS"

## 2 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 15'-10"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	1,575.43	0	1,299.20	0	1,022.98	0	746.75	0	473.93	0	201.47	0		0		0		0	
1/4	1,569.68	1/4	1,293.45	1/4	1,017.22	1/4	741.00	1/4	468.36	1/4	195.72	1/4		1/4		1/4		1/4	
1/2	1,563.92	1/2	1,287.70	1/2	1,011.47	1/2	735.24	1/2	462.78	1/2	189.97	1/2		1/2		1/2		1/2	
3/4	1,558.17	3/4	1,281.94	3/4	1,005.71	3/4	729.49	3/4	457.21	3/4	184.21	3/4		3/4		3/4		3/4	
1	1,552.41	1	1,276.19	1	999.96	1	723.73	1	451.63	1	178.46	1		1		1		1	
1/4	1,546.66	1/4	1,270.43	1/4	994.21	1/4	717.98	1/4	446.06	1/4	172.70	1/4		1/4		1/4		1/4	
1/2	1,540.90	1/2	1,264.68	1/2	988.45	1/2	712.23	1/2	440.48	1/2	166.95	1/2		1/2		1/2		1/2	
3/4	1,535.15	3/4	1,258.92	3/4	982.70	3/4	706.47	3/4	434.91	3/4	161.19	3/4		3/4		3/4		3/4	
2	1,529.39	2	1,253.17	2	976.94	2	700.72	2	429.34	2	155.44	2		2		2		2	
1/4	1,523.64	1/4	1,247.41	1/4	971.19	1/4	694.96	1/4	423.76	1/4	149.69	1/4		1/4		1/4		1/4	
1/2	1,517.88	1/2	1,241.66	1/2	965.43	1/2	689.21	1/2	418.19	1/2	143.94	1/2		1/2		1/2		1/2	
3/4	1,512.13	3/4	1,235.90	3/4	959.68	3/4	683.45	3/4	412.61	3/4	138.19	3/4		3/4		3/4		3/4	
3	1,506.37	3	1,230.15	3	953.92	3	677.70	3	407.04	3	132.44	3		3		3		3	
1/4	1,500.62	1/4	1,224.39	1/4	948.17	1/4	671.94	1/4	401.47	1/4	126.70	1/4		1/4		1/4		1/4	
1/2	1,494.86	1/2	1,218.64	1/2	942.41	1/2	666.19	1/2	395.89	1/2	120.96	1/2		1/2		1/2		1/2	
3/4	1,489.11	3/4	1,212.88	3/4	936.66	3/4	660.43	3/4	390.32	3/4	115.22	3/4		3/4		3/4		3/4	
4	1,483.35	4	1,207.13	4	930.90	4	654.68	4	384.74	4	109.48	4		4		4		4	
1/4	1,477.60	1/4	1,201.37	1/4	925.15	1/4	648.92	1/4	379.16	1/4	103.76	1/4		1/4		1/4		1/4	
1/2	1,471.85	1/2	1,195.62	1/2	919.39	1/2	643.17	1/2	373.58	1/2	98.04	1/2		1/2		1/2		1/2	
3/4	1,466.09	3/4	1,189.87	3/4	913.64	3/4	637.41	3/4	368.01	3/4	92.32	3/4		3/4		3/4		3/4	
5	1,460.34	5	1,184.11	5	907.88	5	631.66	5	362.43	5	86.60	5		5		5		5	
1/4	1,454.58	1/4	1,178.36	1/4	902.13	1/4	625.90	1/4	356.72	1/4	80.90	1/4		1/4		1/4		1/4	
1/2	1,448.83	1/2	1,172.60	1/2	896.38	1/2	620.15	1/2	351.00	1/2	75.21	1/2		1/2		1/2		1/2	
3/4	1,443.07	3/4	1,166.85	3/4	890.62	3/4	614.40	3/4	345.29	3/4	69.52	3/4		3/4		3/4		3/4	
6	1,437.32	6	1,161.09	6	884.87	6	608.64	6	339.58	6	63.83	6		6		6		6	
1/4	1,431.56	1/4	1,155.34	1/4	879.11	1/4	602.89	1/4	333.83	1/4	58.19	1/4		1/4		1/4		1/4	
1/2	1,425.81	1/2	1,149.58	1/2	873.36	1/2	597.13	1/2	328.07	1/2	52.55	1/2		1/2		1/2		1/2	
3/4	1,420.05	3/4	1,143.83	3/4	867.60	3/4	591.38	3/4	322.32	3/4	46.90	3/4		3/4		3/4		3/4	
7	1,414.30	7	1,138.07	7	861.85	7	585.62	7	316.56	7	41.26	7		7		7		7	
1/4	1,408.54	1/4	1,132.32	1/4	856.09	1/4	580.00	1/4	310.81	1/4	36.27	1/4		1/4		1/4		1/4	
1/2	1,402.79	1/2	1,126.56	1/2	850.34	1/2	574.37	1/2	305.06	1/2	31.27	1/2		1/2		1/2		1/2	
3/4	1,397.03	3/4	1,120.81	3/4	844.58	3/4	568.75	3/4	299.30	3/4	26.27	3/4		3/4		3/4		3/4	
8	1,391.28	8	1,115.05	8	838.83	8	563.12	8	293.55	8	21.28	8		8		8		8	
1/4	1,385.52	1/4	1,109.30	1/4	833.07	1/4	557.55	1/4	287.79	1/4	17.92	1/4		1/4		1/4		1/4	
1/2	1,379.77	1/2	1,103.54	1/2	827.32	1/2	551.97	1/2	282.04	1/2	14.57	1/2		1/2		1/2		1/2	
3/4	1,374.02	3/4	1,097.79	3/4	821.56	3/4	546.40	3/4	276.28	3/4	11.21	3/4		3/4		3/4		3/4	
9	1,368.26	9	1,092.04	9	815.81	9	540.82	9	270.53	9	7.86	9		9		9		9	
1/4	1,362.51	1/4	1,086.28	1/4	810.05	1/4	535.25	1/4	264.77	1/4	6.42	1/4		1/4		1/4		1/4	
1/2	1,356.75	1/2	1,080.53	1/2	804.30	1/2	529.67	1/2	259.02	1/2	4.98	1/2		1/2		1/2		1/2	
3/4	1,351.00	3/4	1,074.77	3/4	798.55	3/4	524.10	3/4	253.26	3/4	3.54	3/4		3/4		3/4		3/4	
10	1,345.24	10	1,069.02	10	792.79	10	518.52	10	247.51	10	2.10	10		10		10		10	
1/4	1,339.49	1/4	1,063.26	1/4	787.04	1/4	512.95	1/4	241.76	1/4		1/4		1/4		1/4		1/4	
1/2	1,333.73	1/2	1,057.51	1/2	781.28	1/2	507.38	1/2	236.00	1/2		1/2		1/2		1/2		1/2	
3/4	1,327.98	3/4	1,051.75	3/4	775.53	3/4	501.80	3/4	230.25	3/4		3/4		3/4		3/4		3/4	
11	1,322.22	11	1,046.00	11	769.77	11	496.23	11	224.49	11		11		11		11		11	
1/4	1,316.47	1/4	1,040.24	1/4	764.02	1/4	490.65	1/4	218.74	1/4		1/4		1/4		1/4		1/4	
1/2	1,310.71	1/2	1,034.49	1/2	758.26	1/2	485.08	1/2	212.98	1/2		1/2		1/2		1/2		1/2	
3/4	1,304.96	3/4	1,028.73	3/4	752.51	3/4	479.50	3/4	207.23	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 04/02/2014 CL  
CALCULATED: 04/04/2014 CL  
REPRINTED: 03/18/2015 SW

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2015

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "HFL 220 SS"

## 3 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 15'-10"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	3,364.68	0	3,119.59	0	2,874.49	0	2,629.39	0	2,384.29	0	2,139.19	0	1,894.10	0	1,649.00
1/4		1/4		1/4	3,359.58	1/4	3,114.48	1/4	2,869.38	1/4	2,624.28	1/4	2,379.19	1/4	2,134.09	1/4	1,888.99	1/4	1,643.89
1/2		1/2		1/2	3,354.47	1/2	3,109.37	1/2	2,864.28	1/2	2,619.18	1/2	2,374.08	1/2	2,128.98	1/2	1,883.88	1/2	1,638.79
3/4		3/4		3/4	3,349.36	3/4	3,104.27	3/4	2,859.17	3/4	2,614.07	3/4	2,368.97	3/4	2,123.88	3/4	1,878.78	3/4	1,633.68
1		1		1	3,344.26	1	3,099.16	1	2,854.06	1	2,608.97	1	2,363.87	1	2,118.77	1	1,873.67	1	1,628.57
1/4		1/4		1/4	3,339.15	1/4	3,094.05	1/4	2,848.96	1/4	2,603.86	1/4	2,358.76	1/4	2,113.66	1/4	1,868.57	1/4	1,623.47
1/2		1/2		1/2	3,557.94	1/2	3,334.05	1/2	2,843.85	1/2	2,598.75	1/2	2,353.66	1/2	2,108.56	1/2	1,863.46	1/2	1,618.36
3/4		3/4		3/4	3,557.40	3/4	3,328.94	3/4	2,838.74	3/4	2,593.65	3/4	2,348.55	3/4	2,103.45	3/4	1,858.35	3/4	1,613.26
2		2		2	3,556.86	2	3,323.83	2	3,078.74	2	2,833.64	2	2,343.44	2	2,098.35	2	1,853.25	2	1,608.15
1/4		1/4		1/4	3,554.29	1/4	3,318.73	1/4	3,073.63	1/4	2,828.53	1/4	2,583.43	1/4	2,338.34	1/4	2,093.24	1/4	1,603.04
1/2		1/2		1/2	3,551.72	1/2	3,313.62	1/2	3,068.52	1/2	2,823.43	1/2	2,578.33	1/2	2,333.23	1/2	2,088.13	1/2	1,597.94
3/4		3/4		3/4	3,549.14	3/4	3,308.51	3/4	3,063.42	3/4	2,818.32	3/4	2,573.22	3/4	2,328.12	3/4	2,083.03	3/4	1,592.83
3		3		3	3,546.57	3	3,303.41	3	3,058.31	3	2,813.21	3	2,568.12	3	2,323.02	3	2,077.92	3	1,587.73
1/4		1/4		1/4	3,541.95	1/4	3,298.30	1/4	3,053.20	1/4	2,808.11	1/4	2,563.01	1/4	2,317.91	1/4	2,072.81	1/4	1,582.62
1/2		1/2		1/2	3,537.33	1/2	3,293.20	1/2	3,048.10	1/2	2,803.00	1/2	2,557.90	1/2	2,312.81	1/2	2,067.71	1/2	1,577.51
3/4		3/4		3/4	3,532.70	3/4	3,288.09	3/4	3,042.99	3/4	2,797.89	3/4	2,552.80	3/4	2,307.70	3/4	2,062.60	3/4	1,572.41
4		4		4	3,528.08	4	3,282.98	4	3,037.89	4	2,792.79	4	2,547.69	4	2,302.59	4	2,057.50	4	1,567.30
1/4		1/4		1/4	3,522.98	1/4	3,277.88	1/4	3,032.78	1/4	2,787.68	1/4	2,542.58	1/4	2,297.49	1/4	2,052.39	1/4	1,562.19
1/2		1/2		1/2	3,517.87	1/2	3,272.77	1/2	3,027.67	1/2	2,782.58	1/2	2,537.48	1/2	2,292.38	1/2	2,047.28	1/2	1,557.09
3/4		3/4		3/4	3,512.76	3/4	3,267.66	3/4	3,022.57	3/4	2,777.47	3/4	2,532.37	3/4	2,287.27	3/4	2,042.18	3/4	1,551.98
5		5		5	3,507.66	5	3,262.56	5	3,017.46	5	2,772.36	5	2,527.27	5	2,282.17	5	2,037.07	5	1,546.88
1/4		1/4		1/4	3,502.55	1/4	3,257.45	1/4	3,012.35	1/4	2,767.26	1/4	2,522.16	1/4	2,277.06	1/4	2,031.96	1/4	1,541.77
1/2		1/2		1/2	3,497.44	1/2	3,252.35	1/2	3,007.25	1/2	2,762.15	1/2	2,517.05	1/2	2,271.96	1/2	2,026.86	1/2	1,536.66
3/4		3/4		3/4	3,492.34	3/4	3,247.24	3/4	3,002.14	3/4	2,757.04	3/4	2,511.95	3/4	2,266.85	3/4	2,021.75	3/4	1,531.56
6		6		6	3,487.23	6	3,242.13	6	2,997.04	6	2,751.94	6	2,506.84	6	2,261.74	6	2,016.65	6	1,526.45
1/4		1/4		1/4	3,482.13	1/4	3,237.03	1/4	2,991.93	1/4	2,746.83	1/4	2,501.73	1/4	2,256.64	1/4	2,011.54	1/4	1,521.34
1/2		1/2		1/2	3,477.02	1/2	3,231.92	1/2	2,986.82	1/2	2,741.73	1/2	2,496.63	1/2	2,251.53	1/2	2,006.43	1/2	1,516.24
3/4		3/4		3/4	3,471.91	3/4	3,226.82	3/4	2,981.72	3/4	2,736.62	3/4	2,491.52	3/4	2,246.42	3/4	2,001.33	3/4	1,511.13
7		7		7	3,466.81	7	3,221.71	7	2,976.61	7	2,731.51	7	2,486.42	7	2,241.32	7	1,996.22	7	1,506.03
1/4		1/4		1/4	3,461.70	1/4	3,216.60	1/4	2,971.51	1/4	2,726.41	1/4	2,481.31	1/4	2,236.21	1/4	1,991.11	1/4	1,500.92
1/2		1/2		1/2	3,456.59	1/2	3,211.50	1/2	2,966.40	1/2	2,721.30	1/2	2,476.20	1/2	2,231.11	1/2	1,986.01	1/2	1,495.81
3/4		3/4		3/4	3,451.49	3/4	3,206.39	3/4	2,961.29	3/4	2,716.20	3/4	2,471.10	3/4	2,226.00	3/4	1,980.90	3/4	1,490.71
8		8		8	3,446.38	8	3,201.28	8	2,956.19	8	2,711.09	8	2,465.99	8	2,220.89	8	1,975.80	8	1,485.60
1/4		1/4		1/4	3,441.28	1/4	3,196.18	1/4	2,951.08	1/4	2,705.98	1/4	2,460.89	1/4	2,215.79	1/4	1,970.69	1/4	1,480.49
1/2		1/2		1/2	3,436.17	1/2	3,191.07	1/2	2,945.97	1/2	2,700.88	1/2	2,455.78	1/2	2,210.68	1/2	1,965.58	1/2	1,475.39
3/4		3/4		3/4	3,431.06	3/4	3,185.97	3/4	2,940.87	3/4	2,695.77	3/4	2,450.67	3/4	2,205.58	3/4	1,960.48	3/4	1,470.28
9		9		9	3,425.96	9	3,180.86	9	2,935.76	9	2,690.66	9	2,445.57	9	2,200.47	9	1,955.37	9	1,465.18
1/4		1/4		1/4	3,420.85	1/4	3,175.75	1/4	2,930.66	1/4	2,685.56	1/4	2,440.46	1/4	2,195.36	1/4	1,950.27	1/4	1,460.07
1/2		1/2		1/2	3,415.74	1/2	3,170.65	1/2	2,925.55	1/2	2,680.45	1/2	2,435.35	1/2	2,190.26	1/2	1,945.16	1/2	1,454.96
3/4		3/4		3/4	3,410.64	3/4	3,165.54	3/4	2,920.44	3/4	2,675.35	3/4	2,430.25	3/4	2,185.15	3/4	1,940.05	3/4	1,449.86
10		10		10	3,405.53	10	3,160.43	10	2,915.34	10	2,670.24	10	2,425.14	10	2,180.04	10	1,934.95	10	1,444.75
1/4		1/4		1/4	3,400.43	1/4	3,155.33	1/4	2,910.23	1/4	2,665.13	1/4	2,420.04	1/4	2,174.94	1/4	1,929.84	1/4	1,439.65
1/2		1/2		1/2	3,395.32	1/2	3,150.22	1/2	2,905.12	1/2	2,660.03	1/2	2,414.93	1/2	2,169.83	1/2	1,924.73	1/2	1,434.54
3/4		3/4		3/4	3,390.21	3/4	3,145.12	3/4	2,900.02	3/4	2,654.92	3/4	2,409.82	3/4	2,164.73	3/4	1,919.63	3/4	1,429.43
11		11		11	3,385.11	11	3,140.01	11	2,894.91	11	2,649.81	11	2,404.72	11	2,159.62	11	1,914.52	11	1,424.33
1/4		1/4		1/4	3,380.00	1/4	3,134.90	1/4	2,889.81	1/4	2,644.71	1/4	2,399.61	1/4	2,154.51	1/4	1,909.42	1/4	1,419.22
1/2		1/2		1/2	3,374.90	1/2	3,129.80	1/2	2,884.70	1/2	2,639.60	1/2	2,394.50	1/2	2,149.41	1/2	1,904.31	1/2	1,414.11
3/4		3/4		3/4	3,369.79	3/4	3,124.69	3/4	2,879.59	3/4	2,634.50	3/4	2,389.40	3/4	2,144.30	3/4	1,899.20	3/4	1,409.01

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.  
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.  
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.  
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE.  
GAUGE POINT: (MMC) LOCATED ON CENTERLINE AND 25'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "HFL 220 SS"

## 3 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 15'-10"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	1,403.90	0	1,158.80	0	913.71	0	668.61	0	423.74	0	178.90	0		0		0		0	
1/4	1,398.80	1/4	1,153.70	1/4	908.60	1/4	663.50	1/4	418.65	1/4	173.79	1/4		1/4		1/4		1/4	
1/2	1,393.69	1/2	1,148.59	1/2	903.49	1/2	658.40	1/2	413.55	1/2	168.69	1/2		1/2		1/2		1/2	
3/4	1,388.58	3/4	1,143.49	3/4	898.39	3/4	653.29	3/4	408.46	3/4	163.58	3/4		3/4		3/4		3/4	
1	1,383.48	1	1,138.38	1	893.28	1	648.18	1	403.36	1	158.48	1		1		1		1	
1/4	1,378.37	1/4	1,133.27	1/4	888.18	1/4	643.08	1/4	398.27	1/4	153.37	1/4		1/4		1/4		1/4	
1/2	1,373.26	1/2	1,128.17	1/2	883.07	1/2	637.97	1/2	393.17	1/2	148.26	1/2		1/2		1/2		1/2	
3/4	1,368.16	3/4	1,123.06	3/4	877.96	3/4	632.87	3/4	388.08	3/4	143.16	3/4		3/4		3/4		3/4	
2	1,363.05	2	1,117.95	2	872.86	2	627.76	2	382.99	2	138.05	2		2		2		2	
1/4	1,357.95	1/4	1,112.85	1/4	867.75	1/4	622.65	1/4	377.89	1/4	132.95	1/4		1/4		1/4		1/4	
1/2	1,352.84	1/2	1,107.74	1/2	862.64	1/2	617.55	1/2	372.80	1/2	127.85	1/2		1/2		1/2		1/2	
3/4	1,347.73	3/4	1,102.64	3/4	857.54	3/4	612.44	3/4	367.70	3/4	122.75	3/4		3/4		3/4		3/4	
3	1,342.63	3	1,097.53	3	852.43	3	607.33	3	362.61	3	117.64	3		3		3		3	
1/4	1,337.52	1/4	1,092.42	1/4	847.33	1/4	602.23	1/4	357.52	1/4	112.55	1/4		1/4		1/4		1/4	
1/2	1,332.42	1/2	1,087.32	1/2	842.22	1/2	597.12	1/2	352.42	1/2	107.46	1/2		1/2		1/2		1/2	
3/4	1,327.31	3/4	1,082.21	3/4	837.11	3/4	592.02	3/4	347.33	3/4	102.37	3/4		3/4		3/4		3/4	
4	1,322.20	4	1,077.11	4	832.01	4	586.91	4	342.23	4	97.27	4		4		4		4	
1/4	1,317.10	1/4	1,072.00	1/4	826.90	1/4	581.80	1/4	337.14	1/4	92.20	1/4		1/4		1/4		1/4	
1/2	1,311.99	1/2	1,066.89	1/2	821.80	1/2	576.70	1/2	332.04	1/2	87.12	1/2		1/2		1/2		1/2	
3/4	1,306.88	3/4	1,061.79	3/4	816.69	3/4	571.59	3/4	326.95	3/4	82.05	3/4		3/4		3/4		3/4	
5	1,301.78	5	1,056.68	5	811.58	5	566.49	5	321.86	5	76.97	5		5		5		5	
1/4	1,296.67	1/4	1,051.57	1/4	806.48	1/4	561.38	1/4	316.75	1/4	71.92	1/4		1/4		1/4		1/4	
1/2	1,291.57	1/2	1,046.47	1/2	801.37	1/2	556.27	1/2	311.65	1/2	66.87	1/2		1/2		1/2		1/2	
3/4	1,286.46	3/4	1,041.36	3/4	796.26	3/4	551.17	3/4	306.55	3/4	61.82	3/4		3/4		3/4		3/4	
6	1,281.35	6	1,036.26	6	791.16	6	546.06	6	301.44	6	56.77	6		6		6		6	
1/4	1,276.25	1/4	1,031.15	1/4	786.05	1/4	540.95	1/4	296.34	1/4	51.76	1/4		1/4		1/4		1/4	
1/2	1,271.14	1/2	1,026.04	1/2	780.95	1/2	535.85	1/2	291.23	1/2	46.76	1/2		1/2		1/2		1/2	
3/4	1,266.03	3/4	1,020.94	3/4	775.84	3/4	530.74	3/4	286.12	3/4	41.75	3/4		3/4		3/4		3/4	
7	1,260.93	7	1,015.83	7	770.73	7	525.64	7	281.02	7	36.75	7		7		7		7	
1/4	1,255.82	1/4	1,010.72	1/4	765.63	1/4	520.54	1/4	275.91	1/4	32.31	1/4		1/4		1/4		1/4	
1/2	1,250.72	1/2	1,005.62	1/2	760.52	1/2	515.44	1/2	270.81	1/2	27.88	1/2		1/2		1/2		1/2	
3/4	1,245.61	3/4	1,000.51	3/4	755.41	3/4	510.34	3/4	265.70	3/4	23.45	3/4		3/4		3/4		3/4	
8	1,240.50	8	995.41	8	750.31	8	505.24	8	260.59	8	19.01	8		8		8		8	
1/4	1,235.40	1/4	990.30	1/4	745.20	1/4	500.15	1/4	255.49	1/4	16.04	1/4		1/4		1/4		1/4	
1/2	1,230.29	1/2	985.19	1/2	740.10	1/2	495.06	1/2	250.38	1/2	13.06	1/2		1/2		1/2		1/2	
3/4	1,225.18	3/4	980.09	3/4	734.99	3/4	489.96	3/4	245.28	3/4	10.08	3/4		3/4		3/4		3/4	
9	1,220.08	9	974.98	9	729.88	9	484.87	9	240.17	9	7.11	9		9		9		9	
1/4	1,214.97	1/4	969.87	1/4	724.78	1/4	479.77	1/4	235.06	1/4	5.83	1/4		1/4		1/4		1/4	
1/2	1,209.87	1/2	964.77	1/2	719.67	1/2	474.68	1/2	229.96	1/2	4.55	1/2		1/2		1/2		1/2	
3/4	1,204.76	3/4	959.66	3/4	714.56	3/4	469.59	3/4	224.85	3/4	3.28	3/4		3/4		3/4		3/4	
10	1,199.65	10	954.56	10	709.46	10	464.49	10	219.75	10	2.00	10		10		10		10	
1/4	1,194.55	1/4	949.45	1/4	704.35	1/4	459.40	1/4	214.64	1/4		1/4		1/4		1/4		1/4	
1/2	1,189.44	1/2	944.34	1/2	699.25	1/2	454.30	1/2	209.54	1/2		1/2		1/2		1/2		1/2	
3/4	1,184.34	3/4	939.24	3/4	694.14	3/4	449.21	3/4	204.43	3/4		3/4		3/4		3/4		3/4	
11	1,179.23	11	934.13	11	689.03	11	444.12	11	199.32	11		11		11		11		11	
1/4	1,174.12	1/4	929.03	1/4	683.93	1/4	439.02	1/4	194.22	1/4		1/4		1/4		1/4		1/4	
1/2	1,169.02	1/2	923.92	1/2	678.82	1/2	433.93	1/2	189.11	1/2		1/2		1/2		1/2		1/2	
3/4	1,163.91	3/4	918.81	3/4	673.72	3/4	428.83	3/4	184.01	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 04/02/2014 CL  
CALCULATED: 04/04/2014 CL  
REPRINTED: 03/18/2015 SW

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2015

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>