

PIRAEUS II - FLOATING DOCK
STEEL WEIGHT CALCULATION
PERAMA DECEMBER 2018

TANK TOP PLATE & STIFFENERS								
A/A	ITEM		Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)	
1	Tank Top Plate A (P.S.)		1	3,00	1,70	10,0	530,4	
2	Tank Top Plate B (P.S.)		1	2,50	1,50	10,0	390,0	
3	Tank Top Plate C (P.S.)		1	10,00	2,00	10,0	2080,0	
4	Tank Top Plate D (P.S.)		1	2,50	2,00	10,0	520,0	
5	Tank Top Plate E (P.S.)		1	1,00	1,00	10,0	104,0	
6	Tank Top Plate F (P.S.)		1	6,00	2,00	10,0	1248,0	
7	Tank Top Plate G (P.S.)		1	1,00	1,00	10,0	104,0	
8	Tank Top Plate H (P.S.)		1	2,00	2,00	10,0	416,0	
9	Tank Top Plate I (P.S.)		1	8,00	1,00	10,0	832,0	
10	Tank Top Plate J (P.S.)		1	2,00	2,00	10,0	416,0	
11	Tank Top Plate K (P.S.)		1	2,50	2,00	10,0	520,0	
12	Tank Top Plate L (P.S.)		1	2,50	2,00	10,0	520,0	
13	Tank Top Plate M (P.S.)		1	1,60	1,00	10,0	166,4	
14	Tank Top Plate N (P.S.)		1	3,00	2,00	10,0	720,0	
15	Tank Top Plate O (P.S.)		1	4,00	2,00	10,0	960,0	
16	Tank Top Plate P (P.S.)		1	2,00	2,00	10,0	480,0	
17	Tank Top Plate Q (C.L.)		1	8,00	4,00	10,0	3840,0	
18	Tank Top Plate A (S.S.)		1	3,10	1,00	10,0	322,4	
19	Tank Top Plate B (S.S.)		1	1,80	1,20	10,0	224,6	
20	Tank Top Plate C (S.S.)		1	3,50	2,50	10,0	910,0	
21	Tank Top Plate D (S.S.)		1	4,00	2,60	10,0	1081,6	
22	Tank Top Plate E (S.S.)		1	3,90	1,10	10,0	446,2	
23	Tank Top Plate F (S.S.)		1	6,50	2,50	10,0	1690,0	
24	Tank Top Plate G (S.S.)		1	6,50	1,50	10,0	1014,0	
25	Tank Top Plate H (S.S.)		1	4,00	1,00	10,0	416,0	
26	Tank Top Plate I (S.S.)		1	4,00	1,50	10,0	624,0	
27	Tank Top Plate J (S.S.)		1	4,00	2,00	10,0	832,0	
28	Tank Top Plate K (S.S.)		1	4,00	2,00	10,0	832,0	
29	Tank Top Plate L (S.S.)		1	2,00	1,00	10,0	208,0	
30	Tank Top Plate M (S.S.)		1	3,60	0,30	10,0	112,3	
31	Tank Top Plate N (S.S.)		1	3,00	2,00	10,0	624,0	
32	Tank Top Plate O (S.S.)		1	1,00	0,80	10,0	83,2	
33	Tank Top Plate P (S.S.)		1	2,00	0,80	10,0	166,4	
							23433,5	

INNER SIDE WALL PLATE & STIFFENERS (PORT SIDE)								
A/A	ITEM		Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)	
1	Long'l Bhd Plate A		1	2,00	1,80	8,0	299,5	
2	Long'l Bhd Plate B		1	1,40	1,60	8,0	186,4	
3	Long'l Bhd Plate C		1	2,50	1,00	8,0	208,0	
4	Long'l Bhd Plate D		1	1,00	2,00	8,0	166,4	
5	Long'l Bhd Plate E		1	2,00	2,00	8,0	332,8	
6	Long'l Bhd Plate F		1	3,00	2,00	8,0	499,2	
7	Long'l Bhd Plate G		1	6,00	2,00	8,0	998,4	
8	Long'l Bhd Plate H		1	2,00	2,00	8,0	332,8	
9	Long'l Bhd Plate H		1	10,50	2,00	8,0	1747,2	
10	Long'l Bhd Plate H		1	2,00	1,00	8,0	166,4	
10	Long'l Bhd Plate H		1	1,50	1,30	8,0	162,2	
11	Long'l Bhd Plate H		1	7,00	0,60	10,0	436,8	
							5536,1	

INNER SIDE WALL PLATE & STIFFENERS (STBD SIDE)								
A/A	ITEM			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
1	Long'l Bhd Plate A			1	2,00	1,00	8,0	166,4
2	Long'l Bhd Plate B			1	2,00	1,00	8,0	166,4
3	Long'l Bhd Plate C			1	2,00	1,00	8,0	166,4
4	Long'l Bhd Plate D			1	2,00	1,00	8,0	166,4
5	Long'l Bhd Plate E			1	2,00	1,00	8,0	166,4
								832,0

OUTER SIDE WALL PLATE & STIFFENERS (PORT SIDE)								
A/A	ITEM			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
1	Side Shell Plate A			1	2,00	1,00	8,0	166,4
2	Side Shell Plate B			1	2,50	1,00	8,0	208,0
3	Side Shell Plate C			1	2,00	2,00	8,0	332,8
4	Side Shell Plate D			1	1,00	1,00	8,0	83,2
5	Side Shell Plate E			1	4,00	1,00	8,0	332,8
								1123,2

OUTER SIDE WALL PLATE & STIFFENERS (STBD SIDE)								
A/A	ITEM			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
1	Side Shell Plate A			1	2,00	1,75	8,0	291,2
2	Side Shell Plate B			1	2,50	3,00	8,0	624,0
3	Side Shell Plate C			1	2,50	6,00	8,0	1248,0
4	Side Shell Plate D			1	2,50	6,00	8,0	1248,0
5	Side Shell Plate E			1	2,50	6,00	8,0	1248,0
6	Side Shell Plate F			1	2,35	4,50	8,0	879,8
7	Side Shell Plate G			1	2,50	4,00	8,0	832,0
8	Side Shell Plate H			1	2,50	4,00	8,0	832,0
9	Side Shell Plate I			1	3,15	4,00	8,0	1048,3
10	Side Shell Plate J			1	2,50	4,00	8,0	832,0
11	Side Shell Plate K			1	2,30	4,00	8,0	765,4
12	Side Shell Plate L			1	3,30	4,00	8,0	1098,2
13	Side Shell Plate M			1	3,00	2,00	8,0	499,2
14	Side Shell Plate N			1	5,00	4,60	8,0	1913,6
								13359,8

W.B.Tk No 1 PORT (INTERNAL)								
A/A	1 PORT (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Κάτω Σειρά Ενδετών			16	3,00	48,00	17,8	854,4
2	Tank Top Beams (Inboard)			16	2,00	32,00	11,9	380,8
3	Tank Top Beams (Mid Section)			3	1,80	5,40	11,9	64,3
4	Bottom Beams			15	10,00	150,00	10,6	1590,0
5	Outer Side Wall A/B 100x75x8.0			12	2,00	24,00	10,6	254,4
A/A	1 PORT (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
6	Bhd Plate			1	5,00	1,50	10,0	600,0
7	Swash Bhd Plate			1	7,00	1,50	10,0	840,0
8	Long'l Bhd Plate			1	3,00	1,20	10,0	288,0
								4871,9

W.B.Tk No 2 PORT (INTERNALs)								
A/A	2 PORT (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Άνω Σειρά Ενδετών			4	3,05	12,20	12,2	148,8
2	Μεσαία Σειρά Ενδετών			3	3,05	9,15	12,2	111,6
3	Κάτω Σειρά Ενδετών			24	3,05	73,20	17,8	1303,0
4	Tank Top Beams			4	3,80	15,20	11,9	180,9
A/A	2 PORT (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
5	Tank Top Girder 13			1	5,40	0,60	8,0	207,4
6	Tank Top Girder 13 Stiffeners			4	0,37	0,08	8,0	7,6
7	Tank Top Girder 16			3	5,40	0,60	8,0	622,1
8	Tank Top Girder 16 Stiffeners			12	0,37	0,08	8,0	22,7
9	Connecting Brackets			9	0,60	0,60	10,0	259,2
								2863,3

W.B.Tk No 3 PORT (INTERNALs)								
A/A	3 PORT (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Άνω Σειρά Ενδετών			4	3,05	12,20	12,2	148,8
2	Μεσαία Σειρά Ενδετών			5	3,05	15,25	12,2	186,1
3	Outer Side Wall A/B 100x75x8.0			5	7,00	35,00	10,6	371,0
4	Inner Side Wall A/B 100x75x8.0			8	7,00	56,00	10,6	593,6
A/A	3 PORT (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
5	Swash Bhd Plate			1	4,00	1,50	10,0	480,0
								1779,5

W.B.Tk No 4 PORT (INTERNALs)								
A/A	4 PORT (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Μεσαία Σειρά Ενδετών			5	3,05	15,25	12,2	186,1
2	Κάτω Σειρά Ενδετών			12	3,05	36,60	17,8	651,5
3	Tank Top Beams			5	2,00	10,00	11,9	119,0
4	Tank Top Beams			2	3,50	7,00	11,9	83,3
5	Tank Top Beams			2	4,00	8,00	11,9	95,2
A/A	4 PORT (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
6	Swash Bhd Plate			1	2,00	0,80	10,0	128,0
7	Swash Bhd Plate			1	0,50	0,50	10,0	20,0
8	Swash Bhd Stiffener			1	1,00	0,30	10,0	24,0
								1307,0

W.B.Tk No 5 PORT (INTERNALs)								
A/A	5 PORT (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Άνω Σειρά Ενδετών			16	3,05	48,80	12,2	595,4
2	Μεσαία Σειρά Ενδετών			4	3,05	12,20	12,2	148,8
3	Κάτω Σειρά Ενδετών			9	3,05	27,45	17,8	488,6
4	Tank Top Beams			9	2,50	22,50	11,9	267,8
A/A	5 PORT (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
5	Tank Top Girder 13			1	2,50	0,60	8,0	96,0
								1596,6

W.B.Tk No 6 PORT (INTERNALS)								
A/A	6 PORT (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Άνω Σειρά Ενδετών			1	3,05	3,05	12,2	37,2
2	Κάτω Σειρά Ενδετών			4	3,05	12,20	17,8	217,2
3	Tank Top Beams			4	2,50	10,00	11,9	119,0
A/A	6 PORT (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
4	Bhd Plate			1	1,00	1,00	10,0	80,0
5	Bhd Stiffener			1	1,80	0,50	10,0	72,0
								525,4

W.B.Tk No 1 STBD (INTERNALS)								
A/A	1 STBD (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Tank Top Angle Bar 130x65x8.0			2	4,00	8,00	11,9	95,2
								95,2

W.B.Tk No 2 STBD (INTERNALS)								
A/A	2 STBD (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Άνω Σειρά Ενδετών			2	3,05	6,10	10,6	64,7
								64,7

W.B.Tk No 3 STBD (INTERNALS)								
A/A	3 STBD (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Κάτω Σειρά Ενδετών			6	3,05	18,30	17,8	325,7
A/A	3 STBD (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
2	Bhd Plate			1	1,50	1,00	10,0	120,0
3	Tank Top Girder 16			1	1,50	0,60	8,0	57,6
4	Tank Top Girder 16 Stiffeners			2	0,37	0,08	8,0	3,8
								507,1

W.B.Tk No 4 STBD (INTERNALS)								
A/A	4 STBD (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Άνω Σειρά Ενδετών			8	3,05	24,40	12,2	297,7
2	Μεσαία Σειρά Ενδετών			2	3,05	6,10	12,2	74,4
3	Κάτω Σειρά Ενδετών			7	3,05	21,35	17,8	380,0
A/A	4 STBD (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
6	Bhd Plate			1	2,00	1,00	10,0	160,0
7	Swash Bhd Plate			1	2,00	1,00	10,0	160,0
8	Swash Bhd Plate			1	2,50	2,50	10,0	500,0
9	Bhd Stiffener			1	1,00	0,30	10,0	24,0
								1596,1

W.B.Tk No 5 STBD (INTERNALS)								
A/A	5 STBD (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Άνω Σειρά Ενδετών			5	3,05	15,25	12,2	186,1
2	Κάτω Σειρά Ενδετών			2	3,05	6,10	17,8	108,6
A/A	5 STBD (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
3	Tank Top Girder 13			1	13,50	0,60	8,0	518,4
4	Tank Top Girder 13 Stiffeners			12	0,37	0,08	8,0	22,7
5	Tank Top Girder 16			1	5,40	0,60	8,0	207,4
6	Tank Top Girder 16 Stiffeners			4	0,37	0,08	8,0	7,6
7	Bhd Plate			1	2,00	0,50	10,0	80,0
8	Swash Bhd Plate			1	3,00	0,50	10,0	120,0
9	Swash Bhd Stiffener			1	1,00	0,30	10,0	24,0
								1274,7

W.B.Tk No 6 STBD (INTERNALS)								
A/A	6 STBD (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Κάτω Σειρά Ενδετών			2	3,05	6,10	17,8	108,6
2	Tank Top Beams			17	2,00	34,00	11,9	404,6
3	Tank Top Beams			4	3,80	15,20	12,9	196,1
A/A	6 STBD (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
4	Tank Top Girder			1	12,00	0,60	8,0	460,8
5	Tank Top Girder Stiffeners			10	0,37	0,08	8,0	18,9
								1189,0

W.B.Tk No 1 CENTER (INTERNALS)								
A/A	1 CENTER (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Swash Bhd 16 - Stiffeners 7 & 8			2	3,00	6,00	17,8	106,8
A/A	1 CENTER (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
2	Tank Top Girder 3 (P.S.)			1	5,00	0,60	8,0	192,0
3	Tank Top Girder 6 (P.S.)			1	16,00	0,60	8,0	614,4
4	Tank Top Girder 3 (S.S.)			1	16,20	0,60	8,0	622,1
5	Tank Top Girder 6 (S.S.)			1	16,20	0,60	8,0	622,1
								2157,4

W.B.Tk No 2 CENTER (INTERNALS)								
A/A	2 CENTER (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
						0,00		0,0
A/A	2 CENTER (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
1	Tank Top Girder 3 (P.S.)			1	5,40	0,60	8,0	207,4
2	Tank Top Girder 6 (P.S.)			1	5,40	0,60	8,0	207,4
3	Tank Top Girder 3 (S.S.)			1	5,40	0,60	8,0	207,4
								622,1

W.B.Tk No 3 CENTER (INTERNALS)								
A/A	3 CENTER (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
						0,00		0,0
A/A	3 CENTER (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
1	Tank Top Girder 3 (P.S.)			1	10,80	0,60	8,0	414,7
2	Tank Top Girder 6 (P.S.)			1	10,80	0,60	8,0	414,7
3	Tank Top Girder 3 (S.S.)			1	16,20	0,60	8,0	622,1
4	Tank Top Girder 6 (S.S.)			1	16,20	0,60	8,0	622,1
								2073,6

W.B.Tk No 4 CENTER (INTERNALS)								
A/A	4 CENTER (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
						0,00		0,0
A/A	4 CENTER (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
1	Tank Top Girder 3 (P.S.)			1	16,20	0,60	8,0	622,1
2	Tank Top Girder 6 (P.S.)			1	16,20	0,60	8,0	622,1
3	Tank Top Girder 3 (S.S.)			1	16,20	0,60	8,0	622,1
4	Tank Top Girder 6 (S.S.)			1	16,20	0,60	8,0	622,1
								2488,3

W.B.Tk No 5 CENTER (INTERNALS)								
A/A	5 CENTER (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
1	Bhd 156 - Stiffener 7			1	3,00	3,00	17,8	53,4
A/A	5 CENTER (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
								0,0
								53,4

W.B.Tk No 6 CENTER (INTERNALS)								
A/A	6 CENTER (ANGLE BARS)			Pcs	Length (m)	Length Total(m)	Weight/ m (kg)	Weight (kg)
						0,00		0,0
A/A	6 CENTER (PLATES/BRACKETS)			Pcs	Length (m)	Breadth (m)	Thickn. (mm)	Weight (kg)
1	Tank Top Girder 3 (P.S.)			1	1,00	0,60	8,0	38,4
2	Tank Top Girder 6 (P.S.)			1	1,00	0,60	8,0	38,4
3	Tank Top Girder 3 (S.S.)			1	5,40	0,60	8,0	207,4
4	Tank Top Girder 6 (S.S.)			1	10,80	0,60	8,0	414,7
								698,9