

Calculations of Displacement &c. of the Composite Tea Clipper "Cutty Sark", built at Dumbarton by Messrs Scott & Linton in 1869, under the Special Survey of the Surveyors to Lloyd's Register of Shipping, and Classed + 16 A1.

THESE CALCULATIONS HAVE BEEN MADE FROM THE LINES OF THE VESSEL CONSTRUCTED FROM MEASUREMENTS AND PARTICULARS OF THE VESSEL OBTAINED WHILE IN DRY DOCK AT THE "UNION DOCKS" OF MESSRS FLETCHER, SON & FARNELL, LIMITED, LIMEHOUSE, LONDON, JANUARY 1922.

This paper of calculations is the property of the Committee of Lloyd's Register of Shipping, London.

No. of Sections.	Keel.	Water Line 1.				Water Line 2.				Water Line 3.				Water Line 20 ft.				Vertical Sections.			
		1	4	2	4	1	4	2	4	1	4	2	4	1	4	2	4	Areas.	Functions	Mult.	Moments.
Item 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1 1	7	2.8	1.0	2.0	1.5	6.0	2.3	9.2	3.4	13.6	20.3	81.2	1	81.2							
2 2	7	1.4	2.2	4.4	3.6	7.2	8.2	10.4	6.7	13.4	44.2	88.4	2	176.8							
3 4	7	2.8	3.5	14.0	6.2	24.8	8.2	32.8	7.7	38.8	69.6	278.4	3	835.2							
4 2	7	1.4	5.2	18.4	8.9	17.8	11.1	22.2	12.4	24.8	96.1	192.2	4	768.8							
5 4	7	2.8	7.0	28.0	11.4	45.6	13.5	54.0	14.4	57.6	119.9	479.6	5	2398.0							
6 2	7	1.4	8.7	17.4	13.7	27.4	15.4	30.8	16.0	32.0	140.5	281.0	6	1686.0							
7 4	7	2.8	10.3	41.2	15.3	61.2	16.6	66.4	16.8	67.2	155.7	622.2	7	4359.6							
8 2	7	1.4	11.4	22.8	16.4	32.8	17.3	34.6	17.3	34.6	165.6	331.2	8	2649.6							
9 4	7	2.8	12.3	49.2	17.1	68.4	17.7	70.8	17.5	70.0	172.4	689.6	9	6206.4							
10 2	7	1.4	12.7	25.4	17.4	34.8	18.0	36.0	17.7	35.4	176.0	352.0	10	3520.0							

6675.4/10550.4 = 1.58

4.7

1106

632

7.426 =

Gen. of Bury below L.W.L.

793.7

10.5

39485

72370

3/8333.85

2777.95

12/5555.90

7/462.901

5/66.141

13.2282 =

Disp. in tons per

inch at L.W.L.

733.9

10.5

36695

7339

3/7705.95

2668.65

12/5137.20

7/428.108

5/61.158

12.2316 =

Disp. in tons per

inch at 3rd W.L.

410.1

10.5

20505

4101

3/4306.05

1485.35

12/2870.70

7/339.325

5/34.175

6.235 =

Disp. in tons per

inch at 1st W.L.

203.6 = Length of Keel.

176.0

4.7

12320

7040

3/827.20

275.733

551.466

1.43 = Keel 1-2 x 1-1

552.896 =

Area of Mid. Sec.

73206.832

291.162 = Keel.

7/73498.030

5/10399.718

2099.9436 =

Disp. at 20 ft. W.L.

73498.03 =

431 Coeff. of Disp.

212 x 36 x 20

W.L. B. D.

552.896

36.20 =

767 Coeff. of Mid. Sec.

Area of 1st.

5555.9

212 x 364 =

740 Coeff. of L.W.L.

41.1 x 1 = 41.1

206.3 x 4 = 825.2

410.1 x 1 = 410.1

1276.4

2.35

63820

38292

25522

3/2999.548

999.846

10.5

4999.230

999.846

3/10498.3836

3499.461

2

6998.922

291.162 = Keel.

7/7290.070

5/1041.438

208.2876 =

Disp. at 1st W.L.

41.1 x 1 = 41.1

410.1 x 4 = 1640.4

632.3 x 1 = 632.3

2513.8

4.7

161966

92552

3/108748.6

3624953

10.5

18124765

3624953

3/39062.065

12687.3358

2

25374.6710

291.162 = Keel.

7/25665.319

5/3666.545

733.309 =

Disp. at 2nd W.L.

41.1 x 1 = 41.1

410.1 x 3 = 1230.3

632.3 x 3 = 1896.9

733.1 x 1 = 733.1

3902.2

4.7

273154

156082

3/18340.34

6113.446

10.5

30567230

6113.446

8/64191.1820

8023.8978

3

24071.6934

291.162 = Keel.

7/48434.5348

5/6919.2192

1375.5438 =

Disp. at 3rd W.L.