



## RMS MAJESTIC SPECIFICATION FILE

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*Majestic's* reign as the world's largest ship lasted from her maiden voyage in 1922 until *Normandie's* appearance in 1935, if we count the title for the largest ship in service. Her size can be appreciated in her technical measurements and capacities. For instance, the space deducted from her gross tonnage figure to ascertain the net tonnage figure is almost equal to *Mauretania's* entire gross tonnage when she entered service as the largest ship in the world back in 1907; and even then *Majestic's* net tonnage was greater than *Adriatic's* gross tonnage in 1907. Quite simply, *Majestic* had a greater gross tonnage than *Adriatic* and *Mauretania* combined. Although, like *Olympic*, she had been designed primarily for comfort

Right: Letterhead from the *Majestic*.  
(J. Kent Collection.)



## Mark Chirnside's Reception Room



*Above: Majestic lived up to her name. The White Star Line were proud to operate the largest liner in the world. (Author's Collection.)*

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and luxury rather than speed, by 1925 *Majestic's* recorded speed left no doubt that she was also very fast. Her fastest eastbound crossing averaged 25 knots, while her best day's run up to that time came closer to 26 knots.

The specifications in this file were recorded prior to the 1928 refit, as the gross tonnage and net tonnage figures were subsequently amended by hand. However, the vast majority of the information is applicable to *Majestic* right up to 1936, by which time she had surpassed two hundred round trips to New York. Oddly enough, the á la carte restaurant's 133 seats are sometimes omitted from documents counting the 'saloon seats' in first class. The fact that this was an extra-tariff facility seems irrelevant, since *Olympic's* á la carte restaurant was usually included in her specifications.

Some dimensions will vary from other sources, due to different methods of measurement. For example, the length between perpendiculars was given on *Majestic's* Certificate of Registry as 915 feet 5 inches, rather than the 912 feet seen here, and to complicate matters slightly her British Register entry from 1922 gave it as 915 feet 6 inches (as reproduced in *RMS Majestic: The 'Magic Stick'*, page 89). Her 'length on deck' according to Lloyd's 1885 rules was given as 913 feet 6 inches. Many variations stemmed from different methods of measurement, or rounding, and further explanation of these methods can be found at Dave Gittins' website. Similarly, some secondary sources might give the ship's breadth as 100 feet or 100 feet 6 inches depending on whether they use the moulded or extreme breadth. One White Star Line brochure rounded it up to 101 feet. Her overall length has been given between 956 feet and 954 feet 6 inches, as well, depending on the sources used. The dramatic variations evident in some of the different methods of measurement are evident from the competition between *Leviathan* and *Majestic* in the 1920s, as they competed for the title of the 'world's largest ship'. The fact of the matter was that under any comparable measurement, *Majestic* was the larger of the two, yet *Leviathan's* owners tried to claim the title for their ship based on her American-based gross tonnage.

### RMS Majestic Specifications:

BUILDER, REGISTRATION:	
Builder:	Blohm & Voss, Hamburg
Registered Date:	1922
Class:	German Lloyd's 100 A-4
Board of Trade passenger certificate:	Yes
Load line certificate:	Yes
No. of propellers:	4
Normal weather, average speed (knots):	23.5

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DIMENSIONS:	
Length overall, feet:	954.5
Length between perpendiculars, feet:	912
Breadth, moulded, feet:	100
Breadth, extreme, feet:	100.5
Depth, moulded, side, feet:	64
Depth, moulded, centre, feet:	64.2

TONNAGE:	
Gross:	56,551.08
Deductions for erections, propelling space, etc.:	30,227.12
Net:	26,369.57
Nationality:	British
Official number:	146,555
Builder's number:	(B&V) 214

CREW:	
Maximum, Deck Dept.:	90
Maximum, Engine Dept.:	216
Maximum, Victualing Dept.:	787
Grand total:	1,093

DRAFT, DISPLACEMENT & FREEBOARD:	
Light	
Draft, feet:	30' 8½"
Displacement, tons:	48,250
Tons per inch immersion:	162
Block co-efficient:	.597

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<b>DRAFT, DISPLACEMENT &amp; FREEBOARD (cont'd):</b>	
<b>Summer</b>	
Draft, feet:	38' 10¼"
Freeboard, feet:	25' 7½"
Tons per inch immersion:	169.3
Block co-efficient:	.629
Deadweight tons:	13,477

<b>TANKS:</b>	
<b>Double Bottom Tanks:</b>	
Fresh water only, tons:	1,658
Salt water only, tons:	2,285
Oil only, tons:	No. 3, 756
Fresh or salt water, tons:	2,157
<b>Deep Tanks:</b>	
Salt water only, tons (Frahm tanks):	539
Oil, tons:	1,126 salt water or 2,104 oil
<b>Peak Tanks:</b>	
Salt water, tons:	421
Total fresh water, tons:	3,815
Total salt water, tons:	3,282
Total [fuel] oil, tons:	8,717
<b>Domestic Tanks:</b>	
Fresh water, tons:	141
Gallons:	31,584

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WATERTIGHT SUBDIVISION, CARGO AND APPLIANCES:	
No of transverse watertight bulkheads:	13
Cargo holds:	6 compartments, 2 for cargo
Size of largest hatch on Weather Deck:	20 x 16
No. of winches available for cargo:	12, 3 ton each
Special appliances:	Submarine signal, wireless, anti-rolling tanks

DYNAMOS:	
Number:	5
Makers:	Allgemeine, Elec., Ges., Berlin (A.E.G.)
Voltage:	115
Total output in kilowatts:	1,440

EMERGENCY DYNAMOS:	
Makers:	A. E. G.
Total output in kilowatts:	70

PASSENGERS:	
1 <sup>st</sup> CLASS	
Permanent rooms:	243
Permanent berths:	800
Alternative 1 <sup>st</sup> or 2 <sup>nd</sup> class rooms:	27
Alternative 1 <sup>st</sup> or 2 <sup>nd</sup> class berths:	75
Max number of berths:	875
Saloon seats:	678

## *RMS Majestic Specification File*

<b>PASSENGERS:</b>	
<b>2<sup>nd</sup> CLASS</b>	
Permanent rooms:	174
Permanent berths:	513
Alternative 1 <sup>st</sup> or 2 <sup>nd</sup> class rooms:	27
Alternative 1 <sup>st</sup> or 2 <sup>nd</sup> class berths:	75
Alternative 2 <sup>nd</sup> or 3 <sup>rd</sup> class rooms:	65
Alternative 2 <sup>nd</sup> or 3 <sup>rd</sup> class berths:	212
Max number of berths:	800
Saloon seats:	361

<b>PASSENGERS:</b>	
<b>3<sup>rd</sup> CLASS</b>	
Rooms:	502
Berths in rooms:	1,889
Berths open:	327
Alternative 2 <sup>nd</sup> or 3 <sup>rd</sup> class rooms:	65
Alternative 2 <sup>nd</sup> or 3 <sup>rd</sup> class berths:	222
Max number of berths:	2,438
Saloon seats:	Aft saloon: 442 Forward saloon: 363

<b>CARGO:</b>	
Capacity of all cargo spaces, excluding 3 <sup>rd</sup> class spaces, Bridge spaces, And refrigerated spaces, cubic ft.:	6,000
Refrigerated spaces available for cargo, cubic feet:	32,160
Grand total of cargo space, cubic ft.:	38,160

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REFRIGERATED CARGO:	
No. of compartments:	2
No. of cubic ft.:	32,160
No. of quarters:	4,400
System:	CO2 & brine

FUEL:	
Consumption	
Per day, tons:	840
Per 100 knots:	148
Class of fuel:	Oil, American
Permanent bunkers above double bottom, Oil taken at 38 c. ft. per ton., Coal taken at 44 c. ft. per ton:	210,900 cubic feet 5,550 tons
Double bottom, oil taken at 38 c. ft. per ton:	28,728 cub. ft. 756 tons
Deep tanks, oil, taken at 38 c. ft per ton:	2,104
Total fuel tons:	8,717

BOILERS:	
Type:	Yarrow
Number of water tubes:	48
Dimensions dia or width:	Steam Drums 5 Diam
Maker:	Blohm & Voss
Date:	1922
Pressure, lbs. per sq. Inch:	240

FURNACES:	
Grate area, square ft.:	4,013
Heating surface, square ft.:	219,504
Natural or forced draught:	Forced
Type of oil fuel system:	White
No. of burners:	240

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PROPELLERS:	
Turbine	
Diam, ft.	16.5
Pitch, ft.	15
Expand. surface, sq. ft.	240

HORSEPOWER:	
Average turbine SHP ahead:	66,000
Average turbine SHP astern:	36,000

TURBINES:	
Type:	Parsons Direct Drive
Makers:	Blohm & Voss, Hamburg
No. of rotors:	4
No. of stages ahead:	H.P. ad. 4 I. P. ad. 10 L. P. ad. 12
No. of stages astern:	H.P. an. 5 L.P. an 5
No. of nozzles:	H.P. an. 42 I.P. ad. 20
Gearing single or double:	Direct driven.
Propeller revs. per min.:	180

**Note:** Although the specifications given here are very technical in nature, some simple abbreviations are easily understandable, while others require a more lengthy explanation.

**Reg'd.:** Registered.

**Cert.:** Certificate.

**Dispt.:** Displacement.

**W.T.:** Watertight.

**Refrig'd.:** Refrigerated.

**lbs. per sq. inch:** Pounds per square inch.

**Revs. per min.:** Revolutions per minute.

**C. feet./Cub feet:** Cubic feet.

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**Tons per inch immers'n.:** Tons per inch immersion, or the number of tons that are required to change the draught of the ship by one inch at a given level of draught.

**Block co-eff.:** Block co-efficient. This is the ratio of the underwater volume of a ship to the volume of a rectangular block having the length, breadth and draft of the ship.

**Deadweight:** The deadweight is the difference between the loaded displacement of the ship and the displacement when it is completely empty of cargo, fuel, passengers, crew, etc.

**Trans.:** Transverse, i.e. a watertight bulkhead running across the ship, from side to side, rather than along the ship.

**Expand. surface sq. ft.:** Expanded surface area of the propeller, in square feet.

**S.H.P.:** Shaft horsepower, the method of measuring a steam turbine's power output.

**H.P., I.P. and L.P.:** High pressure, intermediate pressure, and low pressure. Majestic's turbines had three stages when running ahead, as steam entered at high pressure and was reduced to a lower pressure.

**Ad.:** Ahead.

**An.:** Astern.

### **ACKNOWLEDGEMENTS**

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