Ship Fact Sheet

MOOLTAN (1861)

Base data at 8 March 1861. Last amended November 2008
** indicates entries changed during P&O Group service.*

Type	Passenger liner
P&O Group service	1861-1880
P&O Group status	Owned by parent company
Former name(s)	
Registered owners, managers and operators	The Peninsular and Oriental Steam Navigation Company
Builders	Thames Iron Works and Shipbuilding Co
Yard	Blackwall
Country	UK
Yard number	
*Registry**	London, UK
Official number	29397
Signal letters	
Classification society	
Gross tonnage	2,257 grt
Net tonnage	1,628 nrt
Deadweight	
Length	106.28m (348.8ft)
Breadth	11.91m (39.1ft)
Depth	8.74m (28.7ft)
Draught	
Construction (if not steel)	Iron
*Engines**	Tandem compound inverted direct-acting steam engines (Wolf's double-acting design)
*Engine builders**	Humphrys, Tennant & Co
*Works**	Deptford
*Country**	UK
Power	1,734 ihp
Propulsion	Single screw
Speed	12 knots
Passenger capacity	112 first class, 37 second class
Cargo capacity	
Crew	
Employment	Southampton/Alexandria and Calcutta/Suez services

Career

10.1860:	Launched by Mrs Hall, wife of Captain W H Hall, RN, a P&O director.
08.03.1861:	Registered as *Mooltan* for The Peninsular and Oriental Steam Navigation Company. Mooltan, or Multan, was an important garrison town of British India, now in Pakistan.
27.04.1861:	Ran trials. She was fitted with P&O's first experiment with compound engines, which halved fuel consumption but proved unreliable and broke down frequently. She was also unusually long for her beam and tended to roll, and her lifting screw, hydraulic capstans and steam steering gear all gave trouble. But she was comfortable with magnificent fittings and a hydraulic ice-making machine for passengers.
20.07.1861:	Maiden sailing Southampton/Alexandria.
Late 1862:	Sent out for Calcutta/Suez service.
1866:	Sent home to be fitted with new engines and boilers by C A Day, Southampton.
10.1871:	Came north through Suez Canal to run Southampton/Alexandria and Venice/Alexandria services.
1873:	Bombay/Galle/Sydney service.
15.11.1874:	Arrived at London and laid-up.
05.12.1876:	Re-registered at Greenock.
12.1880:	Sold to J Ellis and Co, Liverpool.
1883:	Sold to J J Wallace, London.
1884:	Sold to J Pedley, London, renamed *Eleanor Margaret* and reduced to a sailing vessel.
1888:	Sold to J D Bischoff, Germany.
28.06.1891:	Sailed from Newcastle upon Tyne for Valparaiso and disappeared without trace in the North Atlantic.

PENINSULAR AND ORIENTAL COMPANY'S STEAM SHIP MOOLTAN

"Illustrated London News" 3rd August 1861

This last addition to the noble fleet of this celebrated company has lately left our shores on her first voyage. The *Mooltan* has been built to run between Southampton and Alexandria. She was designed by Mr. James Ash, and built by the Thames Iron Company. Her size, length, and tonnage (2,600) are for the present day of almost an ordinary standard, for the strides by which companies and shipbuilders are advancing to vessels of almost *Great Eastern* proportions are great and rapid. The Cunard Company are building ships of upwards of 4,000 tons; and even the *Warrior*, of nearly 7,000 tons, though large certainly, is thought by no means out of the way for ordinary sea-going merchantmen, as is evidenced by the Government having now under consideration a scheme for a line of 8,000-ton steamers as troop-transports and mail-steamers between this country and India via the Cape. The *Mooltan* is 370 feet long (only five feet shorter than the *Himalaya*), 31 feet deep, and 39 feet wide. Such a width for such an immense length may at first appear disproportionate and too little; but in this ship, built to accomplish a high rate of speed with a small consumption of fuel, these dimensions were almost unavoidable. She is ship-rigged, and her appearance in the water gives one more the idea of a costly yacht of immense size, so exquisite are her fine lines and her graceful buoyancy. Light, however, as she looks, the hull is of enormous strength, and broad diagonal stringers of iron so cross the ship in both sides and deck in all directions that she may be considered, of her size, as strong as the *Great Eastern* herself. Inside she is fitted up with a solidity and splendour, which have not been seen in the finest vessels of this company. Everything even on the upper-deck which is not of polished mahogany, is of polished teak, and the expenditure in ornamental fittings would appear to be carried to an extreme, if they were not also all solid and serviceable. The decorations of the state saloon might be pointed to as a model for good taste and elegance of what a ship's fittings would be in this respect.

All connected with the machinery and hull are novelties, though not innovations. The Peninsular and Oriental Company pay annually nearly a million sterling for coals, and their efforts, therefore, have been constantly directed to the encouragement and development of machines that will do the most work with the least consumption of fuel. Speed in ships with great power is always attainable; but the cost of an extra knot on a seagoing steamer is something enormous, and companies have found that, like other things, speed may therefore be bought too dear. By the application of the superheating apparatus to their vessels, the Peninsular and Oriental Company have already affected a considerable saving of fuel. With one applied by Mr. Penn to the *Valetta* the consumption of that ship has been reduced, we believe, from the sixty to forty tons a day. With the *Mooltan*, however, the company are trying to achieve still greater results, and by certain modifications in the plan of the machinery, hope, with only four small boilers, engines of 400-horse power, and a consumption of one ton of coals per hour, to make this vessel average a speed of $10^1/_2$ knots an hour. To average this on all her runs the *Mooltan* must be able to do $12^1/_2$ or 13 knots in anything like fair weather. The engines have been fitted by Messrs. Humphreys and Tennant, and are, for their power, unusually compact, not occupying a greater width in the ship than the diameter of the

large cylinders. The cylinders are “jacketed”, as it is termed—that is, there is an upper pair of 43 in. diameter, in which the dry steam is first used, at a pressure of 20lb, and an outer cylinder of 96 in. diameter, when it is worked expansively and afterwards condensed and returned to the boilers. The boilers contain only 4800 ft. of surface, and 160 ft. of fire-bar. For a seagoing steamer of 400-horse power the Admiralty require boilers containing 7,600 ft. of surface and 280 ft. of fire-bar. The stroke is only 3 ft., the diameter of the screw 17 ft., and the pitch 22ft. The whole weight of the engines, with water in the boilers, is 330 tons. Mr. Humphreys guarantees with these to work up to four times the nominal horse power, to do 12 knots at the measured mile, and to average at sea 10 knots. In her passage from the Thames to Southampton, in spite of a strong head wind to Dover and a strong tide against her all the way, except during three hours, the *Mooltan* averaged over nine knots, and in a run of twenty- four hours only consumed 20 tons 10 cwt. of coals. The fuel used was patent, so that a count tally of every block put on could be kept. For nearly seven hours only 4 $^{1}/_{2}$ tons were used, and while the screw was going at 59 revolutions, and the engines indicating between 1,100 and 1,200 horse power, the vessel was going through the water at nearly 10 knots, not a complete ton, it is stated, was used in any single hour. Of course, the engines are superheating, being fitted with Lamb’s apparatus in the bottom of the funnel, and from this the steam passed at from 330 degrees to 320 into the cylinders—the pressure in the boilers being 20 1b., in the engines from $17^{1}/_{2}$ lb to 18 lb. Her official trial-trip at Stokes Bay averaged 12.4 knots at the measured mile.

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