

HE M.V. "Craftsman" with its ability to lift up to 500 tons can be made available for the carriage of individual pieces of cargo requiring an abnormal lifting capacity.

This exceptional vessel came into service in April 1972 and is the first general cargo vessel with such a heavy lift ability to be registered in Great Britain. The vessel has been designed to meet the trend towards heavier lifts, particularly in the electrical equipment field where manufacturers of transformers, stators, etc. are finding it more feasible and economic to construct heavier machinery.

A well-proven arrangement of two 250 ton double pendulum block type Stulcken derricks are used coupled for heavy lifts, or independently for lighter loads. There is also a comprehensive outfit of cranes ranging from 5 to 10 tons, 5 and 10 ton derricks and a 10 ton swinging derrick.

One of the most difficult design problems which had to be overcome was ensuring that "Craftsman" had the inherent stability to handle 500-ton lifts in all conditions—even when otherwise empty—without the use of solid ballast. Elaborate derrick tests which were carried out before delivery included taking 500 tons on the hook, and plumbing the second set of railway lines from the quay edge-some 22 ft. Even with the load at this outreach "Craftsman" does not heel more than $12\frac{1}{2}^{\circ}$. This means that heavy lift cargoes can be discharged at ports where, for example, no specialised facilities exist for roll on roll off vessels. "Craftsman" in fact is a vessel capable of carrying

lifts on a truly world-wide basis, and will be available for employment to ports outside normal routes, subject to availability and convenience. The vessel has a service speed of $18\frac{1}{2}$ knots.

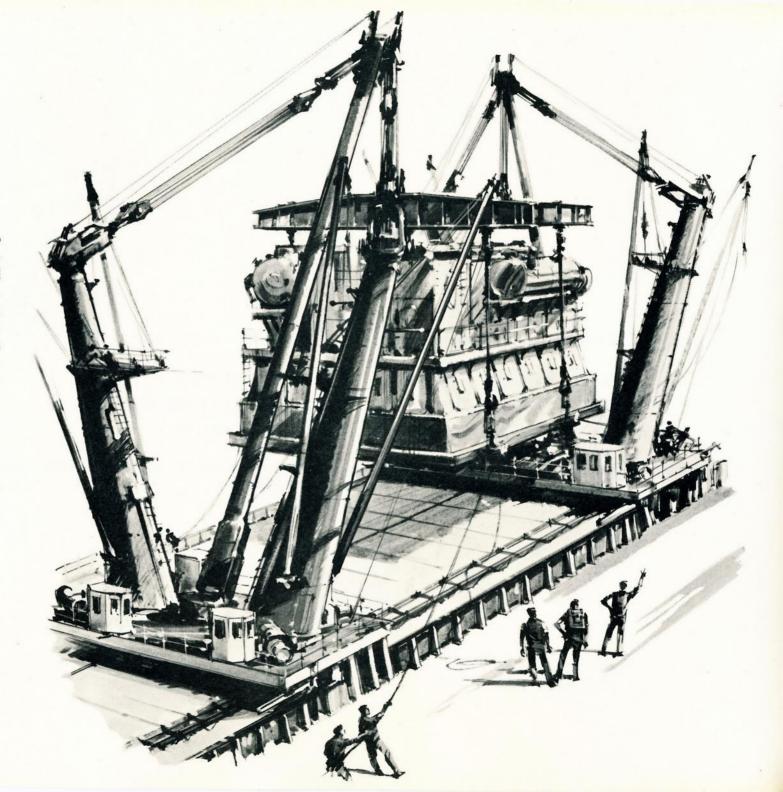
Simple, co-ordinated control from the bridge. The 250-ton derricks are operated by four 110 h.p. winches situated in forced ventilation rooms below tween deck levels—and controlled by one man with a simple walking 'joystick'. When the derricks are working in tandem, the entire operation, including transfer of water ballast, can be co-ordinated by the Master from the bridge. Loading or discharging a 500-ton piece would take little more than an hour.

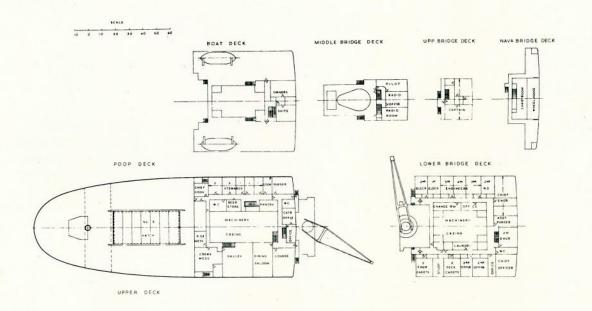
Some 20,000 cu. ft. of refrigerated space is available, divided into five chambers, with temperature control

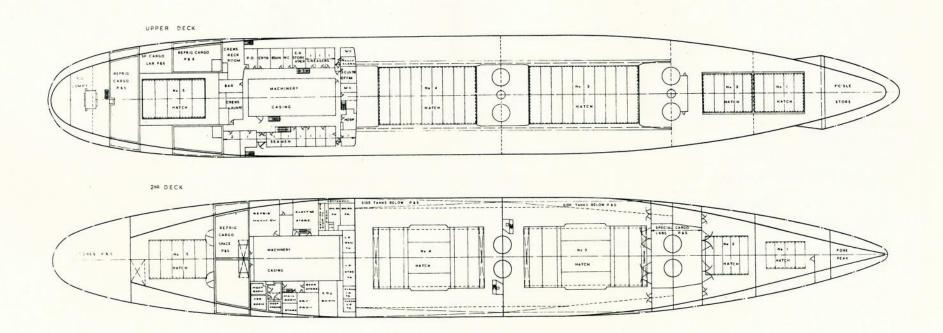
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between -10° F and $+60^{\circ}$ F. All cargo compartments are mechanically ventilated with additional forced ventilation for carriage of citrus fruits. And for the first time in a Harrison Line vessel the engine room has been designed to operate unmanned 16 hours a day-again, with direct control from the bridge. This is the result of extensive investigation into unmanned operation-with special training for the company's Superintendents in electronics, servo mechanics and allied subjects.

The "Craftsman" carries extensive monitoring and alarm annunciation systems for machinery spaces, automatic recording of hold temperatures, and bilge level alarms to reduce deck department duties to a minimum.





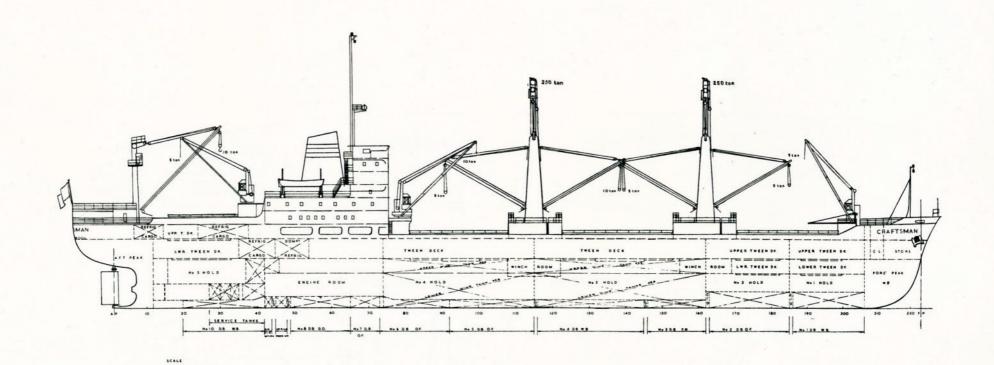


PRINCIPAL PARTICULARS

Length, o.a	
Length, b.p	
Breadth, moulded73ft. 6in.	
Depth, moulded to	
upper deck41ft.	

Depth, moulded to	2nd	deck	30ft. 2in.
Gross register			10,219 tons
Nett register			.5,169 tons
Deadweight			12,830 tons
Draught, summer .			

Bale capacity	582,336	cu. ft.
Refrigerator capacity	. 21,600	cu. ft.
Block coefficient		61
Propulsive power	. 16,000	b.h.p.
Service speed	$18\frac{1}{2}$	knots



The Harrison Line fleet is employed on regular services to and from

WEST INDIES · GUYANA · SURINAM · VENEZUELA
COLOMBIA · MEXICO · GUATEMALA · BRITISH HONDURAS
U.S. GULF PORTS · SOUTH AND EAST AFRICA

m.v. "Craftsman" will normally serve these trades but will be available for employment to and from ports outside these routes by arrangement.

Harrison Line

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