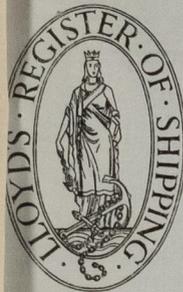


## LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER



Port MANCHESTER.

18608.

16th October, 1958.

This is to Certify that

L.V. HAUSER.

the undersigned Surveyor to this Society did at the request of Messrs. Crossley Bros. Ltd., Reddish. attend at their works for the purpose of examining and testing Two - BW4 Heavy Oil Engines for Messrs. J.I. Thornycroft Ltd., Yard No.4183.

Particulars of the engine are as follows:-

Contract Nos.	15977-B.
Engine Number.....	146383-4.
Type .....	BW4
Number of Cylinders .....	4
Diameter of Cylinders.....	5"
Stroke .....	6 $\frac{1}{4}$ "
Maximum Pressure.....	850 P.S.I.
Mean Indicated Pressure.....	121 P.S.I.
Brake Horse Power .....	80
Revolutions per Minute .....	1350
Span of Bearings.....	12-5/8"
Diameter of Journals .....	3-1/2"
Diameter of Crankpins.....	3-1/4"
Breadth of Webs .....	5"
Thickness of Webs .....	1-27/32".

These engines have been built under Special Survey, in accordance with the Approved Plans and Rules of the Society, materials and workmanship being good.

On completion, the above machinery was tried in the shops under working conditions with satisfactory results, coupled to 50 KW Campbell & Isherwood Generators Nos. 54755-6 respectively.

For purposes of identification the cylinder blocks and crankshafts were stamped thus:-

## LLOYD'S TEST

50 lb./sq. in.  
LVH 24.1.58.  
LVH 21.1.58.

## LLOYD'S TEST

No. 728/2 LVH 19.12.57.  
728/1 LVH 23.12.57.

L. V. Hauser

Engineer Surveyor to

Lloyd's Register of Shipping.

Fee:— £20. 0. Od.

Exp. £1.17. 6d.

This Certificate is issued upon the terms of the Rules and Regulations of the Society, which provide that:—

"While the Committees of the Society use their best endeavours to ensure that the functions of the Society are properly executed, it is to be understood that neither the Society nor any Member of any of its Committees is under any circumstances whatever to be held responsible for any inaccuracy in any report or certificate issued by the Society or its Surveyors, or in any entry in the Register Book or other publication of the Society, or for any error of judgment, default, or negligence of any of its Committees or any Member thereof, or the Surveyors, or other Officers or Agents of the Society."

(Rpt. 10/4c) 5m,7.5d. T. (MADE AND PRINTED IN ENGLAND)