

Messrs. Fredriksstad Mek. Verkstad's Yard Nos. 287 & 289.

Boilers.

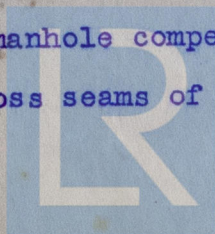
The Oslo Surveyors have forwarded a plan of Boilers for consideration, and state that it was originally intended to build the above vessels under the survey of the Norske Veritas, it not being decided to build to the classification of this Society until ^{after} the boiler plates ~~were~~ ^{had been} examined and tested.

The material for these boilers has been made at an approved Works by the open hearth process and tested by the Norske Veritas Surveyors, the results of the tests being satisfactory.

The thickness of the shell plates as shown on the plan is slightly less than required by the Society's Rules, but from the test sheets and sketches forwarded by the Surveyors it appears that the tensile strength and thickness of the shell plates are somewhat greater than indicated on the plan and meet the requirements of the Rules.

The combustion chambers are of welded construction and, as shown on the plan, are such as could be accepted.

IT IS SUBMITTED the Oslo Surveyors be informed it is noted that the plates for these boilers have been made and tested under the supervision of the Norske Veritas Surveyors, the results of the tests being satisfactory, and in the circumstances the boilers with scantlings as shown and amended on the plan could be accepted in this instance for a working pressure of 15.5 Kgs. per sq. cm., provided the plates be examined and found sound and free from surface defects, the pitch of the rivets of the shell circumferential end seams be not greater than 102 mm., the pitch of the rivets at the ends of the shell manhole compensation plate be not less than 240 mm., the cross seams of the boiler end plates



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W267-0123 1/2

be double riveted, the welding of the combustion chambers be carried out with electrodes of a type approved by the Committee for use on parts of primary structural importance and to the Surveyors's satisfaction, the combustion chambers be annealed on completion of the welding, and the boilers be constructed to the satisfaction of the Surveyors and under the usual conditions of ~~survey and~~ testing.

The Surveyors should pay special attention to the combustion chambers when the boilers are under hydraulic test.

It should be pointed out that the efficiency of the longitudinal shell joint allowed in this case is 85% and, in conjunction with the mean thickness of the shell plates, as measured by the Surveyors, together with the ultimate tensile breaking strength of the material, this meets the requirements of the Rules for the proposed working pressure of 15.5 Kgs. per sq. cm.

It is concluded that the material not mentioned on the test sheets forwarded by the Surveyors, viz:- furnaces, stays and tubes, will be made and tested under the supervision of the Society's Surveyors, but this should be confirmed.

Wire Oslo Surveyors:-

"Fredriksstad 287/9 boilers plan approved for working pressure 15.5 Kgs. per sq. cm., provided cross seams of end plates be double riveted. Welding to Surveyors' satisfaction. Minor amendments. Concluded furnaces, stays and tubes will be tested by Society's Surveyors".

WRITING."

Return 4 plans
Retain 1 copy

J.D.P.

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