

Messrs. Burmeister & Wain.

Proposed use of Thomas Steel for parts of Welded Bedplate.

This case was dealt with in the Secretary's letters of the 21st June, 1938, and 21st July, 1938, when a design of welded bedplate proposed by Messrs. Burmeister & Wain received consideration.

In this design use is made of broad flanged "Differdinger" sections and the Firm asked whether these sections could be accepted if made from Thomas (Basic Bessemer) Steel.

This latter proposal was not accepted.

The Firm now state that it is impossible to obtain these particular sections on the European market in Open Hearth Steel, and that the sections in question are made only in Thomas Steel.

The Firm also point out that the stresses in these parts are low, viz:- 1.9 tons per sq. inch (which fact has been confirmed by calculations made in this Office), and they offer impact and tensile tests on the material together with a chemical analysis from both ends of each beam.

IT IS SUBMITTED that Mr.L.Ripley, Principal Surveyor for Steel, and Mr.W.E.Lewis, Special Surveyor for Steel, should be advised in terms of the above, and having regard to the Society's practice in the past, and the fact that bedplates are considered acceptable if made from cast iron, without physical tests and with stresses of about 1.5 tons per sq. inch, they should be requested to state whether the tests now offered by the Firm would afford a basis on which these sections might be accepted, if made from Thomas Steel.

Messrs. Ripley and Lewis should also be asked to state whether the tests suggested by the Firm would

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satisfactorily indicate a brittle, overblown or unreliable state of the material and to suggest any further tests which would, in their opinion, form a sound basis for an investigation of the material in question.

With regard to the Firm's statement that the sections in question, as per sketch attached, can only be obtained in Thomas Steel, Messrs. Ripley and Lewis should be requested to state whether, to their knowledge, such is the case, or whether any Firm known to them, rolling such "Differdinger" sections, has open hearth plant or would consider special rolling in open hearth material.

The Copenhagen Surveyors' letter should be suitably acknowledged.

W.B.W.

J.R.

EDH.

1st October, 1938.

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