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REPORT

ON

BRITISH STANDARD FORMS

OF

ETCHED BAR TEST PIECES.

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No. 131—1920.

British Engineering Standards Association.
(Incorporated 1918.)

FORMED IN 1901 AS THE ENGINEERING STANDARDS COMMITTEE

BY

THE INSTITUTION OF CIVIL ENGINEERS.
THE INSTITUTION OF MECHANICAL ENGINEERS.
THE INSTITUTION OF NAVAL ARCHITECTS.
THE IRON AND STEEL INSTITUTE.
THE INSTITUTION OF ELECTRICAL ENGINEERS.

REPORT

ON

BRITISH STANDARD FORMS

OF

NOTCHED BAR TEST PIECES.

LONDON:

PUBLISHED FOR THE ASSOCIATION BY CROSBY LOCKWOOD & SON,
7, STATIONERS' HALL COURT, LUDGATE HILL, E.C. 4; AND 5, BROADWAY, LONDON, S.W. 1;
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August, 1920.

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*This Report was adopted by the Sectional Committee on Notched Bar Tests at
their meeting on March 11th, 1920, and approved on behalf of the Main Com-
mittee on July 15th, 1920.*

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BRITISH STANDARD FORM**NOTCHED BAR TEST PIECES.**

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INTRODUCTORY REMARKS.

In view of the large use of Notched Bar Tests, and the diversity in the dimensions of the test pieces at present used, it has been considered desirable that the test should be standardised, and this Report gives the Standard dimensions of the test pieces and the form of notch recommended, as well as a number of other particulars.

The test piece should be fractured by a single blow of a falling tup or pendulum or revolving flywheel. The work expended in fracture is measured by the difference of the striking energy before and after impact.

In pendulum machines the pendulum should be supported on knife edges or ball bearings. The centres of gravity of the pendulum and test piece and the point of impact should be in the middle plane of oscillation of the pendulum. The centre of percussion of the pendulum should be at or slightly above the point of impact.

The results in some materials depend on the striking velocity which should not in any case be less than 3 metres per second.

The weight of the anvil block and its foundation should be at least 40 times the weight of the tup or pendulum.

Various machines are in use for making notched bar tests. It does not appear that the results are materially different when tests are made with the Standard types of test pieces in these different machines, provided they are properly constructed, calibrated and used, and that the striking velocity is not substantially different.

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