DETERMINATION OF ELASTIC CONSTANTS
—STP 129

There has in recent years been a revival of interest in the
determination of elastic constants. This symposium was
designed to review critically the various methods and focus
attention on those which might be suitable for standardization.
There is an analysis of a questionnaire on the needs
regarding elastic constants and on current practice in their
determination. An ingenious static method for modulus
determinations at elevated temperatures and its application to
steels is described. Static and dynamic methods for non-
mets are surveyed. Dynamic methods with their advantages
and limitations are discussed. Finally there is a comparison
of values of elastic constants for a beryllium-copper alloy
obtained by several static and dynamic methods. 184 pages.
(December, 1952.)

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ELASTIC CONSTANTS

Presented at the
FIFTY-FIFTH ANNUAL MEETING
(FIFTIETH ANNIVERSARY MEETING)
AMERICAN SOCIETY FOR TESTING MATERIALS
New York, N. Y., June 25, 1952

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FOREWORD

The papers and discussions in this Symposium on Determination of Elastic Constants were presented at the Seventeenth Session of the Fifty-fifth Annual Meeting of the American Society for Testing Materials held in New York, N. Y. on June 25, 1952. The Symposium was sponsored by the Task Group on Elastic Constants of Committee E-1 on Methods of Testing. Past President R. L. Templin, Assistant Director of Research and Chief Engineer of Tests, Aluminum Company of America, New Kensington, Pa. acted as Chairman of the session. Mr. Walter Ramberg, Chief, Mechanics Division, National Bureau of Standards, Chairman of the Task Group and of the Symposium Committee, was Secretary of the session.