

COMPACTION OF SOILS



STP 377

COMPACTION OF SOILS

A Symposium Presented at the
SIXTY-SEVENTH ANNUAL MEETING
AMERICAN SOCIETY FOR TESTING AND MATERIALS
Chicago, Ill., June 23, 1964



Reg. U. S. Pat. Off.

ASTM Special Technical Publication No. 377

Price \$7.00; to Members \$4.90

Published by the
AMERICAN SOCIETY FOR TESTING AND MATERIALS
1916 Race St., Philadelphia, Pa. 19103

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Library of Congress Catalog Card Number: 65-18214

Printed in Baltimore, Md.
July 1965

FOREWORD

The expansion in the use of compacted soils as a construction material has placed increased emphasis on the use of soil testing procedures in design and construction and in research before, during, and after these stages. Consistent with this trend, four papers are published here that describe recent research in the compaction of soils. These papers and their discussion comprise the first part of this publication.

The second part of the publication presents the transcription of a panel discussion in which the members of the panel address four basic questions on the compaction of soils:

1. Why compaction?
2. Why do we test?
3. How do we test?
4. What do we do with the test results?

To start this session, each member of the panel presented a resume or "state of the art" response to one of these questions. This was followed by an inter-panel discussion of significant points and then by general discussion. The panel included:

James K. Mitchell, University of California
Wesley G. Holz, U. S. Bureau of Reclamation
A. Walter Johnson, Highway Research Board
Willard J. Turnbull, U. S. Army Waterways Experiment Station
Bonner S. Coffman, Ohio State University (moderator)

The papers and discussions in this publication were presented in two sessions at the Sixty-seventh Annual Meeting of the Society, held in Chicago, Ill., June 21-26, 1964. The symposium was sponsored by Committee D-18 on Soils and Rock for Engineering Purposes through a special committee under the chairmanship of Bonner S. Coffman. John G. Joslin, Ohio Department of Highways, served as chairman of the papers session. Editing of the transcript of the second session was by Richard G. Ahlvin of the U. S. Army Waterways Experiment Station.

NOTE—The Society is not responsible, as a body, for the statements
and opinions advanced in this publication.

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RELATED ASTM PUBLICATIONS

Field Testing of Soils, STP 322, 1962 (\$15.00)

Soil Exploration, STP 351, 1964 (\$8.00)

D-18 Compilation of Procedures for Soil Testing, 1964 (\$7.75)

THIS PUBLICATION is one of many issued by the American Society for Testing and Materials in connection with its work of promoting knowledge of the properties of materials and developing standard specifications and tests for materials. Much of the data result from the voluntary contributions of many of the country's leading technical authorities from industry, scientific agencies, and government.

Over the years the Society has published many technical symposiums, reports, and special books. These may consist of a series of technical papers, reports by the ASTM technical committees, or compilations of data developed in special Society groups with many organizations cooperating. A list of ASTM publications and information on the work of the Society will be furnished on request.

