Fourth Pacific Area Meeting Papers

RAILROAD MATERIALS AND FACILITIES RESEARCH

Published by the
AMERICAN SOCIETY FOR TESTING AND MATERIALS

ASTM Special Technical Publication No. 354
RAILROAD MATERIALS AND FACILITIES RESEARCH

A Symposium presented at the Fourth Pacific Area National Meeting
AMERICAN SOCIETY FOR TESTING AND MATERIALS
Los Angeles, Calif., October 5, 1962

ASTM Special Technical Publication No. 354

Price $3.00; to Members $2.10

Published by the AMERICAN SOCIETY FOR TESTING AND MATERIALS
FOREWORD

Sponsored by the West Coast Technical Program Committee, the Symposium on Railroad Materials and Facilities Research was held on Friday, October 5, during the Fourth Pacific Area National Meeting of the Society from September 30-October 5, 1962, in Los Angeles, Calif.

The chairman of the symposium, at which five papers were presented, was A. S. Pedrick of the Southern Pacific Co. M. R. Scott of the Standard Oil Company of California was the presiding officer, and the session chairman was G. W. Vreeland, of the Columbia-Geneva Steel Co.

All the papers were written by railroad representatives who discussed the possibilities of improving testing procedures, facilities, maintenance practices, and the applicability of new technological developments to railroads.

The symposium committee consisted of the following members:

A. S. Pedrick, Southern Pacific Co. (symposium chairman)
M. R. Scott, Standard Oil Co. of Calif. (presiding officer)
G. W. Vreeland, Columbia-Geneva Steel Co. (session chairman)
E. Lenzin, Southern Pacific Co.
F. H. Stengele, Southern Pacific Co.
R. McBriar, The Denver and Rio Grande Western Railroad Co.
C. O. Penney, The Denver and Rio Grande Western Railroad Co.
R. H. Wright, The New York Central Railroad Co.
E. R. Thomas, Southern Pacific Co.
Note—The Society is not responsible, as a body, for the statements and opinions advanced in this publication.
CONTENTS

Introduction—A. S. Pedrick ................................................. 1
Automated Systems for Cleaning Diesel Engines and Other Railroad Equipment—
   F. H. Stengele and E. Lenzin ............................................. 3
   Discussion ...................................................................... 9
Research and Rail Inspection—R. McBryan and C. O. Penney .............. 10
   Discussion .................................................................. 21
Field Testing Experience With Freight Car Journal Lubricators—M. A. Pinney ... 22
   Discussion .................................................................. 32
A Test for Oxidation Stability of Diesel Lubricating Oils—R. H. Wright ........ 33
Functions and Design of a Research and Control Facility for Railroad Diesel Locomo-
   tives—E. R. Thomas ......................................................... 40
   Discussion .................................................................. 47
Research for Better Timber Railroad Bridges—E. J. Ruble and F. P. Drew ...... 49