

# Appearance of Metallic Surfaces

**STP 478**



**AMERICAN SOCIETY FOR TESTING AND MATERIALS**

# APPEARANCE OF METALLIC SURFACES

A symposium  
presented at the  
Seventy-first Annual Meeting  
AMERICAN SOCIETY FOR  
TESTING AND MATERIALS  
San Francisco, Calif., 23-28 June 1968

ASTM SPECIAL TECHNICAL PUBLICATION 478

List price \$7.00



AMERICAN SOCIETY FOR TESTING AND MATERIALS  
1916 Race Street, Philadelphia, Pa. 19103

© BY AMERICAN SOCIETY FOR TESTING AND MATERIALS 1970  
Library of Congress Catalog Card Number: 77-132803  
ISBN 0-8031-0065-5

NOTE

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

## Foreword

The Symposium on Appearance of Metallic Surfaces was presented at the Seventy-first Annual Meeting of the American Society for Testing and Materials held in San Francisco, Calif., 23-28 June 1968. The sponsor of this symposium was Committee E-12 on Appearance of Materials. E. F. Barkman, Reynolds Metals Co., presided as symposium chairman. In addition to the four papers presented at the symposium a paper by B. W. Robinson has been included in this publication.

## **Related ASTM Publications**

**Stainless Steel for Architectural Use, STP 454  
(1969), \$9.75**

**Nomenclature and Definitions Applicable to Radiometric  
and Photometric Characteristics of Matter,  
STP 475 (1970), \$3.00**

# Contents

Introduction	1
Appearance Attributes of Metallic Surfaces—R. S. HUNTER	3
Measurement of Appearance Characteristics of Stainless Steel—A. E. GLUBISH	22
Specular and Diffuse Reflectance Measurements of Aluminum Surfaces— E. F. BARKMAN	46
Instruments for the Measurement of Metallic Appearance—J. S. CHRISTIE	59
Proposed Method of Measurement for Appearance of Rolled Aluminum Sur- faces Using Distinctness of Image and Diffuse Reflectance Measuring Instruments—B. W. ROBINSON	79