

SYMPOSIUM ON TESTING METAL POWDERS AND METAL POWDER PRODUCTS

INTRODUCTION

BY F. V. LENEL¹

Nine years ago, the American Society for Testing Materials recognized that the commercial applications of powder metallurgy had advanced to a point where the methods of standardization developed by the Society may be profitably applied to the new field. The Society, therefore, arranged a Symposium on Powder Metallurgy which was held during its Buffalo Spring Meeting in March, 1943.² As a result of this symposium, a new technical committee of the Society was organized in 1944, which is committee B-9 on Metal Powders and Metal Powder Products. Since then the interest of industry in general in powder metallurgy as a fabricating process has increased considerably. The committee felt that one of the best approaches to stimulate further interest in the work it is performing was to organize another symposium in which specific methods of testing metal pow-

ders and metal powder products would be discussed.

In the field of metal powder products, Committee B-9 has developed specifications for those applications and those types of products where powder metallurgy has been well established as a production method, such as self-lubricating bearings and some types of structural parts. New applications and improved compositions for known applications have come to the fore in recent years, and the task of extending its standardization work to them faces the committee. Several of these new applications and compositions are being discussed in the first group of four papers.

The most important of the metal powder testing methods is the determination of particle size distribution, particularly in the range of sub-sieve particle sizes. This is a field in which standardization is just beginning. The last three of the papers in the symposium are concerned with it.

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² Symposium on Powder Metallurgy, Am. Soc. Testin^g Mats. (1943). (Issued as *ASTM STP No. 56*.)