



Transactions of
Technical Conference on
**Metric
Mechanical
Fasteners**

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Fasteners**

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Foreword In January 1971, the Industrial Fasteners Institute issued an engineering report, *A Study to Develop an Optimum Metric Fastener System* which presented recommendations on sizes, thread pitches, and thread form for a new series of metric module fasteners. This report was broadly circulated to engineering managers of leading multinational fastener using corporations in the United States and Canada, to the technical experts of fastener producing companies, and to the National Bureau of Standards study team responsible at that time for the conduct of the United States Metric Study.

Responses from all sources were quick and enthusiastic and urged an accelerated continuation of the study to search for an optimum metric fastener system. At the request of a group of users, producers, and government representatives, the American National Standards Institute in April 1971 appointed the ANSI Special Committee to Study Development of an Optimum Metric Fastener System, and authorized it to:

“develop a total system of metric module mechanical fasteners, taking advantage of every opportunity to improve fastener performance capability through product redesign and the most efficient use of materials, and to limit to the fewest possible the number of different sizes, series, grades, types and styles of fasteners necessary to satisfy the engineering requirements of the majority of industrial applications.”

While “optimum” by dictionary definition means the best, in the context of its use by the ANSI Special Committee, it means the most favorable compromise between technical excellence, the economics of fastener production and usage, and the realities of world trade and international standardization efforts.

The Committee held its first meeting in June 1971, and since has met twelve times with over sixty additional meetings of its working Subcommittees and Task Groups.

The transactions of this technical conference detail many of the engineering concepts and approaches used in the development of the recommendations issued by this Committee and will provide valuable reference information for all those having interest in mechanical fasteners.

The Industrial Fasteners Institute wishes to acknowledge the many significant and valued contributions of its members and the many industries which they serve. This pooling of technical knowledge by fastener engineers throughout North America to fulfill the Committee objectives is perhaps without precedent in engineering developments.

Charles J. Wilson
Secretary
ANSI Special Committee to
Study Development of an
Optimum Metric Fastener
System
March 1975

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