# AMERICAN NATIONAL STANDARD ENGINEERING DRAWING AND RELATED DOCUMENTATION PRACTICES

# Gear and Spline Drawing Standards Part 2-Bevel and Hypoid Gears

ANSI Y14.7.2 - 1978

## **REAFFIRMED 1999**

FOR CURRENT COMMITTEE PERSONNEL PLEASE SEE ASME MANUAL AS-11

#### SECRETARIAT

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## FOREWORD

For many years there was a growing desire for a national standard for engineering drawings, and as far back as December 1914 ASME approved and published the report of its Committee on Standards for Cross-Sections.

The subject of standard practice was laid before the ASME Standardization Committee in April 1925 and in May the ASME Council voted to approve the recommendation of the Committee that the American Standards Association be requested to authorize the organization of a nationally representative committee under its procedures to develop standards for drawings and drafting room practice. This recommendation was considered favorably and a preliminary conference was called by the ASA for October 14, 1925, and a general conference for December 4, 1925.

At the meeting of the ASA Standards Council, December 1925, the project was finally approved, its scope was outlined, and the Society for the Promotion of Engineering Education and the American Society of Mechanical Engineers were designated as joint sponsors. The organization meeting of the sectional committee was held September 24, 1926, at which Dean Franklin deR. Furman was elected chairman. Subsequently six subcommittees were appointed. These subcommittees undertook the formulation of tentative drafts of the several sections of the final report which were distributed for criticism and comment.

In the spring of 1931 an Editing Committee, Dr. Thomas E. French, Chairman, combined and harmonized the final reports of the several subcommittees. The proposed standard was approved by the sectional committee and was subsequently approved by the sponsor societies and transmitted to the American Standards Association for approval and designation as an American Standard, a status which was granted in May, 1935.

The sectional committee authorized the revision of the American Standard in December, 1940, and the Subcommittee on Revision was appointed in September, 1941. A draft dated August, 1944 received the approval of the sectional committee. The proposal was subsequently submitted to the sponsors and to the American Standards Association for their approval. This approval with designation as an American Standard was received on April 12, 1946.

In 1948, the scope of the project was enlarged, and a revision was begun in view of the increased drafting standardization work in Great Britain and Canada. An Executive Committee was formed in 1949 to supervise the work. It was decided to publish the eventual revision in separate sections. Upon completion and sectional committee approval of the last of the first six sections, they were sent to sponsors and to ASA for approval. Succeeding sections, as approved by the sectional committee were subsequently submitted to sponsors and ASA.

A section, Gears, Splines and Serrations, Y14.7, was approved and published as an American Standard on April 8, 1958.

Recognizing the need for a universal gear drafting standard, a COR Committee was organized, in December 1961, for the purpose of coordinating the views of the SAE, Y14, the Military and the AGMA on a drafting standard for gears which could provide a fundamental document for wide national use of all interested parties.

It was recommended by the SAE Drawing Standards Committee and concurred in by the members of the COR committee that this section be divided into parts with Part 1 covering spur, helical, double-helical, and rack gears, Part 2 covering bevel and hypoid gears, Part 3 covering crossed helical gears, worm gears, Spiroid and Helicon gears, and Part 4 covering splines.

After eight meetings, the COR Committee was incorporated into Subcommittee 7 of Standards Committee Y14. Many drafts were circulated among the members of AGMA, AOA, SAE, Y14 and the Military for suggestions and criticisms. During this time the American Standards Association became the United States of America Standards Institute and, as of October 6, 1969, the American National Standards Institute, Inc. In addition, the Society of Automotive Engineers became a cosponsor, along with the ASEE and the ASME of all Y14 Drafting Practices.

Part 1 was designated an American National Standard on November 1, 1971. This section covering Part 2 received the approval of the Y14 Standards Committee and was subsequently approved by the sponsor societies and submitted to the American National Standards Institute. It was designated an American National Standard on 17 January, 1978.

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