ASME A13.1-2007
[Revision of ASME A13.1-1996 (R2002)]

Scheme for the Identification of Piping Systems

AN AMERICAN NATIONAL STANDARD

The American Society of Mechanical Engineers

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ASME issues written replies to inquiries concerning interpretations of technical aspects of this Standard. Interpretations are published on the ASME Web site under the Committee Pages at http://cstools.asme.org as they are issued.

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FOREWORD

This is a revision of the Scheme for the Identification of Piping Systems, originally affirmed in 1928; reaffirmed in 1945; revised in 1956, 1975, and 1981; reaffirmed in 1985 and 1993; revised in 1996, reaffirmed in 2002, and revised in 2007.

Shortly after the turn of the twentieth century, with the resultant industrial expansion, it became apparent that some scheme should be devised to identify piping. In 1908, an article on "Identification of Power House Piping by Colors" was read at a meeting of The American Society of Mechanical Engineers. In 1909, an article called "Standard Colors for Power Station Piping" was read at the meeting of the Association of Edison Illuminating Companies.

In 1920, the National Safety News pointed out the need for a color scheme for pipelines, and the following year several papers were published and reports made to various committees, notably, the Prime Movers Committee of the National Electric Light Association, The American Society of Mechanical Engineers, and the U.S. Navy Department.

In the meantime, many large companies compiled their own scheme with no thought to standardization of pipe colors, even in their own plants. When personnel were shifted, accidents could and did happen.

The organization of the Sectional Committee on the Identification of Piping Systems, under the procedure of the American Standards Association (now called the American National Standards Institute), took place on June 14, 1922, resulting in the 1928 publication.

On August 23, 1950, the committee was reorganized to investigate the possibility of a revision to the standard. It was felt that a revision was necessary because of the tremendous number of different materials being carried in pipes. After many meetings and much discussion, a revision of American Standard, Scheme for Identification of Piping Systems, was approved by the sectional committee and sponsors. It was then presented to the American Standards Association (now called the American National Standards Institute) for approval and designation as an American Standard. This was granted on January 27, 1956.

In the late 1960s, the committee began discussions on the possibility of revising the 1956 Standard. These discussions continued for a number of years, eventually resulting in approval by the American National Standards Institute and designation as an American National Standard was obtained on November 16, 1981.

This edition of A13.1, which was approved by the A13 Committee and ASME, was approved by the American National Standards Institute on February 12, 2007.

ASME A13.1 COMMITTEE
Scheme for the Identification of Piping Systems

(The following is the roster of the Committee at the time of approval of this Standard.)

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INTRODUCTION

PURPOSES OF STANDARDIZATION

Schemes for identification of the contents of piping systems have been developed in the past by a large number of industrial plants and organizations of various kinds. Generally speaking, the standards arrived at in individual cases may have given satisfaction to those using them but they also may have suffered from a lack of uniformity. Numerous injuries to personnel and damage to property have occurred because of mistakes made in turning valves on, or disconnecting pipes at the wrong time or place, particularly when outside agencies, such as municipal fire departments, were called in to assist. Furthermore, there has been considerable confusion in the minds of those who change employment from one plant to another.

In order to promote greater safety, lessen the changes of error, confusion, or inaction, especially in times of emergency, a uniform system for the identification of piping contents has been established to warn personnel when the piping contents are inherently hazardous. Therefore, while this Standard has been prepared to specify the identification of the contents of piping systems on the basis of legends, it also suggests the use of color as a supplementary means of identifying the type of hazard of the material contained in the system.

METRIC CONVERSIONS

This Standard contains SI (metric) units and U.S. Customary units. Either system may be used to meet the standard.