ASME PTC 2-2001

[Revision of ASME PTC 2-1980 (R1985)]

DEFINITIONS AND VALUES

PERFORMANCE TEST CODES

REAFFIRMED 2014

FOR CURRENT COMMITTEE PERSONNEL
PLEASE E-MAIL CS@asme.org

An American National Standard

The American Society of Mechanical Engineers

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Date of Issuance: December 31, 2002

The next edition of this Code is scheduled for publication in 2006. There will be no addenda issued to this edition.

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

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FOREWORD

Precise definitions of terms and exact values of constants employed in the various Performance Test Codes of this Society are fundamentally important. This Code is intended to provide standard definitions and values required by each respective Performance Test Code (PTC) and to supplement each of them. The principal purpose of this Code (PTC 2), *Definitions and Values*, is to provide a source for any item used by more than one of the PTC committees reporting to the Board on Performance Test Codes. This Code is an outgrowth of five previous codes concerning definitions and values issued and adopted by the Society, and it supersedes them.

A draft of the first edition was printed in the December 1921 issue of Mechanical Engineering and was presented to the Society during the spring meeting held in Atlanta, Georgia the following May. On January 21, 1926, the first such code was approved and adopted by Council as a standard practice of the Society. The second edition of this code was approved by Council on May 14, 1931.

Beginning in June 1936, a thorough review and a complete rewriting of this code was undertaken, and the fruits of this labor were adopted by Council on June 17, 1945. In June, 1969, Performance Test Code Committee No. 2, acting under instructions from the Standing Committee on Performance Test Codes, proceeded to revise this Code, the draft of which was presented to the Society as a paper during the 1970 Winter Annual Meeting in New York. It was adopted in final form by action of the Policy Board on Codes and Standards on February 26, 1971.

The last major revision of this Code began in 1972 to incorporate metrication and the use of Systeme International (SI) units. The values of many of the physical constants and conversion factors were brought up to date as well. The 1980 Code was approved by the Performance Test Codes Supervisory Committee on February 26, 1979, and it was approved as an American National Standard by the ANSI Board of Standards Review on July 21, 1980.

The Code presented herein was revised by the PTC 2 Project Team and approved by the Board on Performance Test Codes on May 29, 2001. This Performance Test Code was also approved as an American National Standard by the ANSI Board of Standards Review on October 31, 2001.

NOTICE

All Performance Test Codes **MUST** adhere to the requirements of **PTC 1, GENERAL INSTRUCTIONS**. The following information is based on that document and is included here for emphasis and for the convenience of the user of the Code. It is expected that the Code user is fully cognizant of Parts I and III of PTC 1 and has read them prior to applying this Code.

ASME Performance Test Codes provide test procedures which yield results of the highest level of accuracy consistent with the best engineering knowledge and practice

currently available. They were developed by balanced committees representing all concerned interests. They specify procedures, instrumentation, equipment operating requirements, calculation methods, and uncertainty analysis.

When tests are run in accordance with a Code, the test results themselves, without adjustment for uncertainty, yield the best available indication of the actual performance of the tested equipment. ASME Performance Test Codes do not specify means to compare those results to contractual guarantees. Therefore, it is recommended that the parties to a commercial test agree **before starting the test and preferably before signing the contract** on the method to be used for comparing the test results to the contractual guarantees. It is beyond the scope of any Code to determine or interpret how such comparisons shall be made.

BOARD ON PERFORMANCE TEST CODES

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

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SECTION 1
OBJECT AND SCOPE

1.1 OBJECT

The purpose of this Code is to provide definition of terms and values of physical constants and conversion factors to comply with the requirements of ASME PTC 1, *General Instructions*.

1.2 SCOPE

This Code contains standards for terms, units of measure, values of constants, symbols, and technical nomenclature that are to be used in all individual test codes. The implication of the words "must," "shall," and "will" is mandatory. The use of "should," "would," and "ought" denotes recommended practice. All the information contained herein represents the state of the art at the time of its preparation. In order that the PTC may continue to be useful, any part of this Code is automatically superseded by any of the following actions:

(a) approval of new or revised units, values of physical constants, or flui properties;

(b) inclusion of equipment not covered by this Code in the PTC series; or

(c) approval by the Board on Performance Test Codes of a new Code not conforming to this document.

Such actions will be published in *Mechanical Engineering* as they occur, and this Code will be amended thereafter.