

ASME CSD-1–2012
(Revision of ASME CSD-1–2009)

Controls and Safety Devices for Automatically Fired Boilers

AN AMERICAN NATIONAL STANDARD



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Mechanical Engineers**

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FOREWORD

The major perils in operating automatically fired boilers are loss of water (low water), furnace explosion, overpressure, and overtemperature. Principal causes of accidents to automatically fired boilers are lack of proper controls and safety devices, lack of adequate maintenance, improperly trained operators, failure to test controls and safety devices, and complacency on the part of the operator due to long periods of trouble-free operation. It is believed that improved instrumentation, controls and safety devices, proper operating procedures, and a clearer understanding of installation requirements by the manufacturers, installers, and operators can greatly reduce the chances of personal injury, damage to property, and loss of equipment from accidents.

It should be pointed out that any governmental jurisdiction has authority over any particular installation. Inquiries dealing with problems of a local character should be directed to the proper authorities of such jurisdictions.

Safety codes and standards are intended to enhance public health and safety. Revisions result from the committee's consideration of factors such as technological advances, new data, and changing environmental and industry needs. Revisions do not imply that previous editions were inadequate.

The first edition of this Standard, which was approved by The American Society of Mechanical Engineers' Committee on Controls and Safety Devices for Automatically Fired Boilers, was approved and designated as an ASME Standard by The American Society of Mechanical Engineers on April 29, 1977.

The second edition, which was approved by the American National Standards Institute (ANSI) on October 4, 1982, was issued on December 31, 1982. An addenda to the edition, CSD-1a-1984, was approved on August 17, 1984 and issued on November 15, 1984.

The third edition, which was approved by ANSI on November 17, 1988, was issued on February 15, 1989. The CSD-1a-1989 Addenda was approved on October 3, 1989 and issued on February 15, 1990. The CSD-1b-1990 Addenda was approved on June 21, 1990 and issued on December 1, 1990.

The fourth edition, which was approved by ANSI on February 28, 1992, was issued on June 15, 1992. The CSD-1a-1993 Addenda was approved on August 18, 1993 and issued on November 30, 1993. The CSD-1b-1994 Addenda was approved on June 20, 1994 and issued on September 30, 1994.

The fifth edition, which was approved by ANSI on February 6, 1995, was issued on June 30, 1995. The CSD-1a-1996 Addenda was approved on February 5, 1996 and issued on July 31, 1996. The CSD-1b-1996 Addenda was approved on July 16, 1996 and issued on December 20, 1996.

The sixth edition, which was approved by ANSI on January 30, 1998, was issued on April 14, 1998. The CSD-1a-1999 Addenda was approved on November 2, 1999 and issued on March 10, 2000. The CSD-1b-2001 Addenda was approved on July 30, 2001 and issued on November 30, 2001.

The seventh edition, which was approved by ANSI on January 17, 2002, was issued on April 15, 2002.

The eighth edition, which was approved by ANSI on August 9, 2004, was issued on April 15, 2005.

The ninth edition, which was approved by ANSI on September 13, 2006, was issued on December 29, 2006.

The tenth edition, which was approved by ANSI on February 24, 2009, was issued on May 8, 2009.

This eleventh edition of CSD-1, which was approved by ANSI on January 13, 2012, was issued on May 10, 2012.



COMMITTEE ON CONTROLS AND SAFETY DEVICES FOR AUTOMATICALLY FIRED BOILERS

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

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General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by requesting interpretations, proposing revisions, and attending Committee meetings. Correspondence should be addressed to:

Secretary, CSDAFB Standards Committee
The American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Proposing a Case. Cases may be issued for the purpose of providing alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval and shall be posted on the ASME Committee Web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard, the paragraph, figure or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

Interpretations. Upon request, the CSDAFB Committee will render an interpretation of any requirement of the Standard. Interpretations can only be rendered in response to a written request sent to the Secretary of the CSDAFB Standards Committee.

The request for interpretation should be clear and unambiguous. It is further recommended that the inquirer submit his/her request in the following format:

Subject:	Cite the applicable paragraph number(s) and the topic of the inquiry.
Edition:	Cite the applicable edition of the Standard for which the interpretation is being requested.
Question:	Phrase the question as a request for an interpretation of a specific requirement suitable for general understanding and use, not as a request for an approval of a proprietary design or situation. The inquirer may also include any plans or drawings, that are necessary to explain the question; however, they should not contain proprietary names or information.

Requests that are not in this format may be rewritten in the appropriate format by the Committee prior to being answered, which may inadvertently change the intent of the original request.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME Committee or Subcommittee. ASME does not “approve,” “certify,” “rate,” or “endorse” any item, construction, proprietary device, or activity.

Attending Committee Meetings. The CSDAFB Standards Committee regularly holds meetings that are open to the public. Persons wishing to attend any meeting should contact the Secretary of the CSDAFB Standards Committee.



ASME CSD-1–2012

SUMMARY OF CHANGES

Following approval by the ASME CSDAFB Standards Committee, and after public review, ASME CSD-1–2012 was approved by the American National Standards Institute on January 13, 2012.

The 2012 edition of ASME CSD-1 includes the following changes identified by a margin note, **(12)**.

<i>Page</i>	<i>Location</i>	<i>Change</i>
1	CG-110	First sentence revised
	CG-140	Title revised
2, 3	CG-440	Revised
3–8	CG-700	(1) Definitions of <i>bleed line</i> , <i>FM</i> , <i>postpurge period</i> , <i>prepurge period</i> , and <i>vent line</i> revised (2) Definitions of <i>branch line</i> , <i>burner tip</i> , <i>combustion chamber</i> , <i>feedback line</i> , <i>flue passages</i> , <i>gas-pressure relief line</i> , <i>primary safety control system</i> , and <i>vent valve line</i> added
12	CW-110(h)	Added
14	CW-210	Revised in its entirety
15	CW-410	Subparagraph (c) revised; new subpara. (d) added; previous subpara. (d) redesignated as (e)
16	CW-700	Added
17	CF-110(b)	Revised
20–23	CF-150	Subparagraphs (e) and (g) revised
	CF-162	Revised in its entirety
	Table CF-3	Second entry in second and third columns revised
24, 25	CF-180(g)	Revised
	CF-190	Revised in its entirety
38	Fig. B-7	Added

SPECIAL NOTE:

The interpretations to ASME CSD-1 are included in this edition as a separate section for the user's convenience.

