

ASME NUM-1–2009

(Revision of ASME NUM-1–2004)

Rules for Construction of Cranes, Monorails and Hoists (With Bridge or Trolley or Hoist of the Underhung Type)

AN AMERICAN NATIONAL STANDARD



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FOREWORD

The Committee on Cranes for Nuclear Power Plants was first established in 1976. In 1980, the scope of the Committee was revised, and its name was changed to the Committee on Cranes for Nuclear Facilities. In 1983, the Nuclear Underhung and Monorail (NUM) Subcommittee was established to develop a standard to cover the design, fabrication, installation, and testing of underhung and monorail equipment used in nuclear facilities. The NUM-1 Standard is the result of the Subcommittee's work.

The first edition of ASME NUM-1 was approved by the American National Standards Institute (ANSI) on October 28, 1996. The second edition of ASME NUM-1 was approved by ANSI on May 3, 2000. The third edition of ASME NUM-1 was approved by ANSI on August 17, 2004.

This Standard, or portions thereof, can be applied to cranes, monorails, and hoists at facilities other than nuclear where enhanced equipment safety may be required, and can be provided by means of either single failure-proof features, enhanced safety features, or a seismic design.

This Standard is split into four major sections: NUM-G, General Specifications (applicable to all equipment); NUM-I, Type I equipment (i.e., equipment that is used to handle critical loads and is required to withstand a seismic event); NUM-II, Type II equipment (i.e., equipment that is not used to handle critical loads and is required to withstand a seismic event); and NUM-III, Type III equipment (i.e., equipment that is not used to handle critical loads and is not required to withstand a seismic event).

Suggestions for the improvement of this Standard are welcome. They should be addressed to the Secretary, ASME Committee on Cranes for Nuclear Facilities, The American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.

The 2009 edition of ASME NUM-1 was approved by ANSI on December 22, 2009.



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PREPARATION OF TECHNICAL INQUIRIES TO THE COMMITTEE ON CRANES FOR NUCLEAR FACILITIES

INTRODUCTION

The ASME Committee on Cranes for Nuclear Facilities (CNF) will consider written requests for interpretations and revisions to CNF Standards and develop new requirements if dictated by technological development. The Committee's activities in this regard are limited strictly to interpretations of the requirements or to consideration of revisions to the present Standard on the basis of new data or technology. As a matter of published policy, ASME does not "approve," "certify," "rate," or "endorse" any item, construction, proprietary device, or activity and, accordingly, inquiries requiring such consideration will be returned. Moreover, ASME does not act as a consultant on specific engineering problems or on the general application or understanding of the Standard requirements. If, based on the inquiry information submitted, it is the opinion of the Committee that the inquirer should seek assistance, the inquiry will be returned with the recommendation that such assistance be obtained.

All inquiries that do not provide the information needed for the Committee's full understanding will be returned.

INQUIRY FORMAT

Inquiries shall be limited strictly to interpretations of the requirements or to the consideration of revisions to the present Standard on the basis of new data or technology.

Inquiries shall be submitted in the following format:

(a) *Scope.* The inquiry shall involve a single requirement or closely related requirements. An inquiry letter concerning unrelated subjects will be returned.

(b) *Background.* State the purpose of the inquiry, which would be either to obtain an interpretation of the Standard or to propose consideration of a revision to the present Standard. Provide concisely the information needed for the Committee's understanding of the inquiry, being sure to include reference to the applicable Standard, Edition, Addenda, Requirements, Parts, Subparts, Appendices, paragraphs, figures, and tables. If sketches are provided, they shall be limited to the scope of the inquiry.

(c) *Inquiry Structure*

(1) *Proposed Question(s).* The inquiry shall be stated in a condensed and precise question format, omitting superfluous background information and, where appropriate, composed in such a way that "yes" or "no" (perhaps with provisos) would be an acceptable reply. The inquiry statement should be technically and editorially correct.

(2) *Proposed Reply(ies).* State what it is believed that the Standard requires. If in the inquirer's opinion a revision to the Standard is needed, recommended wording shall be provided.

(d) *Submittal.* The inquiry shall be submitted in type-written form; however, legible, handwritten inquiries will be considered. It shall include the name and mailing address and telephone number of the inquirer and be mailed to the following address:

Secretary
ASME Committee on Cranes for Nuclear Facilities
Nuclear Department
Three Park Avenue
New York, NY 10016-5990



ASME NUM-1–2009 SUMMARY OF CHANGES

Following approval by the ASME Committee on Cranes for Nuclear Facilities and ASME, and after public review, ASME NUM-1–2009 was approved by the American National Standards Institute on December 22, 2009.

The 2009 Edition of ASME NUM-1 includes revisions, additions, deletions, corrections, and editorial changes introduced in ASME NUM-1–2004, as well as the following changes identified by a margin note, **(09)**, placed next to the affected area.

<i>Page</i>	<i>Location</i>	<i>Change</i>
2	NUM-G-2110	Added
22	NUM-I-7942	Subparagraphs (c) and (d) revised in their entirety
23	Figure NUM-I-7942-1	Revised
	Figure NUM-I-7942-2	Revised
24, 26	NUM-I-7946.1	Subparagraphs (b) and (c) revised in their entirety
27	NUM-I-7960	Added
29, 30	Table NUM-I-8210-1	Revised in its entirety
36	NUM-I-8600	Added
39	NUM-II-8215.2.1	Added
42	NUM-II-8215.3.8	Value “5%” revised to read “7%”
88	NUM-III-7970	(1) Subparagraph (b) revised in its entirety (2) Subparagraph (c) deleted
89	NUM-III-8212.1	Subparagraphs (d)(1) and (e) revised
	Table NUM-III-8212.1-1	Deleted
127	NUM-III-8600	Added

