

ASME B30.10-2019
(Revision of ASME B30.10-2014)

Hooks

**Safety Standard for Cableways,
Cranes, Derricks, Hoists, Hooks, Jacks,
and Slings**

AN AMERICAN NATIONAL STANDARD



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Mechanical Engineers**

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Chapter 10-0

Scope, Definitions, References, Personnel Competence, and Translations

SECTION 10-0.1: SCOPE OF ASME B30.10

Volume B30.10 includes provisions that apply to the fabrication, attachment, use, inspection, and maintenance of hooks shown in [Chapters 10-1](#) and [10-2](#) used for load handling purposes, in conjunction with equipment described in other volumes of the B30 Standard. Hooks supporting a load in the base (bowl/saddle or pinhole) of the hook are covered in [Chapter 10-1](#). Hooks that may be loaded in other than the base (bowl/saddle or pinhole) are covered in [Chapter 10-2](#).

(19) SECTION 10-0.2: DEFINITIONS

abnormal operating conditions: environmental conditions that are unfavorable, harmful, or detrimental to or for the use of a hook, such as excessively high or low ambient temperatures, exposure to weather, corrosive fumes, dust-laden or moisture-laden atmospheres, and hazardous locations.

design factor: ratio between nominal or minimum breaking strength and rated load of the hook.

heavy service: service that involves operating at 85% to 100% of rated load as a regular specified procedure.

hook latch: a device used to bridge or close the throat opening of a hook for the purpose of retaining loose attachments during slack rigging conditions (see [Figures 10-1.1-1](#) through [10-1.1-5](#) and [10-1.1-17](#)). A rigging aid, not intended to support the load.

load: the total force or weight imposed on the hook.

load handling: the act of lifting or pulling a load from one location to another by using a hook as the connector between the load and the load handling equipment.

mouse: a method to close the throat opening of a hook using a device such as rope, wire, or other suitable means.

nick or gouge: sharp notch in hook surface that may act as a stress riser in the area of the notch.

nondestructive test: a test that does not destroy the functional use of the hook, such as, but not limited to, dye-penetrant, magnetic particle, radiography, and ultrasonic tests.

normal service: service that involves operating at less than 85% of rated load except for isolated instances.

proof load: the specific load applied for performance of the proof test.

proof test: a nondestructive load test made to verify the manufacturing integrity of the hook.

qualified person: a person who, by possession of a recognized degree in an applicable field or certificate of professional standing or who, by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve problems relating to the subject matter and work.

rated load: the maximum allowable working load established by the manufacturer. The terms *rated capacity* and *working load limit* are commonly used to describe rated load.

rated load identification: actual rated load information or a designation provided by the manufacturer for grade and type or size to allow determination of hook rated load.

self-closing hook: a hook with a throat opening that is closed by a spring-loaded latch, gate, or bail that is manually opened for loading and closes upon release. It may be locked in the closed position (see [Figures 10-1.1-8](#) through [10-1.1-14](#)).

self-locking hook: a hook with a throat opening that will close and lock when a load is applied and will not open until unloaded and the lock released (see [Figures 10-1.1-6](#) and [10-1.1-7](#)).

severe service: service that involves normal service coupled with abnormal rigging or operating conditions.

shall: a word indicating a requirement.

should: a word indicating a recommendation.

SECTION 10-0.3: REFERENCES

The following is a list of publications referenced in this Standard.

- ISO 7000, Graphical symbols for use on equipment — Registered symbols
- ISO 7296, Cranes — Graphic symbols — Parts 1-3