

BELOW-THE-HOOK LIFTING DEVICES

Chapter 20-0 Scope, Definitions, and References

(99) Section 20-0.1: Scope of ASME B30.20 (a)

Volume B30.20 includes provisions that apply to the marking, construction, installation, inspection, testing, maintenance, and operation of below-the-hook lifting devices, other than slings, used for attaching loads to hoist. The devices are arranged in four chapters as follows:

- Chapter 20-1: Structural and Mechanical Lifting Devices
- Chapter 20-2: Vacuum Lifting Devices
- Chapter 20-3: Close Proximity Operated Lifting Magnets
- Chapter 20-4: Remotely Operated Lifting Magnets
- Chapter 20-5: Scrap and Material Handling Grapples

Section 20-0.2: Definitions — General

administrative or regulatory authority: governmental agency, or the employer in the absence of governmental jurisdiction.

appointed: assigned specific responsibilities by the employer or the employer's representative.

authorized: appointed by a duly constituted administrative or regulatory authority.

designated load: the specified size, shape, and weight of material to be lifted.

designated person: a person selected or assigned by the employer or the employer's representative as being competent to perform specific duties.

normal operating conditions: conditions during which the lifter is performing functions within the scope of the original design.

(99) *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 or resolve problems relating to the subject matter and work.

rated load: the maximum load for which the equipment is designated by the manufacturer:

shall: indicates that the rule is mandatory and must be followed.

should: indicates that the rule is a recommendation, the advisability of which depends on the facts in each situation.

Section 20-0.3: Definitions for Chapter 20-1 (a)

chain/hand wheel: a device for manually operating a lifter.

friction-type pressure gripping lifters: lifters that grip the load without significant or harmful permanent deformation of the load surface (see Fig. 4).

grip ratio: the ratio of the sum of the horizontal forces on one side of the load to the live weight of the load. For example, if the total horizontal force on one side of the load is 100,000 lb and the live load is 50,000 lb, the grip ratio is 2. For purposes of this calculation, the weight of the load does not include the weight of the lifter (see Fig. 1).

gripping force: the force the lifting device exerts on the load.

indentation-type pressure gripping lifters: lifters that carry the load by applying force to indent the sides of the load (see Fig. 3).

ingot turnover grab: a manipulating lifter [Fig. 5, sketch (e)].

latch: a device for holding a lifter in the open or closed position.

latch, automatic: a sequencing latch mechanism operated by lifter motion.