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SIXTH ANNUAL NCCCO **FOUNDATION** **Industry Forum**

ASME B30 Safety Standards What's bubbling under for lifting equipment?

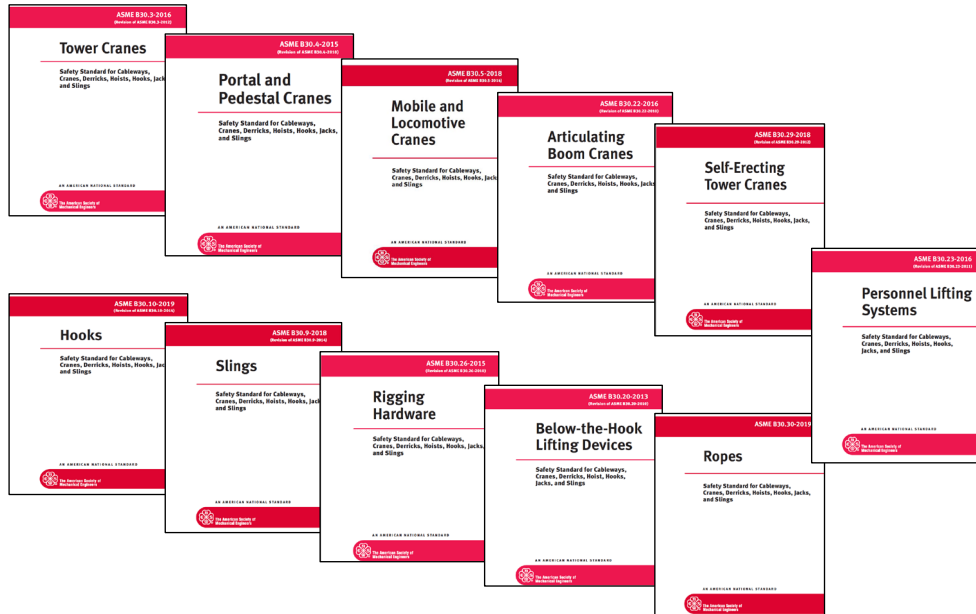
Stephanie Wood
Director of Product Safety, Terex Corporation

November 11, 2021

ASME Standards - Publication Status

3 Year Cycle

- B30.5 (2021) – Mobile and Locomotive Cranes
- B30.9 (2021) – Slings
- B30.20 (2021) – Below the Hook Lifting Devices

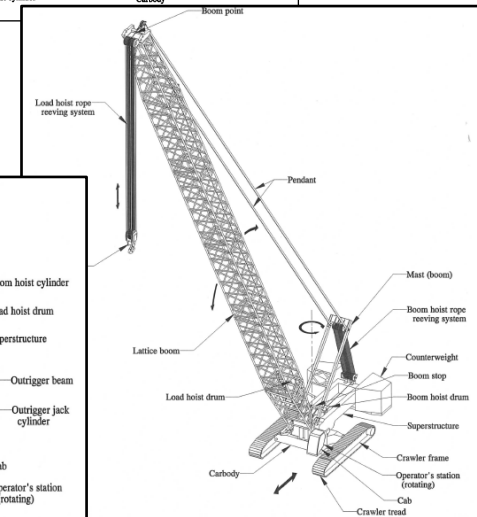
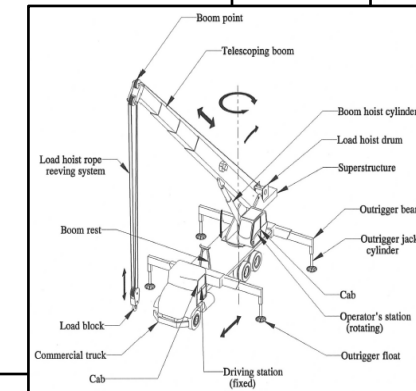
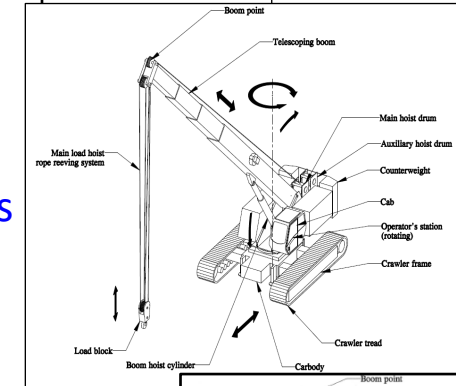
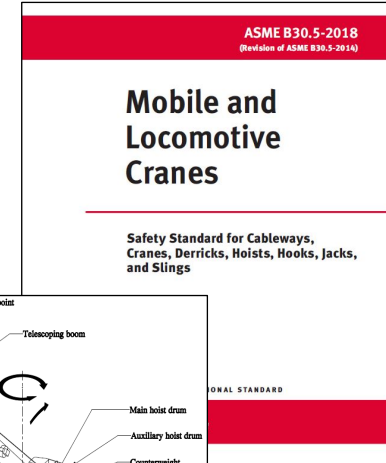


5 Year Cycle

- B30.3 (2019) – Tower Cranes
- B30.4 (2020) – Portal and Pedestal Cranes
- B30.6 (2020) – Derricks
- B30.8 (2020) – Floating Cranes and Floating Derricks
- B30.10 (2019) – Hooks
- **B30.22 (2021) – Articulating Boom Cranes**
- **B30.23 (2021) – Personnel Lifting Systems**
- **B30.26 (2015-R) – Rigging Hardware - Reaffirmed**
- B30.29 (2018) – Self-Erecting Tower Crane
- B30.30 (2019) - Ropes
- **B30.32 (2021) – Unmanned Aircraft Systems**

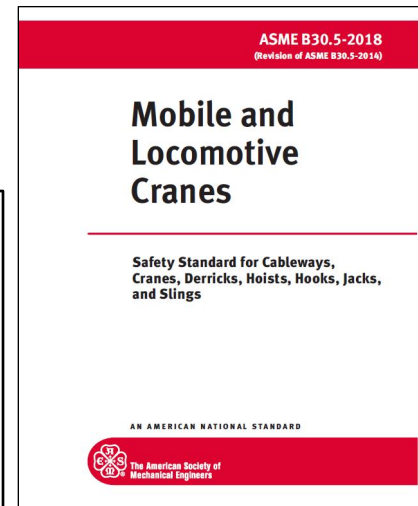
B30.5 – Summary of 2021 Changes

- Chapter 5-0 - Scope, Definitions, Personnel Competence, and References
 - Updated all crane type figures (added 3D isometric views)
- Chapter 5-1 – Construction and Characteristics
 - Clarified rope drum design criteria
 - Added SAE performance requirements for operational aids and indicating/limiting devices
 - Added bar pendants to the list of prototype components required to meet the performance requirements of SAE J987
- Chapter 5-2 – Inspection, Maintenance, and Testing
 - Added wording to include inspecting items as recommended by the manufacturer or a qualified person.
- Chapter 5-3 – Operation
 - Added qualifications for riggers
 - Revisions to physical qualifications of operators - align with DOT requirements
 - Addition of signalperson definition and signalperson responsibilities



B30.5 – New Items Under Consideration

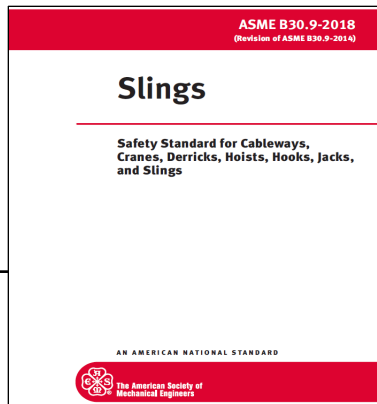
- Removal of rope design, inspection & maintenance criteria and referencing to B30.30
- Updates to signalperson qualifications (5-3.3.3)
- Updates to critical lifts (5-3.2.4) section [Lift Planning]
- Addition of item (7) in 5-3.1.2.1 (b) to require operators to demonstrate knowledge/understanding of the use & functionality of an operational aid(s) when installed on a crane.
- Prohibition of personnel to stand or pass under rope, reeving, blocks, balls and devices unless performing specific tasks
- Updates to the definitions of brake and superstructure
- Restructuring of 5-2.3.3 Adjustments and Repairs
- Update to require operator requalification at least once every 5 years
- Updating of the work area diagrams
- Addition of performance requirements for slew related capacities



B30.9 & B30.22 – 2021 Changes

B30.9 (2021) – Slings

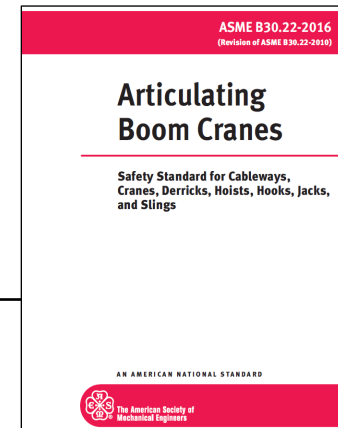
- Addition of non-mandatory appendix that offers a 3-part approach on recognizing hazards, types of damage and the efforts needed to identify and install sling protection
- Added definition of endless sling and along with fabrication, repair, and rigging practice guidance
- Addition of connection hardware shape and size among the list of factors on which a WRP sling's rating is based
- Added compliance to the WSTDA rigging practice for minimum recommended radius as an acceptable method
- Added requirement for proof testing new wire rope slings that incorporate previously used or welded fittings



B30.22 (2021) – Articulating Boom Cranes

- Removal of detailed rope inspection criteria and addition of B30.30 reference
- Addition of Signalperson description and Signalperson responsibilities
- Update to electrical section to align with other B30 Volumes

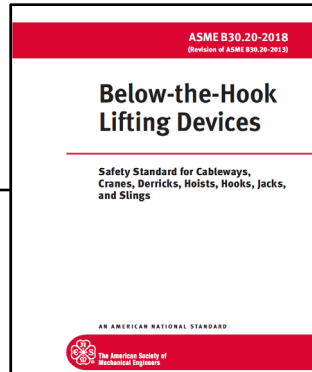
During the public review – comments were received – an appeal is now pending



B30.20 & B30.23 – 2021 Changes

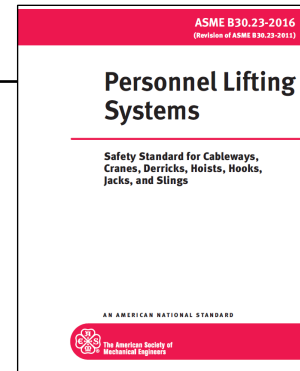
B30.20 (2021) – Below-the-Hook Lifting Devices

- Clarity improvements throughout the Volume for inspections (frequent & periodic)
- Updated load testing requirements for clamps in section 6



B30.23 (2021) – Personnel Lifting Systems

- Added a requirement that platforms be secured when personnel enter or exit the platform while it is attached to equipment that is floating or when being lifted to a location that is floating
- Added requirement for fall protection devices are to be continually connected when personnel are entering/exiting a platform
- Revisions in various sections to clarify fall protection, fall arrest and personal protective equipment (PPE)



B30.32 – Unmanned Aircraft Systems

- Newest standard in the B30 series of safety standards
- Applies to the use of unmanned aircraft systems to support inspection, testing, maintenance, and load handling operations for B30 equipment.
- Sections in the Standard include:
 - 32-0 Scope, Definitions, Personnel Competence, & Documentation
 - 32-1 UAS Characteristics
 - 32-2 UAS Use in Inspection, Testing, Maintenance, and Load Handling Operations
 - 32-3 UAS Operation Personnel, Preparations and Practices



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