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# Addendum 2

Section 2 (Normative References):

ANSI/AISC 360-10 shall be changed to ANSI/AISC 360.

3.6: The definition shall be changed to the following:

#### 3.6

### crown block assembly

The set of components including sheave or block assemblies installed at the top of a derrick or mast to support the hook load.

3.11: The following term and definition shall be added:

#### 3.11

### design validation

The process of proving a design to demonstrate conformity of the product to design requirements.

8.1.1: The second paragraph and NOTE shall be replaced with the following:

For tubular steel members used as critical components (as defined in Section 3.4) in crowns, derricks, masts, and substructures, ANSI/AISC 360 shall be used in place of AISC 335-89 (AISC ASD, Ninth Edition) for the connection design in accordance with the Allowable Strength Design, except as further specified in this standard. This shall include the use of reduced structural section properties from the AISC Steel Construction Manual, 15th Edition for the design of tubular critical components, except that when full thickness sections are specified by design, documented, and verified during manufacture, full thickness section properties may be used.

8.3.3.2: The section shall be replaced by the following:

#### 8.3.3.2 Shielding and Aspect Ratio Correction Factor

A correction factor  $K_{\rm sh}$  is used to account for global shielding effects and for changes in airflow around member or appurtenance ends.  $K_{\rm sh}$  shall be applied only when calculating  $F_{\rm t}$ .

For a derrick,  $K_{\rm sh}$  is calculated based on the solidity ratio,  $\rho$ , and is applied to all structural members within the derrick frame.

$$K_{\rm sh} = 1.11 \rho^2 - 1.64 \rho + 1.14$$
  $0.5 < K_{\rm sh} < 1.0$ 

When calculating  $K_{sh}$  for structural members, the solidity ratio  $\rho$  is defined as the projected area of all members in the front face of the bare frame divided by the projected area enclosed by the outer frame members, with projections normal to the wind direction.

When calculating global shielding effects for other derrick components including, but not limited to, wind walls, setback, guide tracks, crown, vent pipe, top drive, and gin pole,  $K_{sh}$  shall not be less than 0.85.

For a mast the shielding and aspect ratio correction factor  $K_{\rm sh}$  for all structural members or appurtenances shall be not less than 0.9 for all wind directions.

8.11: The following section shall be added:

# 8.11 Design Validation

Design validation shall be performed in accordance with a design and development plan of the manufacturer to ensure that the resulting product is capable of meeting the specified design requirements. Validation should be completed prior to the delivery of the product.

11.7.2 through 11.7.4: These sections shall be replaced with the following:

#### 11.7.2 Records

Full records of all calculations and tests shall be maintained by the manufacturer. If requested by an actual purchaser of the equipment for his/her use, or by a user of the equipment, the manufacturer shall make available for examination details of computations, drawings, test, or other supporting data as may be necessary to demonstrate compliance with this standard. It shall be understood that such information is for the sole use of the user or prospective purchaser for the purpose of checking the equipment rating for compliance with this standard and that the manufacturer shall not be required to release the information from his/her custody.

11.7.3: The following section shall be added:

# 11.7.3 Supply of Crown Block Assembly

The scope of what is supplied with crown block assemblies shall be as agreed to by the purchaser and manufacturer.