



Standard Practice for Installation Procedures for Fitting Chocks to Marine Machinery Foundations¹

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1. Scope

1.1 This practice covers the acceptable methods of fitting chocks to marine machinery foundations.

1.2 The values stated in SI units shall be regarded as standard. The values in parentheses are for information only.

1.3 *This standard does not purport to address the safety concerns associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

A370 Test Methods and Definitions for Mechanical Testing of Steel Products

D638 Test Method for Tensile Properties of Plastics

D648 Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position

D695 Test Method for Compressive Properties of Rigid Plastics

2.2 Other Documents:

American Bureau of Shipping Rules for Building and Classing Steel Vessels³

American Welding Society Publication, AWS D1.1 Structural Welding Code⁴

¹ This practice is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.03 on Outfitting and Deck Machinery.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Dr., Houston, TX 77060, <http://www.eagle.org>.

⁴ Available from American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126, <http://www.aws.org>.

3. Significance and Use

3.1 This practice provides the three principal methods of fitting chocks to marine machinery foundations to ensure that the machinery is free of vibration and perfectly aligned after installation.

3.1.1 The three principal methods of installing chocks described herein are as follows:

3.1.1.1 *Type A*—Epoxy-based resin, nonshrinking Chock-fast Orange PR 610 TCF by Philadelphia Resin Corp., or equal, and

3.1.1.2 *Type B*—Two-piece wedge chocks.

3.1.1.3 *Type C*—Solid, one-piece fitted chocks.

4. Procedure

4.1 *General Requirements for Types A, B, and C Chocking Systems:*

4.1.1 *Machining:*

4.1.1.1 Type A chocks, machinery bedplates, foundation plates, and bolts do not require finish machining if the chocks are not designed to be removed. Unless specified otherwise, Types B and C chock, bolts/studs, machinery bedplate, foundation plates, and fitted holes need to be finished machined and fitted.

4.1.1.2 Surfaces in way of the chock areas on the machinery bedplate and the foundation plate may be machined before installation or while the ship is not waterborne, or both.

4.1.1.3 Unless otherwise specified, all finished surfaces shall be finished to a maximum of 0.003-mm roughness height average (RHA).

4.1.1.4 Finished areas on the machinery bedplate and the foundation plate in way of the chocks shall be sufficiently greater in size than the chock to prevent interference from the unfinished area with the chock during installation.

4.1.1.5 Spotface hole edge radius shall be such that there will not be any interference between it and the bolt head-to-shank radius. The spotface area shall be sufficiently greater in area than that of the bolt head or nut so as not to cause any