



## Standard Specification for Gong, Sound Signaling<sup>1</sup>

This standard is issued under the fixed designation F 957; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

*This standard has been approved for use by agencies of the Department of Defense. Consult the DoD Index of Specifications and Standards for the specific year of issue which has been adopted by the Department of Defense.*

### 1. Scope

1.1 This specification covers gongs for use on ships 100 m or more in length, as required by International Regulations (see Appendix X1).

1.2 For consistency with International Regulations, all measurements are in SI units.

### 2. Referenced Documents

#### 2.1 ASTM Standards:

A 167 Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip<sup>2</sup>

A 276 Specification for Stainless and Heat-Resisting Steel Bars and Shapes<sup>3</sup>

D 3951 Practice for Commercial Packaging<sup>4</sup>

#### 2.2 American Welding Society Standard:

AWS D1.1 Structural Welding Code<sup>5</sup>

#### 2.3 Federal Specifications:<sup>6</sup>

PPP-B-576 Box, Wood, Cleated, Veneer, Paper Overlaid

PPP-B-585 Boxes, Wood, Wirebound

PPP-B-591 Boxes, Fiberboard, Wood-cleated

PPP-B-601 Boxes, Wood, Cleated Plywood

PPP-B-621 Boxes, Wood, Nailed and Lock Corner

#### 2.4 Military Standard:<sup>6</sup>

MIL-STD-129 Marking for Shipment and Storage

### 3. Ordering Information

3.1 Orders for gongs under this specification shall include the following information:

3.1.1 ASTM designation and year of issue.

3.1.2 Number of gongs.

3.1.3 Packaging and marking, if other than commercial.

### 4. Materials and Manufacture

#### 4.1 Materials:

4.1.1 The gong cylinder, brackets, clapper rod, "U" bracket, washers, and clapper support pin shall be of stainless steel, in accordance with Specification A 167, UNS number S31600.

4.1.2 The clapper mass shall be of cast alloy steel in accordance with Specification A 276, UNS S31600.

4.1.3 The support bolt, nut, flat washer, and cotter pins shall be of stainless steel compatible with the other materials.

#### 4.2 Welding:

4.2.1 Welding shall be of the type and sizes shown in Fig. 1 and Fig. 2, and in accordance with Standard AWS D1.1.

#### 4.3 Manufacture:

4.3.1 Fig. 1 shows the general arrangement of the assembled gong, as well as details of the gong cylinder. Fig. 2 shows details of the brackets, clapper, and miscellaneous fittings.

4.3.2 The gong cylinder may be made from two pieces welded together, instead of one piece. Two piece construction shall be annealed to remove residual stresses.

4.3.3 Sharp corners and edges of the cylinder shall be broken.

4.3.4 The two brackets shall be welded together before being welded to the cylinder. The flanged ends of the brackets may be left straight and not shaped to the cylinder.

4.3.5 The clapper mass shall be welded to the clapper rod before forming the second eye.

#### 4.4 Extra Parts:

4.4.1 Two extra supporting nuts and flat washers shall be furnished with each gong.

### 5. Acoustic Requirements

5.1 The sound characteristics shall produce a sound pressure level of not less than 110 dB at a distance of 1 m.

### 6. Dimensions and Tolerances

6.1 Dimensions shall conform to Fig. 1 and Fig. 2.

6.2 Tolerances shall be as follows:

6.2.1 Up to 10 mm:  $\pm 1$  mm.

6.2.2 10 mm to 50 mm:  $\pm 2$  mm.

6.2.3 Over 50 mm:  $\pm 3$  mm.

### 7. Workmanship, Finish, and Appearance

7.1 Gongs shall be free from cracks, burrs, sharp cutting

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F-25 on Shipbuilding and is the direct responsibility of Subcommittee F25.07 on General Requirements.

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<sup>2</sup> Annual Book of ASTM Standards, Vol 01.03.

<sup>3</sup> Annual Book of ASTM Standards, Vol 01.05.

<sup>4</sup> Annual Book of ASTM Standards, Vol 15.09.

<sup>5</sup> Available from the American Welding Society, 550 N. W. Le Jeune Rd., Miami, FL 33126.

<sup>6</sup> Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

