



Standard Specification for Wildcats, Ship Anchor Chain¹

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1. Scope

1.1 This specification covers wildcats as used in windlasses to haul in and pay out anchor chain on board ships. An associated chain stopper is used to secure the chain while the ship is anchored, or the anchor is housed.

1.2 Wildcats are of the five whelp type for use with stud link anchor chain conforming to the American Bureau of Shipping Grades 1, 2, and 3. Wildcat dimensions are provided for chains in integral $\frac{1}{8}$ -in. (3-mm) steps, ranging in size from $\frac{3}{4}$ to $4\frac{1}{8}$ in. (19 to 104 mm). Wildcat dimensions for chains in intermediate $\frac{1}{16}$ -in. (1.5-mm) steps are not provided, but wildcats in these sizes are permitted within the scope of this specification.

1.3 Wildcats are configured to pass detachable links oriented parallel or perpendicular to the wildcat shaft centerline.

1.4 The values stated in inch-pound units are to be regarded as the standard. This specification is for use with anchor chain that is measured in inch-pound units.

2. Referenced Documents

2.1 ASTM Standards:

A 27/A 27M Specification for Steel Castings, Carbon, for General Application²

A 36/A 36M Specification for Structural Steel³

A 148/A 148M Specification for Steel Castings, High-Strength, for Structural Purposes²

E 10 Test Method for Brinell Hardness of Metallic Materials⁴

2.2 Other Documents:

American Bureau of Shipping, *Rules for Building and Classing Steel Vessels*, Section 43.11 Equipment⁵

American Welding Society Structural Welding Code, Chapter D1.1⁶

3. Classification

3.1 The size of the wildcat is identified by the chain size.

3.2 Wildcats are furnished in four types as follows:

3.2.1 *Type I*—Fabricated from structural steel plate for flanges, hubs, whelps, and chain pockets, joined by electric welding. Surface hardness is approximately 150 HB.

3.2.2 *Type II*—Fabricated from structural steel plate for flanges, hubs, and chain pockets; and high-strength steel castings for whelps, joined by electric welding. Surface hardness is approximately 150 HB for flanges and hubs and 300 HB for whelps.

3.2.3 *Type III*—Cast from medium-strength carbon steel castings to provide a surface hardness of approximately 150 HB.

3.2.4 *Type IV*—Cast from high-strength steel castings to provide a surface hardness of approximately 300 HB.

4. Descriptions of Terms

4.1 *chain groove*—circumferential groove at the chain centerline to provide clearance for links passing normal to the wildcat shaft centerline.

4.2 *chain pockets*—recesses between the flanges and whelps into which links with flat side orientated parallel to the wildcat shaft centerling lay.

4.3 *detachable link*—a “C” shaped link, closed by means of a pair of closing pieces and a taper pin, and used to join anchor chain lengths and appendages into a continuous length aboard ship.

4.4 *flanges*—circumferential rims on the outside of the whelps, chain pockets, and chain groove.

4.5 *link grip*—the inside dimension of a chain link representing the effective length of a chain link in an assembled chain. Generally four times the nominal size of a stud link anchor chain, see Fig. 1.

4.6 *whelps*—protrusions on the inside of the flanges of the wildcat that resemble gear teeth and of such shape and

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² *Annual Book of ASTM Standards*, Vol 01.02.

³ *Annual Book of ASTM Standards*, Vol 01.04.

⁴ *Annual Book of ASTM Standards*, Vol 03.01.

⁵ Available from American Bureau of Shipping (ABS), ABS Plaza, 16855 Northchase Dr., Houston, TX 77060.

⁶ Available from The American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126.