



Standard Specification for Cleats, Welded Horn Type¹

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1. Scope

1.1 This specification covers hollow cleats and pads for marine use.

1.2 The cleats shall be used where securing of boat handling lines are required onboard commercial and navy boats and crafts.

1.3 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

2. Referenced Documents

2.1 *ASTM Standards*:²

[A36/A36M Specification for Carbon Structural Steel](#)

[A370 Test Methods and Definitions for Mechanical Testing of Steel Products](#)

[A385 Practice for Providing High-Quality Zinc Coatings \(Hot-Dip\)](#)

3. Ordering Information

3.1 Orders for material under this specification shall include the following:

3.1.1 Title, number, and date of this specification,

3.1.2 Quantity,

¹ This specification 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.

3.1.3 Size of cleats, and

3.1.4 Packaging, packing, or marking requirements.

4. Materials and Manufacture

4.1 *Material*:

4.1.1 The horn cleats shall be of galvanized steel, grade 1023W, in accordance with Practice [A385](#).

4.1.2 The base plate shall be of steel, (carbon 0.35 maximum), in accordance with Specification [A36/A36M](#).

4.1.3 All chafing surfaces shall have a 125 μ finish.

4.2 *Manufacture*—The cleats' horns shall be of cast steel, round in shape, and free of burrs or sharp edges. The horns shall be welded to a base plate as shown in [Fig. 1](#) (see [Table 1](#)). The weld is to be ground smooth to prevent chafing of ropes. The base plate shall be oval shaped with smooth rounded edges. The dimensions shall be in accordance with [Table 1](#).

5. Packaging

5.1 The packing shall afford protection against deterioration and physical damage during shipment from the manufacturer to the using activity for immediate use.

6. Product Marking

6.1 Containers shall be stenciled with the ASTM standard designation, in black paint with approximately 1 in. (25.4 mm) high letters and numbers with the following information:

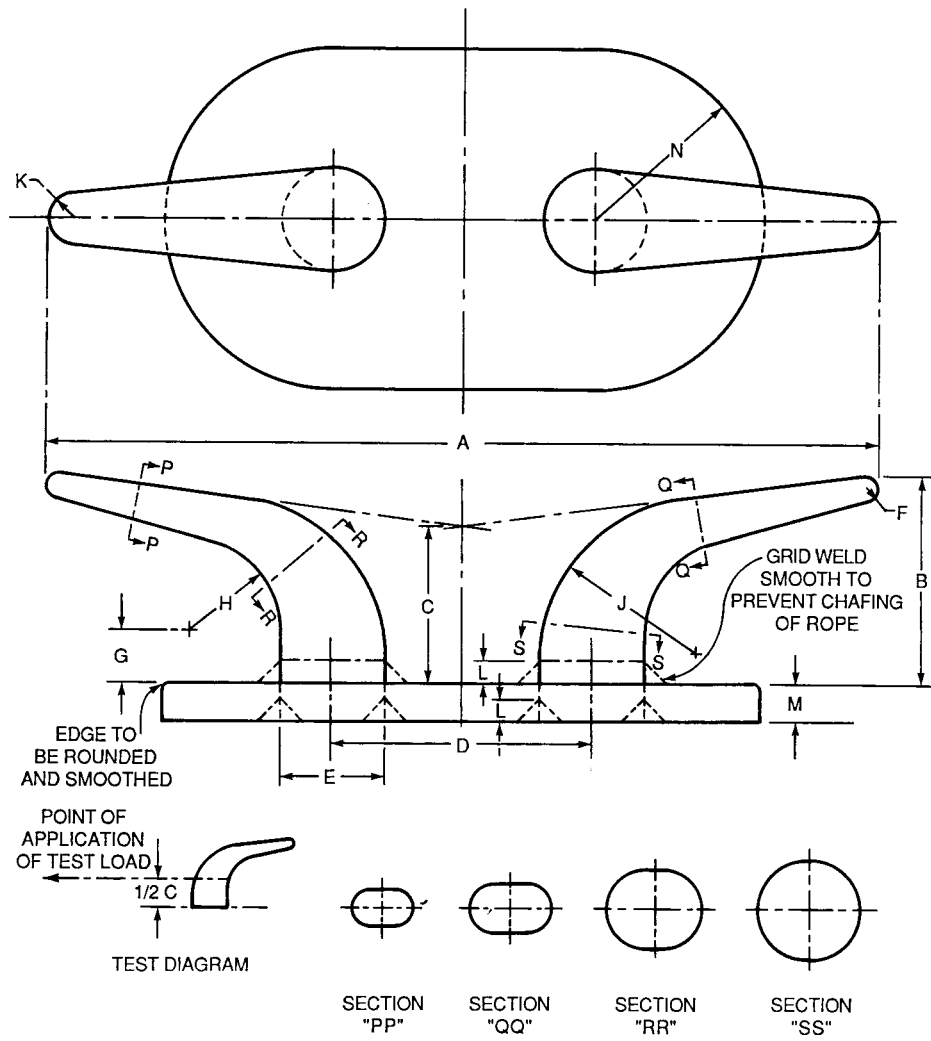
6.1.1 Address,

6.1.2 purchase order number, and

6.1.3 Manufacturer's name.

7. Keywords

7.1 base plates; boat handling lines; cleats; hollow cleats; horn cleats; marine; marine cleats; ship; welded cleats



NOTE 1—See Table 1 for dimensions.
FIG. 1 Welded Horn Type Cleat (16 in.)

TABLE 1 Welded Horn-Type Cleat Dimensions

NOTE 1—Table 1 is to be used with Fig. 1.

NOTE 2—1 in. = 25.4 mm.

NOTE 3—1 lb = 0.45 kg.

Cleat													Rope Circumference (in.)				Rope Diameter (in.)	Cleats Test Load (lb)	
Dimensions (in.)													Calculated Weight (lb)	Manila	Nylon	Dacron	Polypropylene		6 × 37 Fiber Core Wire Rope
A	B	C	D	E	F	G	H	J	K	L	M	N							
10	2½	1⅞	3⅛	1¼	⅝	⅝	1⅜	1⅞	⅝	¼	⅞	2	5.3	1¾	1	1	1½		4100
16	4	3	5	2	¾	1	1¼	3	½	⅞	¾	3¼	21.7	3	2	2	2½	⅝	9000
24	6	4½	7½	3	⅞	1½	2⅝	4½	¾	¾	1⅞	4½	75	5	3	3	4	½	23 000
30	7½	5⅞	9⅞	3¾	1⅝	1⅞	3⅞	5⅞	⅞	⅞	1⅝	5½	137	6	3½	4	5	⅝	36 000

SUPPLEMENTARY REQUIREMENTS

The following supplementary requirement shall apply only when specified by the purchaser in the contract or order.

S1. Quality Assurance Provisions

S1.1 Responsibility for Inspection—The purchaser reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

S1.2 Source Inspection—The purchaser reserves the right to inspect the manufacturing process and end product in the supplier’s plant.

S1.3 Tests—The cleats shall meet the test load requirements of Table 1, as tested in accordance with Test Methods and Definitions A370.

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