

MIL-P-19380/1
28 March 1981
SUPERSEDING IN PART
MIL-P-19380H
5 April 1972
With Amendment-1
15 November 1972

MILITARY SPECIFICATION

PONTOONS, STEEL, SECTIONAL, P-SERIES, DETAIL SPECIFICATION FOR

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The complete requirements for procurement of the P-series sectional
steel pontoons described herein shall consist of this document and the
latest issue of Military Specification MIL-P-19380J.

1. SCOPE

1.1 Scope. This specification describes detail requirements for steel
pontoon units, either assembled or knocked-down.

1.2 Classification. Pontoon units shall be of the Mark numbers specified
(see 6.2 and Table I).

2. APPLICABLE DOCUMENTS -

2.1 Issues of documents. The following documents, of the issue in effect
on date of invitation for bids or request for proposal, form a part of this
specification to the extent specified herein.

3. REQUIREMENTS

3.1 General specification. The individual item requirements shall be as
specified herein and in accordance with MIL-P-19380J. In the event of any
conflict between requirements of this specification and the general
specification, the detail specification shall govern.

3.2 First article. (See 3.2 of MIL-P-19380J.)

3.3 Drawings. (See 3.3 of MIL-P-19380J.)

3.4 Materials. (See 3.4 of MIL-P-19380J.)

3.4.1 Structural steel. (See 3.4.1 of MIL-P-19380J.)

Beneficial comments (recommendations, additions, deletions) and any pertinent
data which may be of use in improving this document should be addressed to:
Commanding Officer (Code 156), Naval Construction Battalion Center, Port
Hueneme, CA 93043, by using the self-addressed Standardization Document
Improvement Proposal (DD Form 1426) appearing at the end of this document or
by letter.

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3.4.2 Steel Pipe. (See 3.4.3 Of MIL-P-19380J.)

3.4.3 Stainless steel. Stainless steel, shown in CEL Drawing 77-26-8F, shall be in accordance with ASTM A167, type 304.

3.5 Construction. (See 3.5 of MIL-P-19380J.) pontoon units shall be fabricated as specified herein and as shown on the applicable drawings listed in Table I. Pontoon units shall consist of welded structural frames covered on all sides with steel plate to form an airtight unit and shall include only such components or parts thereof as are welded permanently to the pontoons. Threaded parts shall conform to FED-STD-H28. American National Taper Pipe Thread form shall be used for flanges and plugs. Flanges shall be standard cast, forged steel, or malleable iron, boiler type, of the sizes shown on the applicable drawings. Drainage plugs shall be of cast iron and shall be installed using an antisieze tape conforming to MIL-T-27730 on threads. Holes for A6B bolts shall be maintained at 1-5/8 inch diameter during assembly and welding of corner components. Unless otherwise specified (see 6.2), the hatch cover assembly, Mark H6, shall be furnished loose for field installation. Welding shall be in accordance with the AWS Structural Welding Code using AWS recommendations pertaining to electrodes for materials, types of welds, and welding processes utilized. When specified (see 6.2), knocked-down pontoons shall be furnished. When knocked-down pontoons are specified, all material shall be cut, bent, and drilled or punched as specified herein and on the applicable drawings; boiler flanges and the manhole ring shall be welded in place. The manhole cover shall be tack welded in the manhole opening. The nut receptacle shall be cut, formed, and welded into a subassembly prior to shipment. All pieces shall be shipped ready for assembly after delivery. Construction of pontoons shall be such that welding operations shall be performed in a flat, horizontal position, wherever possible. Where welding is performed in an alternate position, the welder must be qualified In the alternate position.

TABLE I. Pontoons, Steel sectional, P-series.

Mark number	Description	Drawing number
P-1	Intermediate	813634
P-2	Sloped bilge end	813635
		813636
		813637
		813638
		813639
P-3	Sloped top intermediate ramp	813640
		813641
		813642
P-3	Sloped top, and bottom end ramp	813643
		813644
		813645
P-6L with R7 bumper	Sloped top, sea end for 1179 LST	6002567
P-6R with R6 bumper		Sheets 1-34
P-6C with R8 bumper		

TABLE I. Pontoons, steel sectional, P-series - contined.

Mark number	Description	Drawing number
P-8	Sloped bilge end (receiver)	77-26-1F
	Note: the P-8 unit is	77-26-2F
	nonfunctional without	77-26-3F
	the F1 Flexor Connector	77-26-4F
	(see Table I of	77-26-5F
	MIL-P-19380/3)	77-26-6F
		77-26-7F
		77-26-8F

3.6 Interchangeability. (See 3.6 of MIL-P-19380J.)

3.6.1 Gaging. (See 3.6.1 of MIL-P-19380J.)

3.7 Performance characteristics. (See 3.7 of MIL-P-19380J.)

3.8 Cleaning and painting. (See 3.8 through 3.8.2.2 of MIL-P-19380J.)
When knocked-down pontoons are called for (see 6.2), omit finish coat described in 3.8.2.2 of MIL-P-19380J.

3.8.1 Deck coating. In addition to the three coat epoxy-polyamide paint system applied to all exterior surfaces, the pontoon deck surface shall be coated with No. 36076, dark gray, nonskid finish coating conforming to MIL-D-23003, type II. Coating shall be uniformly applied at the rate of 1 gallon per 60 ± 10 square feet of surface, using airspray or a smooth, hard phenolic core roller. Finished deck coating shall have a profile where the aggregate prominently protrudes above the binder surface. Threaded surfaces and gages shall not be painted. All painted areas shall be touched up where paint is removed as a result of handling or assembly at the manufacturing plant. The pontoon deck surface requiring deck coating is defined as the top of the pontoon as seen in NAVFAC Drawing No. 77-26-1F when viewing the pontoon from the end having the manhole, the pipe plugs being to the left of the manhole.

3.9 Identification marking. (See 3.9 of MIL-P-19380J.) In addition, all pontoons shall be marked with a one-pass single weld bead, 3/16-inch wide minimum, 1-inch high digit/letter identification consisting of two digits, a dash, and one letter. The two digits shall denote the year, followed by a letter assigned to identify the manufacturer, e.g., 80-A. This information is to be applied to the 7-foot long side containing the manhole, with the top of the numbers 3 inches from the top of the pontoon and centered.

3.10 Workmanship. (See 3.10 through 3.10.5 of MIL-P-19380J.)

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. (See 4.1 of MIL-P-19380J.)

4.2 First article. (See 4.2.1 of MIL-P-19380J.)

4.3 Examination. Examination shall be conducted as specified in Table I of MIL-P-19380J. Examination of components and welds inside the pontoon shall be completed before the manhole is welded in place. (See 4.5 of MIL-P-19380J.)

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4.3.1 Welding examination. (See 4.5.1 of MIL-P-19380J.)

4.4 Testing.

~~4.4.1 Pneumatic test. The first article and each production pontoon unit~~ shall be subjected to pneumatic testing. The assembled pontoon unit shall be tested for tightness of joints by the application of air pressure of not less than 5 psi. While the pontoon is under pressure, a soap solution shall be applied externally to reveal any leaks, or as an option, the pressurized pontoon shall be given full immersion to detect any leaks. The Government inspector shall observe the pneumatic test.

4.4.2 Hydrostatic test.

4.4.2.1 Sampling for test. One week's production or 50 consecutively produced pontoons, whichever is smaller, shall be considered a lot for the purpose of hydrostatic testing. For lots of five or less, 100 percent of the pontoons shall be tested. Sample size for lots of 5 to 50 pontoons shall be five. No rejects will be accepted under the contract until the defect has been corrected.

4.4.2.2 Testing. The first article and each production unit sampled as specified in (see 4.4.2.1) shall be subjected to hydrostatic testing. A hydrostatic test pressure of 20 psi shall be maintained for not less than 15 minutes. Permanent deformation or bulging of plating shall not exceed 1/2-inch between the stiffeners and 1/8-inch at the stiffeners. Measurement of permanent deformation or bulging of plating between stiffeners shall be from a straight edge placed at right angles to the stiffeners and over the point of greatest deformation. Measurement of deformation of stiffeners shall be from a straight edge placed directly over, in line with, and for the full length of the stiffener. The water solution used for hydrostatic testing shall be rust inhibiting by addition of 1/2 of 1 percent by weight of sodium bichromate chemical. After completion of the test, each pontoon shall be thoroughly drained by suitable means such as siphoning the test fluid from the lowest corner inside the pontoon. The pontoon shall be measured and gaged before and after each hydrostatic test to determine the extent of the deformation or distortion. The Government inspector shall observe the hydrostatic test. Any permanent deformation in excess of that specified herein or any joint failure or leaks shall be cause for rejection.

4.5 Packaging inspection. (See 4.6 of MIL-P-19380J.)

5. PACKAGING

5.1 Preservation, packing, and marking. Preservation, packing, and identification marking shall be in accordance with Section 5 of MIL-P-19380J.

6. NOTES

6.1 Intended use. The Navy P-series pontoons are intended to be coupled and joined by fittings to form floating and nonfloating platforms and structures. Various combinations forming pontoon barges, tugs, floating drydocks, floating cranes and derricks, bridge units and wharves are delineated in the Navy 'Pontoon Gear Handbook" (NAVFAC P401). Pontoons of different types are listed below.

6.1.1 Mark P-1. Intermediate pontoons are intended for use in the central part of the floating structure.

6.1.2 Mark P-2. Sloped bilge end pontoons are intended to form the bow ~~and stern parts and as a base for outboard propulsion units for barges.~~

6.1.3 Mark P-3. Sloped top intermediate ramp pontoons are intended for use on the barge end of landing ramps.

6.1.4 Mark P-4. Sloped top and bottom end ramp pontoons are intended for the shore 'he landing ramp. Pontoon Mark P-4 is connected to pontoon Mark P-3 to form the ramp from barge to shore.

6.1.5 Mark P-6. Sloped top sea end for 1179 LST vessel is intended to be used for d-he bow of 1179 class LSTs to the end of lthe pontoon causeways.

6.1.6 Mark P-8. Sloped bilge end (receiver) is based on the Mark P-1 configuration and intended to be used to couple causeway sections when incorporating the flexor end connectors.

6.2 Ordering data. Acquisition documents should specify the following:

- (a) Title, number, and date of detail specification and associated general specification.
- (b) Mark number(s) and item(s) required (see 1.2).
- (c) When a first article is required for inspection and approval (see 3.2, 4.2.1, and 6.4 of MIL-P-19380J).
- (d) When hatch cover assembly shall be welded in place in the pontoon by the contractor (see 3.5).
- (e) When knocked-down pontoons are required (see 3.5 and 3.8).
- (f) Identification marking required (see 3.9).
- (g) Level of preservation and packing required (see 5.1).

6.3 Contract data requirements. (See 6.3 of MIL-P-19380J.)

6.4 First article. (See 6.4 of MIL-P-19380J.)

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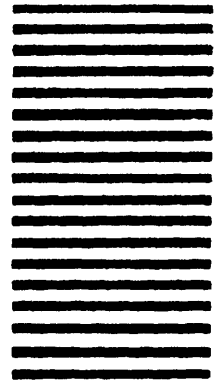
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