



Standard Specification for Mechanical Seals for Shipboard Pump Applications¹

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1. Scope

1.1 This specification covers mechanical end-face seals for centrifugal and positive displacement pumps for shipboard use.

1.2 The following types of seals are not included in this specification: lip seals, oil seals, circumferential seals, or labyrinth seals.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard. A companion hard metric standard is in the process of preparation.

1.4 Special requirements for U.S. Navy Shipboard Pump Applications are included in Supplement S1.

2. Referenced Documents

2.1 *ASTM Standards*:²

A108 Specification for Steel Bar, Carbon and Alloy, Cold-Finished

A182/A182M Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service

A240/A240M Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications

A276 Specification for Stainless Steel Bars and Shapes

A313/A313M Specification for Stainless Steel Spring Wire

A351/A351M Specification for Castings, Austenitic, for Pressure-Containing Parts

A436 Specification for Austenitic Gray Iron Castings

A494/A494M Specification for Castings, Nickel and Nickel Alloy

A564/A564M Specification for Hot-Rolled and Cold-Finished Age-Hardening Stainless Steel Bars and Shapes

A579/A579M Specification for Superstrength Alloy Steel Forgings

A693 Specification for Precipitation-Hardening Stainless and Heat-Resisting Steel Plate, Sheet, and Strip

A744/A744M Specification for Castings, Iron-Chromium-Nickel, Corrosion Resistant, for Severe Service

B62 Specification for Composition Bronze or Ounce Metal Castings

B127 Specification for Nickel-Copper Alloy (UNS N04400) Plate, Sheet, and Strip

B164 Specification for Nickel-Copper Alloy Rod, Bar, and Wire

B166 Specification for Nickel-Chromium-Iron Alloys (UNS N06600, N06601, N06603, N06690, N06693, N06025, N06045, and N06696), Nickel-Chromium-Cobalt-Molybdenum Alloy (UNS N06617), and Nickel-Iron-Chromium-Tungsten Alloy (UNS N06674) Rod, Bar, and Wire

B168 Specification for Nickel-Chromium-Iron Alloys (UNS N06600, N06601, N06603, N06690, N06693, N06025, N06045, and N06696), Nickel-Chromium-Cobalt-Molybdenum Alloy (UNS N06617), and Nickel-Iron-Chromium-Tungsten Alloy (UNS N06674) Plate, Sheet, and Strip

B271 Specification for Copper-Base Alloy Centrifugal Castings

B333 Specification for Nickel-Molybdenum Alloy Plate, Sheet, and Strip

B335 Specification for Nickel-Molybdenum Alloy Rod

B338 Specification for Seamless and Welded Titanium and Titanium Alloy Tubes for Condensers and Heat Exchangers

B348 Specification for Titanium and Titanium Alloy Bars and Billets

B367 Specification for Titanium and Titanium Alloy Castings

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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.