



SPECIFICATION

SPECIFICATION FOR SS PLATE

APPROVALS	DATE	REV	DCN NO.	BY	CHECK	DCC	DATE
AUTHOR:							
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**SPECIFICATION FOR SS PLATE****1.0 Scope**

This specification covers the minimum technical requirements for the materials, fabrication, inspection, testing, preparation for shipping, shipment and delivery of the Stainless Steel plate to be used for manufacturing ultra high vacuum boundary equipment.

All attachments are incorporated herein by reference and made a part of this specification.

Information contained in this specification and its attachments is proprietary in nature and shall be kept confidential. It shall be used only as required to respond to the specification requirements, and shall not be disclosed to any other party.

2.0 Schedule and Delivery

Plate shall be delivered in lots as follows:

As specified in Attachment A of this specification.

3.0 Material Requirements

3.1 This material shall conform to the requirements of ASME Specification SA-240 Type 304/304L with the additional supplementary requirements described in this specification. The material is to be dual certified to meet the material grade of 304 and 304L.

3.2 Applicable Codes

3.2.1 ASME Boiler & Pressure Vessel Code, Section II, "Materials", the 2007 Edition with all published Addenda.

3.2.2 ASTM A-480, "Standard Specification for General Requirements for Flat-Roll Stainless and Heat-Resisting Steel Plate, Sheet, and Strip".

3.2.3 ASTM A-700, "Standard Packages for Packaging, marking, and Loading Methods for Steel Products for Domestic Shipment".

3.3 Any apparent conflicts between the requirements given herein and the applicable ASME Specification shall be brought to the attention of THE BUYER for clarification.

4.0 Manufacture

4.1 Thickness Tolerance

The material shall be furnished in the thickness(es) specified in Attachment A. The thickness tolerance shall meet ASTM A-480 requirements.

4.2 Width and Length Tolerance

The plate material shall be cut to the minimum size specified in the purchase order. The width and length plus tolerance of the finished material shall not exceed the tolerances specified in ASME SA-480 specification, the minus tolerance is 0.0 in.

4.3 Surface Finish

Hot rolled, Annealed, and Pickled (HRAP) mill finish is acceptable.



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4.4 Chemistry and Mechanical Properties

The material shall meet the chemistry requirements as specified in SA 240 Type 304L, and the mechanical requirement of SA240 Type 304 material specification. The material shall be dual certified as type 304/304L.

4.5 After final cleaning and pickling, no grinding with abrasive wheels, cloth or stones is permitted. No iron, carbon steel or other contaminants (such as grease, chloride compounds oil hydrocarbons) to come in contact with the plate.

4.6 Cleanliness

This material is intended for use in a high vacuum application. Potential hydrocarbon contamination shall be eliminated. Also, the material shall be wrapped and covered at all times the material is not being processed to minimize possible exposure to contaminants. The plate shall be Steam cleaned prior to shipment.

5.0 Material Testing

5.1 A 2" wide by 12" long coupon, is to be supplied for each heat number supplied. The coupon must be pickled the same as the plate.

6.0 Repair of Defects

6.1 No weld splices or repair welding is permitted to the material.

7.0 Identification

7.1 Identification of the material shall be maintained through all manufacturing processes.

7.2 If material identity is lost, the plate shall be re-qualified by making all tests that were required for the material or as indicated in this specification.

7.3 Marking the finished materials with marking fluids, die stamps, and/or electro-etching is not permitted. A vibratory tool with a minimum tip radius of .005" is acceptable for marking one side only of the finished plate. All other marking methods must be approved by the Buyer prior to use. All plates shall be marked 6" in from both edges in one corner. When stacked for shipment, all markings shall be in the same corner for easy identification upon receipt at THE FABRICATION SHOP. The minimum marking is to be the heat/lot number.

8.0 Documentation

8.1 The Certified Material Test Report (CMTR) shall be provided to the Buyer a minimum of 48 hours prior to shipment of the material.

8.2 A record of the material thickness for each group of materials is required. Thickness shall be measured and recorded at both edges and the center of the plates.



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9.0 Packaging, Storage and Shipping

9.1 The material shall be packaged for shipment as described in ASTM A700-94, Section 11.3.3 and Figure 56 (wrapped package on skids) with the additional supplementary requirements as described herein.

9.2 The plate material shall be wrapped in waterproof polyethylene and covered with a tarp immediately after all steel processing operations have been completed to minimize contamination. The material shall remain packaged and covered until it is necessary to remove the covering and packaging material for further processing.

9.2 The material shall be shipped as specified in the purchase order.

10.0 Non-Escort PRIVILEGES and Inspection Right

Non-escort privileges for Buyer, Owner, Government and Owner representatives to all areas of the facilities where the work is being performed shall be arranged. This will include access to all areas where material is being processed and stored.



SPECIFICATION FOR SS PLATE

ATTACHMENT A

List of Plates Sizes and Quantities

(To be specified by The Seller)