ASTM A270 / A270M - 15 Standard Specification for Seamless and Welded Austenitic and Ferritic/Austenitic Stainless Steel Sanitary Tubing

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This resource is cited by 2 documents (show Citations)

Description

This specification covers grades of seamless, welded, and heavily cold worked welded austenitic and ferritic/austenitic stainless steel sanitary tubing intended for use in the dairy and food industry and having special surface finishes. Pharmaceutical quality may be requested, as a supplementary requirement.

Seamless tubes shall be manufactured by a process that does not involve welding at any stage. Welded tubes shall be made using an automated welding process with no addition of filler metal during the welding process. Heavily cold worked tubes shall be made by applying cold working of not less than 35% reduction of thickness of both wall and weld to a welded tube prior to the final anneal. No filler shall be used in making the weld. All material shall be furnished in the heat-treated condition. A chemical analysis of either one length of flat-rolled stock or one tube shall be made for each heat. Each tube shall be subjected to mechanical tests like reverse flattening test, hydrostatic test or nondestructive electric test.

The following surface finishes may be specified: mill finish, mechanically polished surface finish, finish No. 80, finish No. 120, finish No. 180, finish No. 240, electropolished finish, and maximum roughness average surface finish. Longitudinally polished finish shall be performed on the inside surface only while a circumferential polished finish shall be done on either the inside surface, outside surface, or both.

Scope

This specification covers tubes in sizes up to and including 12 in. [300 mm] in outside diameter.

The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

Optional supplementary requirements are provided, and when one or more of these are desired, each shall be so stated in the order.

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- AS/NZS 3500.2:2015

  ASTM A270 / A270M - 15 is cited by AS/NZS 3500.2:2015 Plumbing and drainage - Part 2: Sanitary plumbing and drainage

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