



Standard Specification for Tin Mill Products, Black Plate Electrolytic Chromium- Coated, Single and Double Reduced¹

This standard is issued under the fixed designation A657/A657M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope*

1.1 This specification covers single- and double-reduced tin mill black plate electrolytically coated with chromium and chromium oxide. The steel is furnished in coils and cut lengths for use in the manufacture of cans, closures, crowns, and other products.

1.2 This specification is applicable to orders in either inch-pound units (as A657) which is supplied in thicknesses from 0.0050 to 0.0149 in. or in SI units [as A657M] which is supplied in thicknesses from 0.127 to 0.378 mm.

1.3 The values stated in either inch-pound or SI units are to be regarded as standard. Within the text, the SI units are shown in brackets. The values stated in each system are not exact equivalents. Therefore, each system must be used independently of the other. Combining values from the two systems may result in nonconformance with this specification.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

A623 Specification for Tin Mill Products, General Requirements

A623M Specification for Tin Mill Products, General Requirements [Metric]

A700 Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment

D1125 Test Methods for Electrical Conductivity and Resistivity of Water

¹ This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel and Related Alloys and is the direct responsibility of Subcommittee A01.20 on Tin Mill Products.

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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. Ordering Information

3.1 Orders for product under this specification shall include the following information, as required and applicable, to adequately describe the desired product:

3.1.1 Name of product (include whether single- or double-reduced),

3.1.2 Thickness (must be consistent with intended application),

3.1.3 Oiling (Section 6),

3.1.4 Steel type (MR, L, etc.),

3.1.5 Temper designation (T-3, T-4, etc. for single-reduced) or mechanical designation (DR-8, DR-9, etc., double-reduced),

3.1.6 Surface finish (7B, 7C, etc.).

3.1.7 Coil width or cut size,

3.1.8 Rolling direction must be specified on cut sizes and should be indicated by underlining the slit (rolling width) dimension,

3.1.9 On coils, specify minimum or range of acceptable inside diameters. The standard inside diameter is approximately 16 in. if ordered as Specification A657 [410 mm if ordered as Specification A657M]. Coils should be specified to a maximum coil weight if ordered as Specification A657 [mass if ordered as Specification A657M], or maximum outside diameter, or both.

3.1.10 Packaging,

3.1.11 Special requirements where applicable, and,

3.1.12 ASTM specification designation and year of issue.

NOTE 1—A typical ordering description for coils is as follows: 1250 base boxes, single reduced, black plate electrolytic chromium coated, BSO, (0.0093 in.) MR, T-3 BA, 35 $\frac{3}{8}$ in. by coil, 16 in. inside diameter, 59 in. maximum outside diameter, 25 000 lb maximum coil weight, for regular crowns in accordance with Specification A657/A657M - XX. [250 SITAs, single reduced, black plate electrolytic chromium coated, BSO, 0.235 mm thickness, MR, T-3 BA, 513, 900 mm by coil, 410 mm inside diameter, 1500 mm maximum outside diameter, 11 500 kg maximum coil mass for regular crowns in accordance with Specification A657/A657M - XX].

NOTE 2—A typical ordering description of cut sizes is as follows: 1000 base boxes, double reduced black plated electrolytic chromium coated, BSC, 0.0061 in., MR, DR8 CA, 31 by 32 in., for cap closures in accordance with Specification A657/A657M - XX. [200 SITAs, double reduced, black plate electrolytic chromium coated, BSO, 0.155 mm thickness, MR, DR8 CA, 788 by 813 mm, cap closures in accordance with

*A Summary of Changes section appears at the end of this standard