



AEROSPACE MATERIAL SPECIFICATION

AMS4598™

REV. B

Issued 2010-12
Revised 2022-08

Superseding AMS4598A

Copper-Nickel-Tin Alloy, Mechanical Tube
77Cu - 15Ni - 8Sn
Solution Annealed and Spinodal Hardened (TX02, formerly TX00)
(Composition similar to UNS C72910)

RATIONALE

AMS4598B results from a Five-Year Review and update of this specification with changes to prohibit unauthorized exceptions (3.4.1.1, 3.7, 4.4.1, 5.1.1, 8.9), correct temper designation per ASTM B601 from TX00 to TX02 (title, 3.2, 3.3.2, 8.3), create type classification for forward and back extruded products (1.3), revise size ranges for forward and back extruded product (Table 2). Revise property limits and type for product from 7.250 inches to 13.6 inches (184 mm to 346 mm) in nominal diameter (Table 2). Additional updates to form (1.1), applicable documents (Section 2, 8.5), composition (3.1), condition (3.2), solution annealing (3.3.1), spinodal hardening (3.3.2), tolerances (Table 3), ordering information (8.11), and add general agreement wording regarding the immediate prior revision of this specification to highlight changes in the product thickness ranges for the defined types in this revision (8.10).

1. SCOPE

1.1 Form

This specification covers a copper-nickel-tin alloy in the form of mechanical tube 1.100 to 13.6 inches (28 to 346 mm) in outer diameter (see 8.11).

1.2 Application

These products have been used typically for parts requiring high strength, wear resistance, and corrosion resistance at moderate temperatures, but usage is not limited to such applications.

1.3 Classification

There are two tube types based on extrusion method:

Type A – Forward extruded tube

Type B – Back extruded tube

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