

ENDORSED BY
AMERICAN FOUNDRYMEN'S ASSOCIATION

Standard Specifications for

CASTINGS OF THE ALLOY: COPPER 88 PER CENT, TIN 8 PER CENT, ZINC 4 PER CENT¹



A.S.T.M. Designation: B 60 - 41

ADOPTED, 1928; REVISED, 1936, 1941.²

This Standard of the American Society for Testing Materials is issued under the fixed designation B 60; the final number indicates the year of original adoption as standard or, in the case of revision, the year of last revision.

Scope

1. (a) These specifications cover alloy castings, the alloy being a composition of copper, tin, and zinc, known commercially as 88-8-4.

(b) The castings are intended for use in pressure-containing parts, suitable for applications in expansion joints, pipe fittings, valves, pump parts, and the like where tightness under hydrostatic pressure, resistance to certain types of corrosion (such as salt water), wear resistance, and good strength are required.

Basis of Purchase

2. Orders for material under these specifications shall include the following information:

¹ Under the standardization procedure of the Society, these specifications are under the jurisdiction of the A.S.T.M. Committee B-5 on Copper and Copper Alloys, Cast and Wrought.

² Prior to adoption as standard, these specifications were published as tentative from 1926 to 1928, being revised in 1928.

The Tentative Specifications for Tin-Bronze and Lead-Tin-Bronze Sand Castings (B 143-42 T), see p. 1332, are in effect a tentative revision of, and are intended to replace, when adopted, these specifications and also the Standard Specifications for Steam or Valve Bronze Castings (B 61-42), see p. 794. Alloy 1B of Specifications B 143-42 T is identical with the composition covered in these Specifications B 60-41.

(1) Tests or certification required (Sections 4, 6, 12).

Manufacture

3. (a) The alloy may be made by any approved method.

(b) The castings shall be of uniform quality.

Chemical Composition

4. The alloy shall conform to the following requirements as to chemical composition:

	Minimum	Desired	Maximum
Copper, per cent.....	86.00	88.00	89.00
Tin, per cent.....	7.50	8.00	11.00
Lead, per cent.....	.....	none	0.30
Zinc, per cent.....	1.50	4.00	4.50
Iron, per cent.....	.....	.....	0.25
Nickel, per cent.....	.....	.....	1.00
Phosphorus, per cent.....	.....	.....	0.05

Chemical Analysis

5. (a) An analysis of each melt may be made at the option of the purchaser and at his own expense.

(b) The sample for chemical analysis shall be taken by drilling or cutting the test coupon or sprue in such a manner

Emergency Alternate Provisions EA - B 60 applying to this standard were issued on May 26, 1942, a copy of which, printed on colored stock, is furnished with this book for attachment to this page.