

# JIS

**JAPANESE INDUSTRIAL STANDARD**

**Methods for chemical  
analysis of tin metal**

**JIS H 1141—1993**

**Translated and Published**

**by**

**Japanese Standards Association**

In the event of any doubt arising,  
the original Standard in Japanese is to be final authority.

## JAPANESE INDUSTRIAL STANDARD

J I S

Methods for chemical analysis of tin metal

H 1141-1993

1. Scope This Japanese Industrial Standard specifies the methods for determination of copper, lead, iron, arsenic, and antimony in tin metal which are specified in JIS H 2108.

Remarks: The following standards are cited in this Standard:

JIS H 2108 Tin metal

JIS K 0050 General rules for chemical analysis

JIS K 0115 General rules for molecular absorptiometric analysis

JIS K 0116 General rules for emission spectrochemical analysis

JIS K 0121 General rules for atomic absorption spectrochemical analysis

JIS K 8001 General rules for test methods of reagents

JIS K 8005 Reference materials for volumetric analysis

JIS Z 8401 Rules for rounding off of numerical values

2. General matters General matters common to the chemical analysis shall be in accordance with JIS K 0050, JIS K 0115, JIS K 0116, and JIS K 0121.

3. Sampling and treating of sample

3.1 Sampling Sampling shall be made as follows:

(1) When an analytical sample is sampled from a metal, sample at least three metals for each melt number marked on the metal so as to represent the mean quality as far as possible, and take them as primary sample for analysis.

(2) When the analytical sample is sampled in casting the metal, sample at least three cast samples for each one molten metal <sup>(1)</sup>, and take them as the primary sample for analysis.

Note <sup>(1)</sup> For the casting sample, cares shall be taken for the shape of a mold, a size, casting time, etc. in order to obtain the same quality as the metal as far as possible.

(3) For the analytical sample, take chips from the primary sample for analysis by boring with a clean drill <sup>(2)</sup>, collect all the chips cut off, and remove iron powders or the like by using a strong magnet. Thereafter, cut them to about 5 mm or under with clean scissors, and mix thoroughly.

Note <sup>(2)</sup> For a boring position, bore the central part and a part near both end parts of the primary sample for analysis normally to the surface thereof and penetrate them to make the cut off chips obtain the same quality as the primary sample for analysis as far as possible.