



Designation: B897 – 03

# Standard Specification for the Configuration of Zinc and Zinc Alloy Jumbo and Block Ingot<sup>1</sup>

This standard is issued under the fixed designation B897; 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 reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope\*

1.1 This specification covers zinc and zinc alloy jumbo and block ingot meeting dimensional requirements.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 *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 become familiar with all hazards including those identified in the appropriate Material Safety Data Sheet (MSDS) for this product/material as provided by the manufacturer; to establish appropriate safety and health practices, and determine the applicability of regulatory limitations prior to use.*

## 2. Referenced Documents

2.1 The following standards of the issue in effect on date of order acceptance, form a part of this specification to the extent referenced herein:

2.2 *ASTM Standards:*<sup>2</sup>

B6 Specification for Zinc<sup>2</sup>

B852 Specification for Continuous Galvanizing Grade (CGG) Zinc Alloys for Hot-Dip Galvanizing of Sheet Steel<sup>2</sup>

B899 Terminology Relating to Non-ferrous Metals and Alloys<sup>3</sup>

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

## 3. Terminology

3.1 Terms shall be defined in accordance with Terminology B899.

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee B02 on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee B02.04 on Zinc and Cadmium.

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<sup>2</sup> Annual Book of ASTM Standards, Vol 02.04.

<sup>3</sup> Annual Book of ASTM Standards, Vol 14.02.

## 3.2 Definitions of Terms Specific to This Standard:

3.2.1 *jumbo ingot, n*—large casting of zinc or zinc alloy, having through holes for chains, designed for handling by mechanical equipment, which is also referred to as a jumbo or strip jumbo.

3.2.2 *block ingot, n*—large casting of zinc or zinc alloy, having lift pockets, designed for handling by mechanical equipment, which is also referred to as a block.

## 4. Ordering Information

4.1 Orders for jumbo or block ingots, or both, under this specification shall include the following information:

4.1.1 This specification number and date,

4.1.2 Quantity (weight),

4.1.3 Name of material and grade, and the

4.1.4 Type of ingot (Jumbo, Type 1 Block, or Type 2 Block),

4.1.5 Order may stipulate dimensions, or tolerances, or both, not meeting this specification only upon mutual written agreement between purchaser and producer.

## 5. Materials and Manufacture

5.1 The producer shall use care to have each lot of zinc metal or zinc alloy jumbo or block ingots be of as uniform quality as possible.

## 6. Dimensions, Mass, and Permissible Variations

6.1 Jumbo Ingots

6.1.1 Permissible variations in dimensions and tolerances for zinc or zinc alloy jumbo ingots shall be within the limits specified in Table 1 and Fig. 1 unless prior written agreement exists between purchaser and producer for nonstandard dimensions and tolerances.

6.1.2 Jumbo ingot weight shall be  $2400 \pm 100$  lbs ( $1089 \pm 45$  kg).

6.2 Block Ingots

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

TABLE 1 Zinc Jumbo Ingot Specification

Weight 2400 ± 100 lbs (1089 ± 45 kg)  
Table of Dimensions

| Drawing Identification Letter | Dimension Definition                        | Dimension, in. |       | Dimension, mm |      |
|-------------------------------|---|----------------|-------|---------------|------|
|                               |   | min            | max   | min           | max  |
| A                             | Top length                                  | 48.75          | 50.25 | 1238          | 1276 |
| B                             | Bottom overall length <sup>A</sup>          | 46.00          | 48.00 | 1168          | 1219 |
| C                             | Top width                                   | 19.25          | 20.25 | 489           | 514  |
| 0.5C                          | Center of pin hole to length edge           | 9.63           | 10.13 | 245           | 257  |
| D                             | Bottom overall width <sup>A</sup>           | 16.50          | 18.50 | 419           | 470  |
| E                             | Height <sup>B</sup>                         | 11.75          | 13.25 | 298           | 337  |
| F                             | Center of pin hole to end edge              | 5.75           | 6.75  | 146           | 171  |
| G                             | Height of side fork slots                   | 3.00           | 4.00  | 76            | 102  |
| J                             | Upper width of side fork slot               | 5.50           | 8.00  | 140           | 203  |
| K                             | Lower width of side fork slot               | 8.00           | 10.50 | 203           | 267  |
| L                             | Top pin hole diameter                       | 3.00           | 5.00  | 76            | 127  |
| M                             | Bottom pin hole diameter <sup>B</sup>       | 4.50           | 6.50  | 114           | 165  |
| N                             | Bottom center leg width                     | 11.50          | 15.25 | 292           | 387  |
| P                             | Upper width of end fork slot <sup>B,C</sup> | 5.50           | 8.00  | 140           | 203  |
| R                             | Lower width of end fork slot <sup>C</sup>   | 7.50           | 10.00 | 191           | 254  |
| S                             | Lower outer leg(s) length                   | 6.50           | 8.00  | 165           | 203  |
| T                             | Height of end fork slot                     | 3.00           | 4.00  | 76            | 102  |

<sup>A</sup>Dimensions with curved corners are measured by placing straight edges on both sides of the curve and using the intersecting point for the reference measurement.

<sup>B</sup>Minimum *P* dimension must be greater than the *M* dimension maximum.

<sup>C</sup>Minimum *R* dimension must be greater than the *P* dimension maximum.

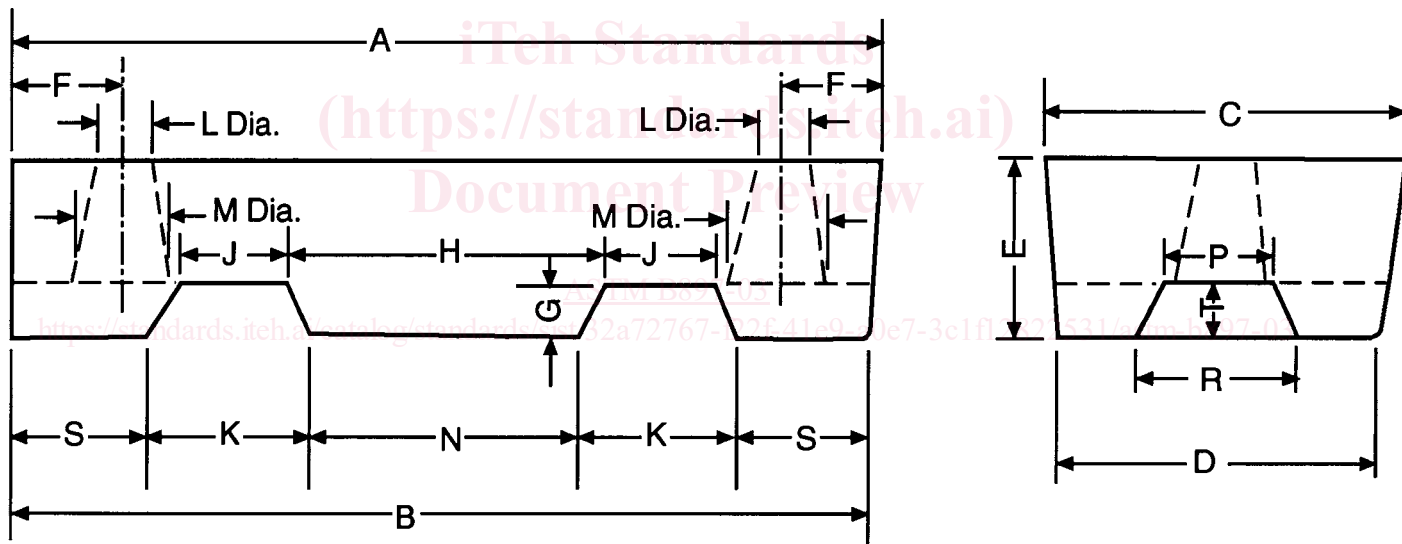


FIG. 1 Zinc Jumbo Ingot