

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 301

ZINC ALLOY INGOTS

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 301, *Zinc Alloy Ingots*, was drawn up by Technical Committee ISO/TC 18, *Zinc and Zinc Alloys*, the Secretariat of which is held by the Institut Belge de Normalisation (IBN).

Work on this question by the Technical Committee began in 1956 and led, in 1960, to the adoption of a Draft ISO Recommendation.

In February 1961, this Draft ISO Recommendation (No. 437) was circulated to all the ISO Member Bodies for enquiry. It was approved by the following Member Bodies:

Australia	Greece	Portugal
Austria	India	Romania
Belgium	Iran	Spain
Brazil	Italy	Sweden
Canada	Japan	Switzerland
Chile	Mexico	United Kingdom
Colombia	Netherlands	Yugoslavia
Denmark	New Zealand	
France	Poland	

One Member Body opposed the approval of the Draft: Germany.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in April 1963, to accept it as an ISO RECOMMENDATION.

ZINC ALLOY INGOTS

1. DEFINITION

The zinc alloys defined in this ISO Recommendation are alloys based on zinc in which the alloying elements are: aluminium, magnesium and, where required, copper.

2. CLASSIFICATION AND DESIGNATION

Each alloy is defined by its composition as shown in Tables 1 and 2 below and is designated conventionally as given in the column headed "Designation".

TABLE 1

Designation	Nominal percentage of alloying elements		
	Al	Cu	Mg
Zn Al 4	4	0	0.04
Zn Al 4 Cu 1	4	1	0.04

3. SPECIFICATIONS

TABLE 2

Designation	Limits of alloying elements per cent			Maximum impurities per cent				
	Al	Cu	Mg	Fe	Pb	Cd	Sn	Cu
Zn Al 4	3.9-4.3	—	0.03-0.06	0.05	0.003	0.003	0.001	0.03
Zn Al 4 Cu 1	3.9-4.3	0.75-1.25	0.03-0.06	0.05	0.003	0.003	0.001	—

4. CHARACTERISTICS OF INGOTS

Ingots generally should weigh 5 to 20 kg (11 to 45 lb).

Ingots should have a shape which permits stacking.

Ingots may include notches which would allow them to be broken up, if necessary, into small pieces. Some of these ingots may include cast-on feet with a view to facilitating the handling of the stacks of ingots.

5. MARKING OF INGOTS

All ingots should have the producer's mark cast-on and a mark identifying the alloy cast-on or stamped.