

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 503

COMPOSITION OF WROUGHT MAGNESIUM-ALUMINIUM-ZINC ALLOYS

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BRIEF HISTORY

The ISO Recommendation R 503, *Composition of Wrought Magnesium-Aluminium-Zinc Alloys*, was drawn up by Technical Committee ISO/TC 79, *Light Metals and their Alloys*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question by the Technical Committee began in 1959 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In October 1964, this Draft ISO Recommendation (No. 760) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Austria	Israel	Switzerland
Belgium	Italy	Turkey
Brazil	Japan	U.A.R.
Canada	Korea, Rep. of	United Kingdom
Czechoslovakia	Norway	U.S.A.
France	Pakistan	U.S.S.R.
Germany	Poland	
Hungary	Sweden	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council which decided, in September 1966, to accept it as an ISO RECOMMENDATION.

COMPOSITION OF WROUGHT MAGNESIUM-ALUMINIUM-ZINC ALLOYS

This ISO Recommendation applies to magnesium-aluminium-zinc alloys the chemical composition of which is given below.

These alloys are

- either in the form of ingots, billets, slabs for rolling, intended for wrought products;
- or in wrought forms
 - extruded bars, sections, tubes;
 - sheets, forgings, drop forgings.

Chemical composition (per cent)

Alloy	No. 21	No. 22	No. 23	No. 25	No. 26
Al	2.5 to 3.5	5.5 to 7.2	7.5 to 9.2	2.4 to 3.6	5.4 to 7.3
Zn	0.5 to 1.5	0.5 to 1.5	0.2 to 1.0	0.5 to 1.5	0.5 to 1.5
Mn	0.2 min.	0.15 min.	0.12 min.	0.15 to 0.4	0.15 to 0.4
Si max.	0.1	0.1	0.1	0.1	0.1
Cu max.	0.05	0.05	0.05	0.1	0.1
Fe max.	0.005	0.005	0.005	0.03	0.03
Ni max.	0.005	0.005	0.005	0.005	0.005
Ca max.	0.04			0.04	

NOTE. — Alloys No. 25 and No. 26 are used for general applications where particular resistance to corrosion is not required.