International Standard 8287

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

Unalloyed magnesium ingots — Chemical composition

Lingots en magnésium non allié — Composition chimique

First edition — 1984-10-15

UDC 669.721-412 **Ref. No. ISO 8287-1984 (E)**

Descriptors : magnesium, ingots, designation, chemical composition.

Price based on 1 page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8287 was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*.

It cancels and replaces International Standards ISO 114-1980 and ISO 207-1980, of which it constitutes a technical revision.

Printed in Switzerland

Unalloyed magnesium ingots — Chemical composition

1 Scope and field of application

This International Standard specifies requirements for the chemical composition of 99,8 and 99,95 unalloyed magnesium ingots for general purposes and of 99,98 unalloyed magnesium ingots for special applications.

Special applications may require stricter limitation of certain unspecified elements.

2 Conventional designation and definition

2.1 Conventional designation

The conventional designation of unalloyed magnesium ingots specified in this International Standard is : Mg-99,8 — Mg-99,95 — Mg-99,98 [see 2.2 b)].

2.2 Definition

Unalloyed magnesium is defined by

a) the maximum contents of the following specified elements :

— aluminium, manganese, zinc, silicon, copper, iron, nickel, lead and tin for 99,95 and 99,98 unalloyed magnesium ingots,

— aluminium, manganese, silicon, copper, iron, and nickel for 99,8 unalloyed magnesium ingots;

b) the total maximum content of the above elements. The difference between this total and 100 is the conventional designation of the unalloyed magnesium [see 2.2 a)];

c) the maximum content of any other elements which may be present in the magnesium for general purposes;

d) furthermore, for 99,95 unalloyed magnesium ingots, the total maximum content of the three elements : iron, nickel and copper.

3 Chemical composition

3.1 For general purposes, the maximum permissible impurities are specified in table 1.

3.2 For special applications, the recommended maximum permissible impurities are specified in table 2.

Table 1

Conventional designation	Maximum permissible impurities, % (m/m)											
	Al	Mn	Zn	Si	Cu	Fe	Ni	Pb	Sn	Total of specified elements	Total : Fe + Ni + Cu	Any other element
Mg-99,8	0,05	0,1	—	0,05	0,02	0,05	0,002	—	—	0,20	—	0,05
Mg-99,95	0,01	0,01	0,01	0,01	0,005	0,003	0,001	0,005	0,005	0,05	0,005	0,01

Table 2

Conventional designation	Maximum permissible impurities, % (m/m)									
	Al	Mn	Zn	Si	Cu	Fe	Ni	Pb	Sn	Total of specified elements
Mg-99,98	0,004	0,002	0,005	0,003	0,000 5	0,002	0,000 5	0,005	0,005	0,02

This page intentionally left blank