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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

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Methods for determining average grain size of magnesium alloy sheets

1 Scope

This Japanese Industrial Standard specifies the methods for determining the average grain size of magnesium alloy sheets (hereafter referred to as “product”) to be used for the forming such as bending, stretching, and deep drawing.

2 Terms and definitions

For the purposes of this Standard, the following terms and definitions apply.

2.1 grain

one of many micro crystals composed of metal

The granular region surrounded by the boundary (hereafter referred to as “grain boundary”) which appears on the observed surface of sample ground and prepared for the microscopic measurement. The twin as shown in figure 1 is not regarded as grain.

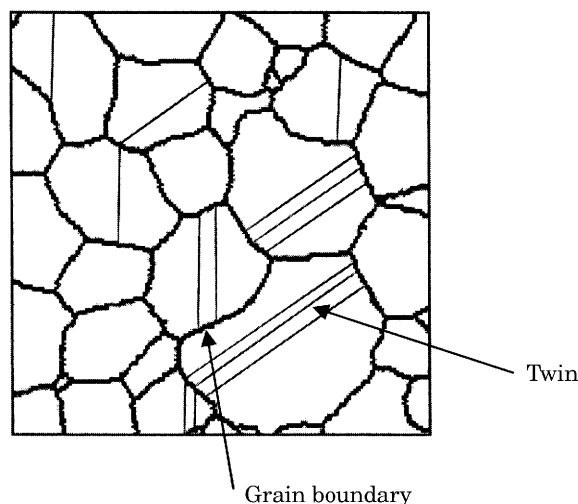


Figure 1 Definition of grain

2.2 grain size

the average size of grain

It is expressed by the average value of grain size numbers.

2.3 grain size number

the value of G , whose relation to the average number of grains per 1 mm^2 of observed surface of sample, m , satisfies $m = 8 \times 2^G$

It can be a positive number, zero or negative number.

2.4 mixed grain

the condition in which, grains whose size deviation from the maximum grain is equivalent to 3 or more in grain size number are unequally distributed within one visual field