

KES

Photometric Emission
Spectroscopic Analysis Method
of Aluminum and Aluminum Alloys.

KES T – M069

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1. Scope of application

This standard shall prescribe about photometric emission analysis by photoelectric measurement of aluminum alloys.

2. General facts, equipment and material.

General facts, equipment and material in analysis method follows KS M

0012(Measurement for dispersion extinction degree), Ks M0028(Photometric emission analysis)

3. Quantity element and range of quantity

Table 1 Range of quantity

Quantity element	Range of quantity (%)
Cu	0.001 ~ 5.0
Si	0.001 ~ 3.0
Mg	0.01 ~ 11.0
Fe	0.001 ~ 3.0
Mn	0.001 ~ 2.0
Ni	0.01 ~ 2.5
Ti	0.001 ~ 0.2
V	0.001 ~ 0.05
Zn	0.01 ~ 6.1
Sn	0.01 ~ 13.0
Cr	0.01 ~ 0.5

4. Method for prescribing and taking of sample.

(1) Taking sample.

With following KS D0002 (Examination rules for nonmetal material), inject amount to main form and take sample then in case that not taking sample from it, cut many parts of main metal and in case that plate metal is large, dissolve in small dissolver and inject like dissolving bath and take sample.

Only. In case of element of big loss of dissolving, be careful enough temperature, and time.

(2) Prescribing sample.

In case of plain sample, cut the 1 ~ 2 mm surface with using cutter and cut both ends more than 10 mm in 70 mm club shaped sample and in case of more than 70 mm cut the both ends more than 1/3 the cut frame slightly with cutter then grind wit 60 # grinding paper analysis surface.

Note (1) In cutting, use alcohol in cleaning the cutters, and cooling sample.

In case of using oil, be take care of removing pollutants.

Remark : In case of analyzing products, decide taking method and prescribe with negotiation with analyst and client

(3) Prescribing of standard sample

Prescribe standard sample is to be then same with analysis sample.