

KES

Method for Analysis of Zinc
in Zinc Alloy Die Castings

KES T – M204

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1. Scope of Application

This standard shall specify the test method of atomic extinction analysis of zinc alloy die casting that has zinc content of 50 ~ 90 %.

2. Summary

Dissolve test material in HCl and use atomic extinction analysis device to measure the concentration of zinc from test material and standard solution at wavelength of 213.9 nm.

3. Test Apparatus

Atomic Extinction Analysis Device

Note : The usage is specified in KES T-M 002

(Analysis Method using Atomic Extinction Device).

4. Reagent

(1) HCl (1 : 1)

(2) HCl (1 : 9)

(3) NaOH Solution (30 %)

(4) Zinc Standard Solution (1.0 mg Zn / mL) : Specified in KS M 0002

(Preparation Method of Standard Solution for Chemical Analysis)

5. Test Method

- (1) Exactly measure 0.1 ~ 0.2 G of test material and put it in beaker (300 mL). Close with clear dish and add HCl (1 : 1) 50 mL. Heat the beaker and dissolve the test material.
- (2) After dissolving is complete, add 0.1 mL of NaOH and continue heating for 5 minutes.
- (3) Cool the beaker, then using filtering paper (5 Series A) filter the content into mass flask (100 mL). Wash the solution on filtering paper with HCl (1 : 9). Fill up the flask with water up to the marked line and mix well. (A solution)