

KES

**Stainless Steel's 65%
Nitric Erosion Test**

KES T – L219

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1. Scope of Application

This standard shall test corrosive action of stainless steel with boiling nitric acid liquid.

2. Purpose

This standard shall regulate revival-testing result of 65 % nitric acid with stainless steel.

3. Testing Items

- (1) Testing Container should be a conical flask (Capacity around 1 ℓ) with gold finger style condenser. However, under the contract between testing people, it's okay to use conical flask (capacity around 1 ℓ) joint by taper of cooling square vertical back flowing condenser.
- (2) Testing plates should be certain shape of glass upholding item to keeping stand in the middle.
- (3) Heating equipment should keep testing liquid boils quietly during testing session.
- (4) Testing liquid top quality (weight around 1.42) KSM 8104 [Nitric acid (a test)] makes 65 % with distilled water or hydrogen ion. Density of testing liquid should 65 ± 0.2 % (Weight) and authorized by KSA 0601 (Liquid weight test method) or flowing neutralization rule under KSM 8104

4. Testing Plate

- (1) Testing plate's surface area between 10 ~ 30 cm² under rolled condition or forging ways with 1/2 size of surface area. A kind of testing plates is from steel casting and so on.
- (2) The testing plate should cut by saw. After cutting of testing plate, the surface of item should be clean.
- (3) A testing plate with scale, it should be done by cutting or grinding
- (4) Surface of testing plate should dry grinding (120 times over) with KSL 6002 (Polishing),