

EISHIN Ni-Cr Type1 Test Panel

TECHNICAL DATA SHEET

■ Product Description

The Eishin Ni-Cr (Nickel-Chrome Plating) Type 1 Test Panels are designed for comparing and evaluating the sensitivity and performance of dye and fluorescent penetrants. These panels are made by plating a hard nickel-chromium alloy on a 2mm thick brass substrate and stressing the panel in tension. Each set consists of a pair of identical panels marked A and B, with manufacturer's certification and crack photograph, making it ideal for accurate comparison tests. The Test Panels of size 10, 20 and 30 microns are mainly used for checking, testing ability fluorescent Penetrants, and 30 and 50 microns for visible i.e. Red dye penetrant.

■ Specifications

- ✓ **Length:** 100 mm \pm 2 mm
- ✓ **Width:** 35 mm \pm 2 mm
- ✓ **Thickness:** 2 mm \pm 0.2 mm
- ✓ **Plating / Cracks Depth:** 10, 20, 30, 50 microns

■ Conforms to:

- ✓ ISO 3452-3, JIS Z 2343-3

■ For use with systems conforming to:

- ✓ AMS 2647
- ✓ ASTM E1417
- ✓ ISO 3452, JIS Z 2343

■ Instructions for Use

1. **Cleaning:** Before use, Ultrasonic clean with acetone or IPA each panel to ensure no residues remain. Heat drying is recommended to completely remove all water from the cracks.
2. **Processing:** Once the panels are clean and dry, process them in accordance with the penetrant system materials and parameters to simulate production conditions. Typically, one panel is processed using new, unused materials, and the other with working/in-use materials.
3. **Comparison:** After processing, compare the appearance of the panels to assess the performance of the working/in-use materials, noting any degradation from the performance of new, unused materials.

4. Post-Use Cleaning: Thoroughly clean the panels before storage to remove all penetrant and developer materials. Ultrasonic cleaning with emulsifier or cleaner/remover solvent is recommended.

Caution

- ✓ Avoid mechanical shock and do not attempt to bend or straighten the test panels.
- ✓ Do not expose the test panels to temperatures over 100° C for an extended period.
- ✓ Any of these conditions can permanently damage the test panels.

EISHIN TYPE 1 TEST PANELS INCLUDE:

- ✓ Crack Photograph
- ✓ Twin Identical Panels with cracks 10/ 20/ 30/ 50 microns
- ✓ Manufacturer's Certification
- ✓ Carry Case



Twin Identical Panels with cracks



Carry Case



Crack Photograph

Certificate-Test Report
 According to ISO 10474:2013 5.1 and JIS G 0414:2014 5.1

The Eishin Type 1 reference test block meets the requirements of ISO 3452-3:2013 and JIS Z 2343-3:2017. This is to certify that the product listed below has been tested and inspected, and the results are satisfactory.

Product Description :

EISHIN Type 1 reference test block	
Crack Depth: 20 μm	
Serial No.	B993
Depth	20.1 μm
Width (target value)	1 μm

Inspection conditions of bundled photos : ISO 3452-1:2013 1 Da Level 4

Application : The reference test block is used to confirm the sensitivity level of the penetrant and penetrant inspection system.

Safekeeping : Be careful about coating removal and crack development due to bending, mechanical, and thermal stress applied to the reference test block. After use, the reference test block should be cleaned properly and stored in a provided case, protective envelope, or desiccator.

Note : We certify that the product does not contain hazardous substances restricted by the RoHS Directive as intentional impurities.

Date of Inspection : 17 July, 2025
Inspector : _____
 H.Takei
Approved by : _____
 H.Aimura
 Technical Department

Manufacturer's Certification