



## EISHIN NiCr Type1 Test Panel

### ■ Product Description

The Eishin NiCr Type 1 Test Panels are designed for comparing and evaluating the sensitivity and performance of dye 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 used for checking, testing ability fluorescent Penetrants, and 30 and 50 microns for visible i.e. Red 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 2647D
- ✓ ASTM E1417
- ✓ ISO 3452, JIS Z 2343

### ■ Instructions for Use

1. **Cleaning:** Before use, Ultrasonic clean with acetone 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**

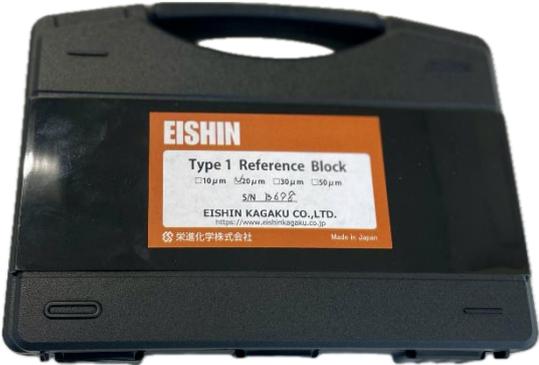
- ✓ Avoid mechanical shock and do not attempt to bend or straighten the test panels.
- ✓ Do not expose the test panels to temperatures over 100° C for an extended period.
- ✓ Any of these conditions can permanently damage the test panels.

**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

**Test Report**

No. E24-8-16-B408  
Date: June 28, 2024

According to ISO 10474 5.1 & JIS G 0415 5.1

The Eishin Type 1 reference test block meets the requirements of ISO 3452-3, JIS Z 2343-3.

This is to certify that the product listed below has been tested and inspected, and the results are satisfactory.

Product Description

Type	TP-5.0 µm
Serial No.	B408
Depth	51.0 µm
Width (target value)	2 µm

Application: The test panels are 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 test panel. After use, the test panel should be cleaned properly and stored in an appropriate box, 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: June 17, 2024

Inspector:

H. Takahashi

Approved by:

H. Aimura  
Technical Department

Manufacturer's Certification