

## Eishin NiCr Twin Cracked Penetrant Test Panels

**Now RoHS compliant\***



**\*Hexavalent Chromium has been replaced with safe Trivalent Chromium for RoHS compliance.**

The Eishin Kagaku NiCr Twin Cracked Penetrant Test Panels are used for comparing and evaluating sensitivity and performance of Dye Penetrants.

They are available in 10, 20, 30 and 50 microns (0.0004, 0.0008, 0.0012, 0.002 inch) flaw depth.

Each set consists of a pair of identical panels marked A and B with manufacturers certification and crack photograph.

These panels are made by plating hard Nickel Chromium alloy on a 2mm thick brass substrate and stressing the panel in tension. The hard NiCr coating is brittle in comparison to the brass substrate so that the cracks created in the plated layer are limited to the thickness of the NiCr layer. The panel is then cut in half perpendicular to the direction of the cracks thus creating a matching pair of virtually identical cracks of controlled depth.

NiCr Panels are used to compare new and used penetrants and can be used for comparing performance of different penetrant materials or different processing techniques.

Sensitivity* (unofficial)		<ul style="list-style-type: none"> <li>• <b>Fluorescent Penetrant Sensitivity Levels are established by the USAF Laboratory at Wright Paterson AFB under highly controlled conditions.</b></li> <li>• <b>Sensitivity testing is not something the penetrant manufacturer or user can do. What you can do is compare samples using appropriate NiCr Cracked Panels.</b></li> </ul>
Crack Depth	Level	
50 $\mu\text{m}$	1, 2, 3, 4	
30 $\mu\text{m}$	2, 3, 4	
20 $\mu\text{m}$	3, 4	
10 $\mu\text{m}$	4	

- **Guaranteed to be equivalent to both Sherwin and Magnaflux branded panels.**
- **Specifications Compliance:** ASTM E1417, AMS 2647D, ISO 3452-3, JIS Z 2343-3
- **Maintenance:** 1- Clean in ultrasonic cleaner using Acetone. 2 – Dry. 3 – Wrap in a towel for storage.