Test Panel Nichel

DESCRIPTION

Pair of sheets made by plating a brass panel, first with brittle nickel, then with chrome. The sheets measure approximately 1.5' (36 mm) wide by 4' (101 mm) in length, are cut from a batch of the same material and have matching cracks. They are particularly effective in evaluating the performance of a PT system to detect surface discontinuities. Test Panels make easy to compare two batches of penetrant liquids simultaneously. Available in four different versions, which differ in terms of discontinuity depth (10-20-30-50μ).

In compliance with: ISO 3452-3 TYPE 1; ASTM E1417; AMS 2647D; JIS Z 2343-3

USER INSTRUCTIONS

Step-by-step description

1. **Plates preparation**

    - **Thorough cleaning**: before use, both plates must be meticulously cleaned to remove any traces of dirt, grease or penetrant residues.

    - **Dry thoroughly**: dry the Test Panels completely. A moderate temperature oven (e.g. 65°C) is often employed for this step.

2. **Testing**

- **Penetrant application**: apply the new, unused penetrant to one Test Panel and the used penetrant to the other.

- **Penetration time**: wait for the time recommended by the penetrant manufacturer for the liquid to penetrate the cracks.

- **Remove penetrant excess**: carefully remove penetrant excess from both plates, following standard PT procedures. For fluorescent penetrants, this requires controlled rinsing with water.

- **Apply the developer**: apply a thin, even layer of developer to both plates. The developer serves to highlight the penetrant in the cracks.

- **Allow the necessary time for development**: wait until the penetrant becomes clearly visible.

3. **Inspection and comparison**

- **Verify the indications**: observe the indications on both Test Panels, using UV light for fluorescent penetrants.

- **Compare the results**: compare the indications on the test plate (with the penetrant in use) with those on the reference plate (with new penetrant).

- **Performance evaluation**: if the penetrant in use is working correctly, the crack indications on the test plate should be similar to or not significantly worse than those on the reference plate.

- **Remarks**: comparison may also help determine whether processing equipment (e.g., emulsifier, dryer, etc.) or the technique used affects system's performance.

4. **Care and maintenance**

- **Cleaning after use**: after each use, Test Panels must be thoroughly cleaned and stored correctly to maintain their integrity. It may be useful to store them in solvent to prevent penetrant residues from clogging the cracks.

- **Cleaning verification**: before each use, inspect the Test Panels (under UV light for fluorescent penetrant testing) to ensure that all previous markings have been removed.

- **Handle with care**: handle the panels carefully to avoid damaging the delicate chrome surface and causing undesired cracks.

AVAILABLE MODELS

Part Number	Description	Ref.
04099810	Pair of NiCr – 10µ Test Panel	98.6/1
04099811	Pair of NiCr – 20µ Test Panel	98.6/2
04099812	Pair of NiCr – 30µ Test Panel	98.6/3
04099813	Pair of NiCr – 50µ Test Panel	98.6/4