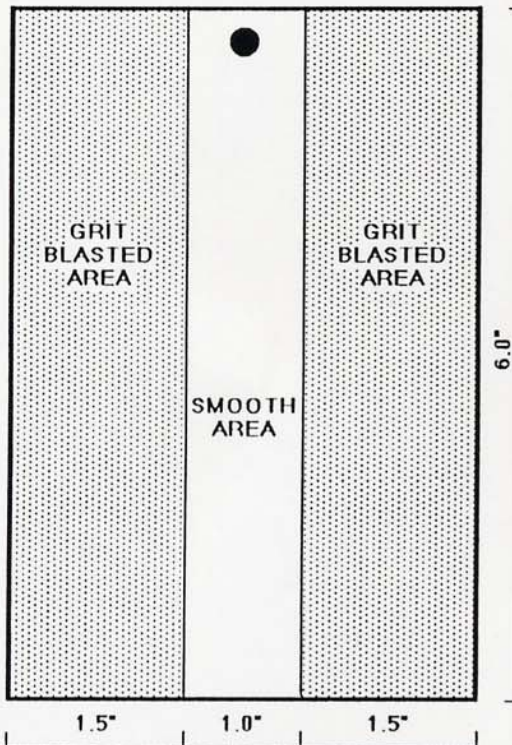


SHERWIN INCORPORATED WTP-1 WASH TEST PANEL



The Sherwin Incorporated Wash Test Panel is used to determine the intrinsic level of background fluorescence in a penetrant system. Excessive background fluorescence can mask or obscure dangerous flaws. At a minimum, background fluorescence slows the inspection process by making indication evaluation more difficult and time consuming. Background fluorescence routinely increases over time as penetrants and, particularly, emulsifiers become contaminated.



For this reason certain specifications and directives, including MIL-STD-6866, mandate periodic comparisons between uncontaminated laboratory samples and in-use penetrant system materials. MIL-STD-6866 specifies a weekly removability test if the system includes an emulsifier — either lipophilic (Method B) or hydrophilic (Method D) — and a monthly test if the system includes a water wash penetrant (Method A). The Sherwin Incorporated WTP-1 wash Test Panel is appropriate for these tests.

Comparison Tests: Made of stainless steel and .09" thick, the Wash Test Panel has two grit blasted areas separated by smooth strip. Typically, the panel is used to make side-by-side comparisons of two penetrant systems' removability. The two systems are placed on the panel's separate grit blasted strips and processed at the same time and in the same manner. The objective is to determine whether one side washes easier than the other. The final determination concerning relative residual fluorescence is made under black light inspection.

Cleaning: It is important to clean the Wash Test Panel after each use. A suggested procedure follows.

1. Lightly scrub the panel with a soft cloth or towel saturated with a mild detergent solution. Sherwin Incorporated's DUBL-CHEK ER-83A Hydrophilic Emulsifier is suitable for this purpose. Avoid scratching the panel's surface. Rinse the panel thoroughly with a water spray. This removes the developer and some penetrant.
2. Dry the panel thoroughly. The panel may be air dried, or a heat blower or oven may be used to accelerate drying.
3. To remove remaining penetrant traces, immerse the panel in acetone, isopropyl alcohol, 1,1,1-trichloroethane, or similar volatile solvent for a few minutes with some agitation. Replace the solvent frequently.
4. (Optional) Clean the panel in an ultrasonic cleaner charged with a safe chlorinated solvent for two minutes.
5. Dry the panel thoroughly as in Step 2 above.

Other Panels: Sherwin Incorporated offers other penetrant testing panels:

- | | |
|-------------------------|---|
| PSM-5 Panel | Conforms to P&WTAM 146040; used for routine testing of in-use penetrants. Annual recertification required by P&W specifications provided by Sherwin Incorporated's USAF-approved QC Laboratory. |
| Cracked Aluminum Blocks | Also referred to as ASME "Penetrant Comparator," conforms to MIL-I-25135C, usually used to compare visible penetrants and/or in teaching environment. |

Continued ...

SHERWIN
INCORPORATED

5530 Borwick Ave.
South Gate, CA 90280
(562) 861-6324
FAX (562) 923-8370

Twin Tapered
NiCr Panels

Tapered NiCr plating on matched panels; generally used to compare in-use penetrants with lab sample

Twin NiCr
Sensitivity
Panel

A NiCr-plated brass panel in one of three grades for testing the relative ability of visible and fluorescent penetrants to detect shallow cracks. Varying grades range appropriately for Level 1/2 through Level 4 penetrants.