

TECHNICAL DATA SHEET

SHERWIN TWIN KDS PANELS

Twin Known Defect Standards

DESCRIPTION

The Sherwin Twin KDS Panels are two panels, each measuring two by six inches and having five sunburst style cracks included in a brittle metal plating, which has a depth of approximately 0.001 inches (26µm). The cracks run along one side of each panel, top to bottom, in varying diameters. Adjacent to the cracked portion is an unplated strip of medium rough, grit-blasted stainless steel for removability evaluation.

The Sherwin KDS Panels were explicitly designed as a realistic means for complying with the ASTM E-1417 requirement that in-use penetrants be compared side-by-side to new, unused penetrants. Sherwin Twin KDS Panels give accurate, reliable information not obtainable by referring to impressionistic verbal data or nonfluorescent photographs.

The Sherwin Twin KDS Panel comes in a TAM model. The TAM model uses Method A, water washable penetrants, and Methods B, C, and D, post-emulsifiable penetrants.

FEATURES & BENEFITS

- Penetrant System Monitoring
- Sensitivity Comparison
- Possible to control crack size and depth, while producing panels that are sufficiently rugged to withstand being routinely sent down the penetrant inspection line
- Better at detecting diminished sensitivity and brightness than other system monitoring panels
- Rugged and easy to clean
- A simple 30-minute soak in isopropyl alcohol clears the induced cracks of residual penetrant



SPECIFICATIONS

A pair of nearly identical panels measuring 2.6 inches and 0.090 inches thick with matching crack patterns. Having matching crack patterns of known sizes, the panels may be used to compare penetrant performance.

SPECIFICATION COMPLIANCE

- ASTM E-1417
- MIL-STD-6866

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ASTM E-1417 requires a daily penetrant system check using a known defect standard. The purpose of the daily check is to assure that the penetrant system is functioning properly: that there has been no system breakdown, e.g., over-heated oven, inadequate developer application, elevated rinse water temperature, penetrant degradation, etc. After processing the known defect standard through the penetrant system, results must be compared to a similar known defect standard, processed with unused penetrant, or to a photograph.

ORDERING INFORMATION

Product Code	Packaging
TWN KDS without photo	1 x kit
TWN KDS with photo	1 x Kit

Sherwin Twin KDS Panels Are Multi-Purpose Comparators

As the Sherwin Twin KDS Panels are "twins," they may be used to judge relative penetrant sensitivity and relative system performance. They also may be used to compare penetrant removability and washability.

Sherwin Twin KDS Panels can be used to maximise a penetrant system's performance by examining the effects of varying processing parameters, e.g., dwell times, rinse or removal times and pressures, emulsifier strengths, developer application, etc.

And, of course, as single panels or twins, their primary function is to monitor penetrant systems in order to comply with the ASTM E-1417 requirement for a daily system performance check.

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