

DPI TEST PIECES

Version 18012018

Liquid Penetrant Performance Checks

Test pieces are essential for assessing the performance of liquid penetrant processes and determining that a suitable level of sensitivity is being achieved. Johnson & Allen supply a range of commonly used test pieces that can be used to measure and or compare different consumables. Differing types and brands of penetrant will produce different result but the same product can sometimes work differently if contaminated with water or greases etc. This makes such tests essential to reliable and NDT.

Key Features

TAM Panels	Hoffmann and Sherwin
Comparator	Aluminium Block
Reference Blocks	1 and 2

 <p>Hoffmann TAM Panel</p> <p>Description: Pratt & Whitney approved Hoffmann brand TAM panel consisting of a 2.5mm thick stainless steel plate with half the test surface hard coated with a micro thin chrome alloy. The chrome coloured half contains five controlled and evenly spaced cracked centers. The cracked centers in a circular pattern forming 5 star-like shapes.</p>	 <p>Reference Block Type 1</p> <p>Description: ISO 3452-3:2013 describes two types of reference blocks - Type 1 Reference Blocks are used to determine the sensitivity levels of liquid penetrant product families and are supplied in pairs. They are made by cutting a single block in half perpendicular to the direction of the artificial defects. Available in versions with 10µm, 20µm, 30µm and 50µm crack depths.</p>
 <p>Sherwin TAM Panel</p> <p>Description: Pratt & Whitney approved Sherwin brand TAM panel consisting of a 2.5mm thick stainless steel plate with half the test surface hard coated with a micro thin chrome alloy. The chrome coloured half contains five controlled and evenly spaced cracked centers. The cracked centers in a circular pattern forming 5 star-like shapes.</p>	 <p>Reference Block Type 2</p> <p>Description: ISO 3452-3:2013 describes two types of reference blocks - Type 2 Reference Blocks are for routine assessment of DPI system performance. The block contains 5 artificial star-shaped defects which range from 3.0 to 5.5mm diameters on one side with the 4 adjacent patches containing different roughnesses of 2.5µm, 5µm, 10µm and 15µm.</p>
 <p>Comparator Block</p> <p>Description: The Aluminium Comparator Block is divided into two segments and can be used to compare different penetrants to one and other or fresh penetrant to penetrant in use. The cracked Aluminium block is made from 2024 Aluminium with a groove separating the two sides to facilitate side-by-side penetrant comparison. Intended as a single use item.</p>	 <p>UV Eye</p> <p>Description: The UV Eye is a defect viewing aid that can measure and record the size of defects and is also suitable for checking test panel degradation. Such checks have become mandatory for ensuring consistency of penetrant system performance. The UV Eye includes both the tablet and probe with a measurement accuracy greater than 0.01mm.</p>

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