

**Calibration certificate - Test report**

**according to EN 10204 – 3.1**

**Scope of delivery:**

**Hoffmann TAM Panel, Part Number: PT-Guard  
P&W TAM 146040-1 Approved**

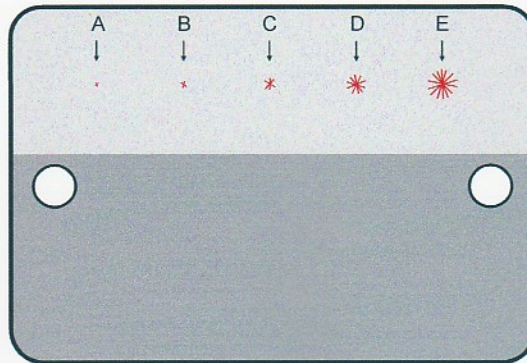
**Serial number:**

**2016.07.6301**

**Test date:**

**18.07.2016**

The Hoffmann TAM Panel is made from a stainless steel plate. Half of the test surface is 0.003" hard coated. Five crack centers are evenly spaced in the hard coated strip. The crack centers are circular patterns forming a star.



Crack no.	A	B	C	D	E
MEASURED SIZE	.022 inches	.053 inches	.080 inches	.143 inches	.209 inches
SPECIFICATION	.015 - .031 inches	.046 - .062 inches	.075 - .093 inches	.125 - .171 inches	.180 - .250 inches
MEASURED SIZE	0.56 mm	1.34 mm	2.03 mm	3.64 mm	5.31 mm
SPECIFICATION	.38 - .79 mm	1.17 - 1.57 mm	1.91 - 2.36 mm	3.18 - 4.34 mm	4.57 - 6.35 mm

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For the measurement of diameter, we have used the Penetrant Type I, the Method D and the Sensitivity level 4:

**Penetrant:**

Magnaflux Zyglo ZL-37 Post Emulsifiable Fluorescent Penetrant

**Remover:**

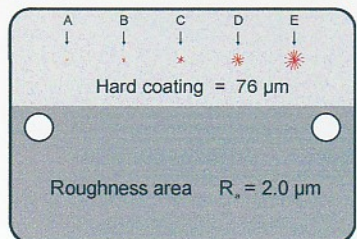
Magnaflux Zyglo ZR-10B (20%) Hydrophilic Remover

**Dry Developer:**

Magnaflux Zyglo ZP-4B Dry Powder Developer

<b>crack depth</b>	<b>0.003" ± .00016"</b>	<b>76 µm ± 4 µm</b>
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The unplated side is grit blasted to Ra = 2.0 roughness for washability / background test.

	<b>Nominal roughness</b>	<b>R<sub>a</sub> = 2.0 µm ± 0.3 µm</b>
	<b>Measured roughness</b>	<b>R<sub>a</sub> = 1.8 µm</b>

The Hoffmann TAM Panel is P&W TAM 146040-1 Approved.

Herewith we certify, that this Hoffmann TAM Panel has duly been tested and corresponds with the determinations described in Pratt and Whitney specification TAM 146040.

18.07.2016

  
**Z. Hoffmann (Expert)**

# Hoffmann Precision Star TAM Panel



2016.07.18

Spec Sheet

[www.pt-panel.com](http://www.pt-panel.com)

Five crack centers forming a star  
Specification Diameter:  
Permissible tolerances

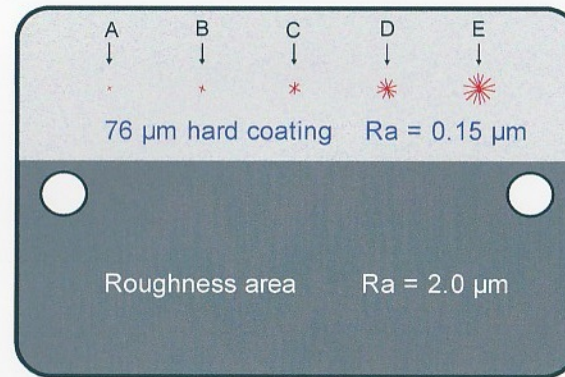
Crack depth in the hard coat

Hard coating area: Roughness  $R_a$   
Roughness area: Roughness  $R_a$

Plate dimensions Tolerance:  $\pm 3\%$

Plate thickness tolerance:  $\pm 10\%$

Hoffmann TAM Panel P/N: PT-Guard  
P&W TAM 146040-1 Approved



A	B	C	D	E
.015-.031 inches	.046-.062 inches	.075-.093 inches	.125-.171 inches	.180-.250 inches
0.38 - 0.79 mm	1.17-1.57 mm	1.91-2.36 mm	3.18-4.34 mm	4.57-6.35 mm

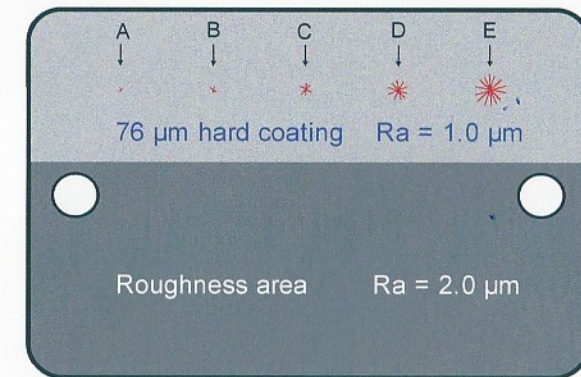
(.003"  $\pm$  .00016") 76  $\mu\text{m}$   $\pm$  4  $\mu\text{m}$

$R_a = 0.15 \mu\text{m} \pm 0.10 \mu\text{m}$   
 $R_a = 2.00 \mu\text{m} \pm 0.30 \mu\text{m}$

6" x 4" 152.4 mm x 101.6 mm

0.1" 2.5 mm

Hoffmann TAM Panel P/N: PT-Guard  
P&W TAM 146040-2 Approved



A	B	C	D	E
.015-.031 inches	.046-.062 inches	.075-.093 inches	.125-.171 inches	.180-.250 inches
0.38 - 0.79 mm	1.17-1.57 mm	1.91-2.36 mm	3.18-4.34 mm	4.57-6.35 mm

(.003"  $\pm$  .00016") 76  $\mu\text{m}$   $\pm$  4  $\mu\text{m}$

$R_a = 1.0 \mu\text{m} \pm 0.30 \mu\text{m}$   
 $R_a = 2.0 \mu\text{m} \pm 0.30 \mu\text{m}$

6" x 4" 152.4 mm x 101.6 mm

0.1" 2.5 mm