As Built Conditions, No HIP Operations
Scanning Electron Microscopy (SEM) Microstructure Of Sintavia Logo: 17-4PH
As Built Conditions, No HIP Operations

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Magnification 500x

Magnification 1000x

Magnification 2000x

Magnification 4000x

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QF-824.01
Owner: Metallurgist

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Reference Sample: Sintavia Logo
Group: X-Y Plane
Sample Comment: Hatch Porosity Worst Area
Porosity [%] 0.00 %
Pore density [1/mm²] 0.00 1/mm²
Max Pore Size [μm] 2.98 μm
Optical Metallographic Microstructure of Faux Blade: Inconel 718, Etched With Vilella’s Reagent. HIPPED vs Non-HIPPED

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Microstructure &amp; Porosity</th>
<th>Project</th>
<th>Marketing</th>
<th>Date</th>
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</thead>
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<tr>
<td>Customer</td>
<td>Sintavia - 17-4ph &amp; Inconel 718</td>
<td></td>
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<td>2/28/2017</td>
</tr>
</tbody>
</table>

**HIP Cycle:** 2155°F @ 14.5ksi  
15 min Soak Time  
Rapid Cool

No HIP, 50X

![No HIP, 50X](image1)

No HIP, 100X

![No HIP, 100X](image2)

Post-HIP, 50X

![Post-HIP, 50X](image3)

Post-HIP, 100X

![Post-HIP, 100X](image4)

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