



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**Product Assurance Services, Inc.**  
328 State Street  
St. Marys, PA 15857

Fulfils the requirements of

**ISO/IEC 17025:2017**

In the field of

**TESTING**

This certificate is valid only when accompanied by a current scope of accreditation document.  
The current scope of accreditation can be verified at [www.anab.org](http://www.anab.org).

Jason Stine, Vice President

Expiry Date: 18 December 2027

Certificate Number: AT-1164



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### Product Assurance Services, Inc.

328 State Street, St. Marys, PA 15857

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### TESTING

ISO/IEC 17025 Accreditation Granted: 10 December 2025

Certificate Number: AT-1164

Certificate Expiry Date: 18 December 2027

#### Mechanical

| Specific Tests and/or Properties Measured                         | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology                                                                        |
|-------------------------------------------------------------------|----------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------|
| Tensile Testing (Test Method)                                     | ASTM E8<br>MPIF Std. 10                            | Sintered and Wrought Products      | Tinius Olsen Super L<br>120 000 lbf Max.<br>Modified Dog-Bone Tensile Bar<br>Spring Loaded Tooling |
| Compression Testing (Test Method)                                 | ASTM E9                                            | Sintered and Wrought Products      | Tinius Olsen Super L<br>120 000 lbf Max.                                                           |
| Hardness Testing (Test Method)<br>Rockwell and Superficial Scales | ASTM E18*<br>MPIF Std. 43*                         | Sintered and Wrought Products      | Wilson Rockwell Hardness Tester<br>Rockwell Scales A,B,C,E,F,G,H<br>Superficial Scales T,N         |
| Microhardness Testing - Knoop (Test Method)                       | ASTM E384<br>ASTM B933<br>MPIF Std. 51             | Sintered and Wrought Products      | QNESS Micro Hardness Tester<br>Knoop and Vickers Scale                                             |
| Depth of Decarburization (Test Method)                            | ASTM E1077                                         | Sintered and Wrought Products      | Olympus PME Metallograph 50X, 100X, 200X, 400X, 1000X                                              |
| Coating Thickness (Test Method)                                   | ASTM B487                                          | Sintered and Wrought Products      | Olympus PME Metallograph 50X, 100X, 200X, 400X, 1000X                                              |
| Case Depth (Test Method)                                          | ASTM B934<br>MPIF Std. 52                          | Sintered and Wrought Products      | Olympus PME Metallograph 50X, 100X, 200X, 400X, 1000X                                              |

**Mechanical**

| Specific Tests and/or Properties Measured                   | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested                   | Key Equipment or Technology                                                                                                                |
|-------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Green Strength (Test Method)                                | ASTM B312<br>MPIF Std. 15                          | Green P/M Compacts                                   | IMADA<br>Compression/Tension<br>100 lbf Max.<br>Tinius Olsen Super L<br>1000 lbf Max.<br>TRS Bar and K-Value Ring<br>Spring Loaded Tooling |
| Case Depth (Test Method)                                    | ASTM B931<br>ASTM B934<br>MPIF Std 52              | Sintered and Wrought Products, Powder and Components | Olympus PME<br>Metallograph<br>QNESS Micro Hardness Tester<br>Knoop and Vickers Scale                                                      |
| Density (Test Method)                                       | ASTM B962*<br>MPIF Std. 42                         | Green and Sintered P/M Products                      | Wet Density Scale<br>Capacity Range, 3100 g                                                                                                |
| Density, Oil Content, Interconnected Porosity (Test Method) | ASTM B963*<br>MPIF Std. 57                         | Sintered P/M Products                                | Wet Density Scale<br>Capacity Range, 3100 g                                                                                                |
| Transverse Rupture Strength (Test Method)                   | ASTM B528<br>MPIF Std. 41                          | Sintered P/M Products                                | Tinius Olsen Super L<br>120 000 lbf<br>TRS Bar Fixture<br>Micrometers 0.0001 in Accuracy<br>TRS Bar<br>Spring Loaded Tooling               |
| Dimensional Change (Test Method)                            | ASTM B610<br>MPIF Std. 44                          | Sintered P/M Products                                | Tinius Olsen Super L<br>120 000 lbf<br>Micrometers 0.0001 in Accuracy<br>TRS Bar<br>Spring Loaded Tooling                                  |
| K-Value (Test Method)                                       | ASTM B939<br>MPIF Std. 55                          | Sintered P/M Products                                | Tinius Olsen Super L<br>120 000 lbf<br>Micrometers/Calipers 0.001 in Accuracy<br>K-Value Ring<br>Spring Loaded Tooling                     |
| Compressibility (Test Method)                               | ASTM B331<br>MPIF Std. 45                          | Sintered P/M Products                                | Tinius Olsen Super L<br>120 000 lbf<br>Micrometers 0.0001 in Accuracy<br>TRS Bar<br>Spring Loaded Tooling                                  |

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**Mechanical**

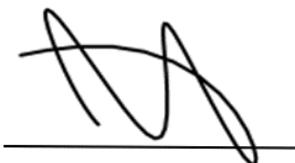
| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique                                        | Items, Materials or Product Tested | Key Equipment or Technology                                                                        |
|-------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------|
| Apparent Density (Test Method)            | ASTM B212*<br>MPIF Std. 04*<br>ASTM B417*<br>MPIF Std. 28*<br>ASTM B703*<br>MPIF Std. 48* | Powders                            | Hall Flowmeter Funnel, Carney Funnel, Stand, Density Cup, Arnold Meter Balance 0.001 g readability |
| Hall Flow Rate (Test Method)              | ASTM B213*<br>MPIF Std. 03*                                                               | Powders                            | Hall Flowmeter Funnel, Balance 0.01 g readability, Stopwatch 0.1 s Accuracy                        |
| Sieve Analysis (Test Method)              | ASTM B214<br>MPIF Std. 05                                                                 | Powders                            | US Series Screens 40M,60M,80M,100M, 200M, 325M, Pan                                                |

**Non-Destructive**

| Specific Tests and/or Properties Measured                                                                                                                                          | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested           | Key Equipment or Technology                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|
| Guide for Magnetic Particle Examination (Guide)<br>Recommended Practice – Magnetic Particle Method                                                                                 | ASTM E709*<br>ASTM E1444*<br>SNT-TC-1A-1996*       | Sintered and Wrought Products and Components | Magnaflux AC/HWDC/FWDC 6 000 amps Max. Multiple Units     |
| Guide for Resonant Ultrasound (Guide)                                                                                                                                              | ASTM E2001*                                        | Sintered and Wrought Products and Components | RUS Inspection Equipment 50 kHz Max. Range Multiple Units |
| Practice for Eddy-Current Sorting of Metals (Practice)                                                                                                                             | ASTM E566<br>ASTM E703                             | Sintered and Wrought Products and Components | Eddy Current Inspection 1.5 in Max. Diameter OD           |
| Visual and Gauge Inspections,<br>Practice for Quality Control Systems for Nondestructive Agencies (Practice)<br>Practice for Agencies Performing Nondestructive Testing (Practice) | ASTM E1212*<br>ASTM E543*                          | Sintered and Wrought Products and Components | Multiple Inspection and Gauging Locations                 |

Note:

1. Methods identified by an asterisk (\*) are also offered as field testing services.



Jason Stine, Vice President

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