

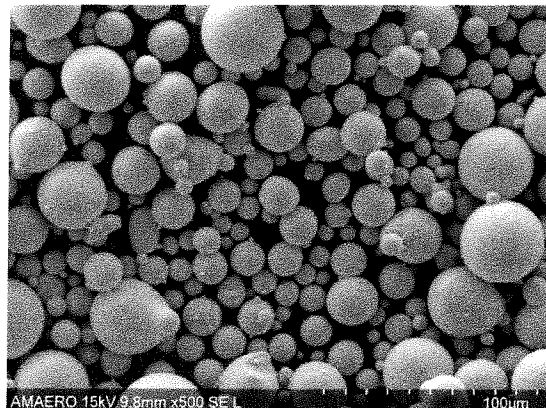
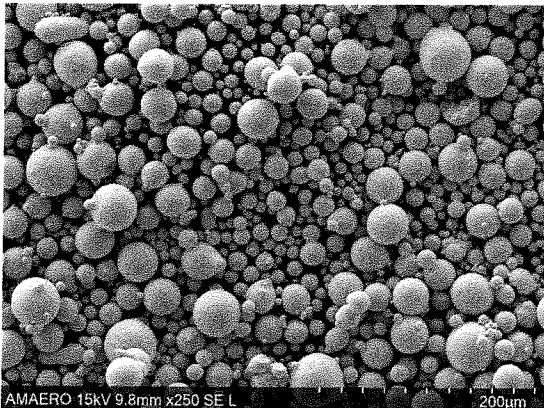
CERTIFICATE OF ANALYSIS

Lot No./Lab No.: AM1162.B4/QA442.1

Print Date: Dec 31, 2025

P/N:	PDG015053	Customer Name:	United Performance Metals
Product Description:	Ti64GD23: Ti64 Grade 23 metal powder	Customer Address:	25 N Enterprise Drive Hamilton, OH 45015
Chemical Composition:	Ti-6Al-4V	Customer PO:	UAD-55728-S78
Particle Size Distribution:	15-53 μm	Customer Specification:	AMS7025
		Quantity (kg):	500

PHYSICAL ANALYSIS						
<i>Sampling method per ASTM B215.</i>						
Laser Diffraction <i>ASTM B822</i> <i>(Microtrac)</i>	Vol%	Min μm	Max μm	Result μm	Approved	Date of Analysis
	D10	-	-	23.66	Yes	Dec 31, 2025
	D50	-	-	39.42	Yes	Dec 31, 2025
	D90	-	-	61.36	Yes	Dec 31, 2025
Sieve Analysis <i>ASTM B214</i> <i>(Ro-Tap)</i>	Screen μm	Min %	Max %	Result %	Approved	Date Of Analysis
	+75	-	0	0	Yes	Dec 31, 2025
	+63	-	1.0	0.2	Yes	Dec 31, 2025
	+53	-	5.0	4.5	Yes	Dec 31, 2025
	-53+15	-	Bal	95.5	Yes	Dec 31, 2025
Laser Diffraction <i>ASTM B822</i>	Size μm	Min %	Max %	Result %	Approved	Date Of Analysis
	<15	-	≤ 5.0	1.5	Yes	Dec 31, 2025
Hall Flow <i>ASTM B213</i>		Min	Max	Result	Approved	Date of Analysis
	sec/50g	-	-	40	Yes	Dec 31, 2025
Apparent Density <i>ASTM B212</i>		Min	Max	Result	Approved	Date of Analysis
	g/cm^3	-	-	2.3	Yes	Dec 31, 2025
Tap Density <i>ASTM B527</i>		Min	Max	Result	Approved	Date of Analysis
	g/cm^3	-	-	3.0	Yes	Dec 31, 2025





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CHEMICAL ANALYSIS						
<i>All elements are measured in wt.% unless otherwise indicated. Sampling method per ASTM B215.</i>						
Element	Method	Min	Max	Result	Approved	Date of Analysis
Aluminum	ICP-OES (External*)	5.5	6.5	6.3	Yes	May 26, 2025
Vanadium	ICP-OES (External*)	3.5	4.5	4.2	Yes	May 26, 2025
Iron	ICP-OES (External*)	-	0.3	0.2	Yes	May 26, 2025
Oxygen	LECO (Internal)	-	0.13	0.10	Yes	Dec 31, 2025
Nitrogen	LECO (Internal)	-	0.05	0.02	Yes	Dec 31, 2025
Hydrogen	LECO (Internal)	-	0.012	0.001	Yes	Dec 31, 2025
Carbon	LECO (Internal)	-	0.08	0.05	Yes	Dec 31, 2025
Titanium	ICP-OES (External*)	-	-	Bal	Yes	-

**As reported on test certificate provided by bar vendor.*

This material has been produced, tested, and analyzed in accordance with the customer purchase order and the specifications referenced herein.

Validated by: Caroline Peck Date: Dec 31, 2025
Quality Manager or Delegate

This report is confidential and proprietary to Amaero Advanced Materials & Manufacturing, Inc. It may contain legally privileged information or copyright material. You should not read, copy, use, or disclose this report without authorization. If you are not an intended recipient, please contact our office for instructions. The Certificate of Analysis meets EN 10204 Type 3.1 and is validated via electronic signature. Significant digits are displayed as per ASTM E 29.



AMAERO

CERTIFICATE of CONFORMANCE

United Performance Metals

PDGD15053

CUSTOMER NAME

AMAERO PART NUMBER

AM-TIGAGD23

December 31, 2025

CUSTOMER PART NUMBER

DATE GENERATED

CERTIFICATION STATEMENT

As a representative of AMAERO Quality, I hereby certify that the materials / products listed below and all inclusive documentation is complete, accurate and conforms in all aspects to the stated Purchase Order / Contract requirements. In addition, all exceptions, waivers, deviations, substitutions and/or non-conforming conditions are correct as noted in Section D.

<input checked="" type="checkbox"/> Powder	<input type="checkbox"/> PM HIP	<input type="checkbox"/> Other:	Ti64	23	15-53 μm	AM1162.B4
PRODUCT TYPE (Check One)			MATERIAL TYPE	GRADE	PSD DESIGNATOR	MATERIAL HEAT #

UAD-55728-578	-	-	N/A	500.0	(Check One) <input checked="" type="checkbox"/> kg <input type="checkbox"/> lbs <input type="checkbox"/> Units	TESTING CERTIFICATES SUPPLIED (Check One in Each Section)					
P.O NUMBER	P.O. REV.	LINE ITEM	CONTRACT #	QUANTITY		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
						MATERIAL HEAT	CHEMISTRY	MECHANICALS			

SERIAL NUMBERS of PM HIP PRODUCT in this SHIPMENT				
N/A				

REQUIRED FLOWDOWN REFERENCE DOCUMENTS / SPECIFICATIONS and APPLICABLE REVISIONS (if Customer Required)					
DOCUMENT #	REVISION	DOCUMENT #	REVISION	DOCUMENT #	REVISION
DOCUMENT #	REVISION	DOCUMENT #	REVISION	DOCUMENT #	REVISION
DOCUMENT #	REVISION	DOCUMENT #	REVISION	DOCUMENT #	REVISION

AMAERO COMMENTS ON PRODUCT SHIPMENTS

Shipment Contains 500 KG

SUMMARY of APPROVED DEVIATIONS in this SHIPMENT of PRODUCT					
DEVIATION REFERENCE #	DEVIATION REFERENCE #	DEVIATION REFERENCE #	DEVIATION REFERENCE #	DEVIATION REFERENCE #	DEVIATION REFERENCE #
<input type="checkbox"/> Date Limited	<input type="checkbox"/> Date Limited	<input type="checkbox"/> Date Limited	<input type="checkbox"/> Date Limited	<input type="checkbox"/> Date Limited	<input type="checkbox"/> Date Limited
End Date:	End Date:	End Date:	End Date:	End Date:	End Date:
<input type="checkbox"/> Quantity Limited	<input type="checkbox"/> Quantity Limited	<input type="checkbox"/> Quantity Limited	<input type="checkbox"/> Quantity Limited	<input type="checkbox"/> Quantity Limited	<input type="checkbox"/> Quantity Limited
Open Balance =	Open Balance =	Open Balance =	Open Balance =	Open Balance =	Open Balance =

AMAERO COMMENTS ON DEVIATIONS

N/A

CoC GENERATED BY		AMAERO QUALITY MANAGER APPROVAL - or Designee		
Caroline Peck	12/31/2025	Caroline Peck	<i>Caroline Peck</i>	12/31/2025
PRINTED NAME	DATE	PRINTED NAME	SIGNATURE	DATE

