



Perryman company
 213 Vandale Drive Houston, PA 15342 USA
 phone: 724-746-9390 fax: 724-746-9392

Certified Test Report

Customer:

Heat No: PVD7716
 Melting Source: Perryman Company, USA
 Work Order No: 156115

Date: 05/25/2021

Quantity: 1271 Lbs

Customer Order No:

Product: TI 6Al-4V 2495/.2505" Dia. CG Bar X 12' R/L

Specification: AMS 4967M, AMS 4928W, AMS 6931D, AMS 2241S,
 ASTM B348 GR 5 REV 19, AMS T-9047A, ASTM F1472-20a

Condition: Annealed 1400 F 2 Hours

MIL-T-9047G Comp Tl6Al-4V Cond A AM 2 Chg Not 1,
 EN 10204 3.1 (2004), AS6279B, MIL-H-81200B,
 AMS-H-81200D, ASME SB-348 GR 5 (2007),

Chemistry: WT %
 ASTM E 1447: Post processing Hydrogen Determination
 H: .0009

Metallographic Examination: ASTM E407: Surface Contamination -
 Etchant: PER1 & PER2
 Macrostructure: Acceptable per AMS 2643F Etchant PER 6
 No alpha case 500x

Mechanical Properties	Tensile Strength	2% Yield Strength	Elongation	Reduction of Area
ASTM E8/EN 2002-001:2005E	ksi	ksi	%	%
Condition	153.3	139.4	23	46
As Shipped	153.1	139.1	24	51

Solution treated and aged
 1750 F 4 hr WQ
 1000 F 4 hr AC

176.9 162.5 16 51

Perryman has complied with all producer requirements of AS6279

Eddy current inspection - Passed

This is to certify that all test results conform to the specifications listed above and that all tests required were performed by Perryman Company.
 The material did not come in contact with Mercury or radioactive contamination at Perryman.
 Attached is a copy of the Ingot Chemistry. All testing performed at room temperature unless otherwise noted.
 The test results relate only to the lots tested and are contained in the records of Perryman Company. The Certified Test Report cannot be reproduced except in full,
 without written approval. Made in USA.

5/25/2021

Zachary S. Duggan
 Laboratory Manager



6/3/21



Perryman company
625 Technology Dr., Coal Center, PA 15423
phone: 724-746-9390 fax: 724-746-9392

SHIP TO
Perryman Company
213 Vandale Drive
Houston, PA 15342

CERTIFICATE OF TEST
For TITANIUM INGOT
WORK ORDER 042182
HEAT NUMBER PVD7716

QUANTITY 12600 Lbs
PCS 1

DESCRIPTION FORM: Ingot, Grade: Ti6Al4V, Size: 30

SPECIFICATION CAPABILITY
P-101 Rev 6

Chemistry (WT%) Top

O	N	C	Fe	Al	V	Si	Cu	Pd	Y	H	B	Ru
.14	.007	.018	.19	6.34	3.92	.013	<.008	<.002	<.002	.0004	<.002	<.003

Chemistry (WT%) Bottom

O	N	C	Fe	Al	V	Si	Cu	Pd	Y	H	B	Ru
.15	.007	.018	.19	6.24	3.94	.012	<.008	<.002	<.002	.0003	<.002	<.003

Comments

Melting Process:
EBCHR-VAR

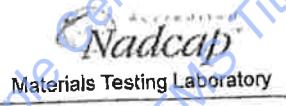
Calculated Beta Transus T/B:
1817F/1817F

Calculated Beta Transus T/B C:
992C/992C

Residual Elements, each < .05%
Residual Elements, total < .20%
Balance Titanium.

Melted in the United States of America.
The material is free of radioactive and mercury contamination.
Oxygen/Nitrogen tested in accordance with ASTM E1409.
Carbon tested in accordance with ASTM E1941.
Hydrogen tested in accordance with ASTM E1447.
B tested in accordance with ASTM E2994.
Metallics Tested By XRF in accordance with ASTM E539.
Elements not required by specification are included in Others(each) and Others(Total)

6/3/21



This material conforms to the chemistry and quality system requirements of the specifications and/or Purchase Order referenced. The results relate only to the lot tested and the results are contained in the records of Perryman Company.
The certificate of test cannot be reproduced except in full without the written approval of the laboratory, and the recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under federal law.

Terrance J. Mauth
Laboratory Supervisor
Date Printed: 06/09/2020