



Perryman company

213 Vandale Drive Houston, PA 15342 USA

phone: 724-746-9390 fax: 724-746-9392

CERTIFIED TEST REPORT

Customer:

Heat No: PVD3030  
Melting Source: PERRYMAN COMPANY  
Work Order No: 085303

Revision: 1  
Date: 12-23-14  
Weight: 503 LBS. ✓

Customer Order No:

Customer Order Date:

Specification:

08-10-14

AMS 4965L

AMS 6930E/AMS-T-9047-03 ✓

MIL T 9047G AMEND 2 ✓

EN 10204 type 3.1:2004 ✓

Product: ✓ Ti-6Al-4V .4995/.5005" DIA. CG BAR X 12' RL

Condition: ✓ SOLUTION TREATED 1750 F - 1 HOUR - WQ AGED 1000 F - 4 HOURS AC

Chemistry: Wt %

ASTM E 1447: Post processing Hydrogen Determination H: .0026 ✓

Metallographic Examination:

ASTM E 407: Microstructure - Equiax alpha-beta  
Macrostructure - Acceptable

ASTM E 407: Surface Contamination - No alpha case

Mechanical Properties:

Tensile Results - ASTM E8

Condition	Tensile Strength ksi	2% Yield Strength ksi	Elongation 4D %	Reduction Of Area %
✓ Solution treated 1750 F - 1 hour - WQ	183.6	171.1	14	52
Aged 1000 F - 4 hours - AC	182.8	170.0	15	53

✓ Ultrasonic inspection to AMS 2631D Class AA, MIL-STD-2154 Class AA, AMS-STD-2154 Class AA - Passed

DFAR compliant to sections 252.225.7002, 252.225.7008, and 252.225.7009.

This is to certify that all test results conform fully to the specifications listed above and all test required, except tensiles, were performed by Perryman Company.

Attached is a copy of the Ingot Chemistry.

The test results relate only to the lots tested and the results are contained in the records of Perryman Company. The Certified Test Report cannot be reproduced except in full, without written approval.

*Zachary S. Dragan* 01/05/15  
Zachary S. Dragan  
Laboratory Manager



# Perryman company

625 Technology Dr., Coal Center, PA 15423 USA  
phone: 724-746-9390 Fax: 724-746-9392

CERTIFICATE OF TEST  
For TITANIUM INGOT

WORK ORDER  
015238

HEAT NUMBER  
PVD3030

Perryman Company  
213 Vandale Dr  
Houston, PA 15342

QUANTITY		PCS										
11065 Lbs		1										
DESCRIPTION												
Grade: Ti6Al4V												
Size: 30"												
Form: Ingot												
SPECIFICATION CAPABILITY												
P-145 Rev 1												
✓ Chemistry (WT%) Top												
O	N	C	Fe	Al	V	Si	Cu	Pd	Y	H	B	Ru
.18	.028	.042	.17	6.09	4.25	.019	.004	<.002	<.001	.0004	<.001	<.001
Chemistry (WT%) Bottom												
O	N	C	Fe	Al	V	Si	Cu	Pd	Y	H	B	Ru
.20	.032	.040	.16	6.07	4.25	.018	.003	<.002	<.001	.0004	<.001	<.001
Comments												
Melting Process: EBCHR-VAR												
Calculated Beta Transus T/B: 1845F/1855F												
Calculated Beta Transus T/B C: 1007C/1013C												
Residual Elements, total < .3%												
Residual Elements, each < .1%												
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, Y, Pd, Ru tested BY ICP.												
Metallics by Spark-AES.												



Materials Testing Laboratory

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This material conforms to the chemistry and quality system requirements of the specifications 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. Marth*  
Terrance J. Marth  
Laboratory Supervisor

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