

TEST REPORT



ATLAS TESTING LABORATORIES, INC.

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IG

PO# 19-11252

DATE: 05/07/19

ATL# 955774

CLIENT: TMS TITANIUM
ATTN: QUALITY CONTROL
12215 KIRKHAM ROAD SUITE 300
POWAY, CA 92064

QTY: 1
2" THK X 3" X 3" TRIANGLE TEST PC
HEAT# MUA7285A
REF: 19-11176

MATERIAL: 6Al-4V Ti COND. A

SPEC: ASTM-B-265/15 GR. 5

TENSILE TEST (METHOD: ASTM-E8/16A)

SPECIMEN ID	TEMP	INSPECTION			YIELD		ULTIMATE		ELONGATION IN 4D			REDUCT OF AREA		LOC. OF FRACT (A)
		VISUAL INSPECT OK?	ORIG. DIAM.	ORIG. AREA	ACTUAL LOAD IN LBS	KSI	ACTUAL LOAD IN LBS	KSI	ORIG. GAGE LENGTH	ELONG INCHES	PER-CENT	FINAL DIAM.	PER-CENT RoFA	
L	RT	OK	0.254	0.0507	6674	131.7	7113	140.4	1.00	0.16	16.0	0.203	36.1	1
REQUIRED, MINIMUM:						120.0		130.0			10.0		-	

Strain Rate: 0.005 inch per inch per minute; Yield determined at 0.2% Offset; Elongation calculated after fracture ATE# 504

(A) 1 = Center Fracture; 2 = Outer Quarter Fracture; 3 = Fractured @ Gage Mark; 4 = Fractured @ Radius; 5 = Material Flaw/Defect

CHEMICAL ANALYSIS: (% BY WEIGHT)

	Al	V	Fe	O.E	O.T	Ti	*C	**O	**N	***H
Actual:	6.4	4.1	0.17	<0.1	<0.4	Rem.	0.02	0.19	0.04	0.003
Min Req:	5.5	3.5	-	-	-	-	-	-	-	-
Max Req:	6.75	4.5	0.40	0.1	0.4	Rem.	0.08	0.20	0.05	0.015

METHOD: ASTM-E1086/14 MOD

ATE# 202 OES

STD'S: NBS654B

METHOD: ASTM-E1941/10(16)

ATE# 200

STD'S: 502-888, AR585 *by combustion

METHOD: ASTM-E1409/13

ATE# 207

STD'S: AR651, AR631, AR641 **by inert gas fusion

METHOD: ASTM-E1447/09(16)

ATE# 207

STD'S: AR651, AR631, AR641 ***by inert gas fusion

Remarks: Material as tested, conforms to requirements.

Respectfully Submitted:

Wendy P. Franco, Quality Assurance

Date:

5/7/19

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