



**CARPENTER
TITANIUM**
by Dynamet®

195 Museum Road
Washington, PA 15301
Phone 724.228.1000
Fax 724.229.4195

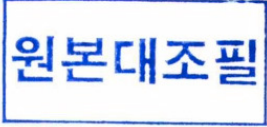

PRODUCT CERTIFICATION

WORK ORDER
543888

SALES ORDER / RLS
083750 / 003

SHIP TO

TNS USA
18881 Von Karman STE 160
Irvine, CA 92612
USA

CUSTOMER P.O. TKCO12514	CUSTOMER PART 121DD2ABD01574G	QUANTITY LADING NO 1,984 lbs 00121499	SHIPMENT DATE 11/30/2023
PART INFORMATION TI 6AL 4V ELI CG Bar - 0.1574" Dia. Specifications: ASTM F 136 Rev: 13 Size: 0.1574" Dia. +0.001" / -0" Length: 96" +/- 6" option to ship 10% shorts down to 6'			
Chemical Report (Wt.%)			
Heat 230049K23A	Al T 6.21	Al B 5.97	C T .018
	C B .018	Fe T .17	Fe B .19
	N T .004	N B .004	O T .12
	O B .11		
V T 4.08	V B 4.09	Y T .0020	Y B .0020
	Ti BAL	Ot E .10	TOE .30
Hydrogen (As Shipped)			
Hydrogen (%) 0.0024			
As Shipped Properties			
UTS #1 (psi) 157500	YS 0.2% #1 (psi) 141800	EL #1 (%) 16	RA #1 (%) 47
Hardness (HRC) 34			
Metallography Results			
Microstructure Alpha-Beta Alpha Case Material Free of Alpha Case			
Material Data			
<div style="text-align: right;">   </div>			



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CUSTOMER P.O. TKCO12514	CUSTOMER PART	QUANTITY LADING NO 1,984 lbs 00121499	SHIPMENT DATE 11/30/2023
Melt Origin KAZAKHSTAN		Bt Tr °F 1770	
Melt Source UKTMP		Bt Tr °C 965	
Certification Information			
<p>As Shipped Condition</p> <p>Annealed 1300°F 2 Hours A/C</p>			
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TKCO12514		1,984	lbs 00121499	11/30/2023

CERTIFICATION REQUIREMENTS

Hydrogen analysis taken from finish product.
Material tested in 4D gage length.
Material free of mercury and radioactive contamination.
Material 100% eddy-current inspected at the finished diameter - All Accepted


Ken Pike
Authorized Quality Release Agent

End of Certification

This is to certify that the above test results are correct as contained in the records of the company

Certification shall not be reproduced except in full without the approval of Dynamet Inc. The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal Law.

원본대조필

