



195 Museum Road
Washington, PA 15301
Phone 724.228.1000
Fax 724.229.4195

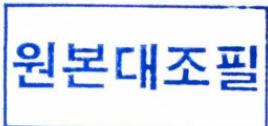
PRODUCT CERTIFICATION

WORK ORDER
543888

SALES ORDER / RLS
083750 / 003

SHIP TO

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

CUSTOMER P.O.	CUSTOMER PART	QUANTITY	LADING NO	SHIPMENT DATE						
TKCO12514		1,984	lbs 00121499	11/30/2023						
PART INFORMATION 121DD2ABD01574G 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										
 										



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

원본대조필





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.	CUSTOMER PART	QUANTITY	LADING NO	SHIPMENT DATE
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

A handwritten signature of Ken Pike.

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

