



WASHINGTON ALLOY CO.
A Division of U.S. Alloy Co.
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Material Test Report

MC:2

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CUSTOMER :

DATE :

P . O No. :
Certificate No. :

Brand Name	Classification	Diameter (inch)	Lot No.	Weight (lb)	Shield Gas
EAGLE-ARC 719	AWS E71T1-C1[M21]A2-CS1-H8/ AWS E491T1-C1[M21]A3-CS1-H8	0.045	F71LFB0001201	2,772	1. 100%CO ₂ 2. 75%Ar+25%CO ₂

1. APPLIED CODE : AWS A5.36/A5.36M: 2016, EN10204 3.1

2. MECHANICAL PROPERTIES OF WELD METAL

3. RADIOGRAPHIC
TEST

Item		Tension Test			Charpy Absorbed Energy	Fig.5
		Y.S (psi)	T.S (psi)	Elon (%)	(ft.lbf) (at -20 °F)	
Spec.(min.)		58,000	70,000~ 95,000	22	20	Accept
Result	Shield Gas(100%CO ₂)	77,430	88,015	30.2	38/38/41 AVE.=39.0	
	Shield Gas(75%Ar+25%CO ₂)	81,200	90,915	28.6	51/56/58 AVE.=55.0	

4. CHEMICAL COMPOSITION (☒ Weld Metal ☐ Filler Metal) (unit : %)

Elements		C	Mn	Si	P	S	Cu	Ni	Cr	Mo	V
Spec. (max.)		0.12	1.75	0.90	0.03	0.03	0.35	0.50	0.20	0.30	0.08
Result	Shield Gas(100%CO ₂)	0.035	1.29	0.47	0.011	0.006	0.02	0.01	0.03	0.01	0.01
	Shield Gas(75%Ar+25%CO ₂)	0.041	1.20	0.48	0.010	0.006	0.01	0.01	0.03	0.01	0.01

5. FILLET WELD TEST

(unit : mm)

Welding Position	Item	Fillet Weld Size	Fillet Weld Leg		Difference Between Length of fillet legs	Convexity	Dimension of Fillet Weld	
		L1	L2	L3				
H	Spec. (max.)		Not required					
	Result							
OH	Spec. (max.)		Not required					
	Result							
V	Spec. (max.)		Not required					
	Result							

6. THE OTHER TESTS

Item	Moisture Test		Hydrogen Test		Bend Test		Remark
Spec.	max.	(%)	max.	8 (Mℓ/100g)	Crack : max. mm		
Result	NR		1. 100%CO ₂ : 3.9 2. 75%Ar+25%CO ₂ : 5.7	Result	Face	NR	Mercury Free
					Root	NR	

Certification and Limited Warranty-This certificates that the product supplied will meet the requirements of the noted classification and data above. Products supplied in accordance to the Quality Management System of Washington Alloy Company. Results may vary from other particular testing or specific batches, heats or lots.

Certification Administrator