



US Alloy Co. dba
Washington Alloy Co.
825 Groves St. Lowell,
NC 28098

Certificate of Conformance

AWS D1.8:2016

Product : Premium 70C-6M

Classification : E70C-6M
Specification: AWS D1.8/D1.8M:2016
Diameter: 1.2mm (0.045")
Lot : M27B4B
Date Tested : Feb. 22, 2024

This is to certify that the product was manufactured to meet the class T4 requirement of AWS 5.01 as required by clause 6.3.8.1 of AWS D1.8/D1.8M:2016

Test Condition	Requirements	Low Heat Input	High Heat Input
Heat Input : kJ/mm(kJ/in)		1.2(30)	3.0(76)
Electrode size : mm(in)		1.2 (.045")	1.2 (.045")
Shielding Gas :		Ar+20%CO2	Ar+20%CO2
Current(amps) :		240	200
Voltage(volts) :		28	25
WFS : cm(in)/min		850(334)	550(216)
Travel Speed : cm(in)/min		35(13)	12(5)
Polarity :		DCEP	DCEP
Welding position :		1G	3G
Pass / Layer :		17 / 8	7 / 7
Preheat Temp : °C(°F)		R.T.	150(302)
Interpass Temp : °C(°F)		120(248)	240(464)

Mechanical Properties

Tensile Strength : MPa(ksi)	490(70)	534(77)	516(75)
Yield Strength : MPa(ksi)	400(58)	472(68)	443(64)
Elongation % in 2 inches	22	28	33
Avg. CV Impact Properties		171(126)	169(125)
Joules @ 21°C (ft-lbf @ 70°F)	54(40)	159 173 180(117 128 133)	170 176 161(125 130 119)

This product satisfies the requirements of AWS D1.8/D1.8M:2016, Annex D after exposure for 3 days at 80°F(26.7°C), 80% humidity. WA Alloy Co. Our quality system is certified in accordance with ISO9001.

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Product : Premium 70C-6M
 Classification : E70C-6M
 Specification: AWS D1.8/D1.8M:2016
 Diameter: 1.4mm (0.052")
 Lot : M27B4B
 Date Tested : Feb. 22, 2024

This is to certify that the product was manufactured to meet the class T4 requirement of AWS 5.01 as required by clause 6.3.8.1 of AWS D1.8/D1.8M:2016

Test Condition	Requirements	Low Heat Input	High Heat Input
Heat Input : kJ/mm(kJ/in)		1.1(28)	3.0(76)
Electrode size : mm(in)		1.4 (.052")	1.4 (.052")
Shielding Gas :		Ar+20%CO2	Ar+20%CO2
Current(amps) :		270	200
Voltage(volts) :		26	25
WFS : cm(in)/min		858(338)	548(215)
Travel Speed : cm(in)/min		35(13)	12(5)
Polarity :		DCEP	DCEP
Welding position :		1G	3G
Pass / Layer :		16 / 8	7 / 7
Preheat Temp : °C(°F)		R.T.	150(302)
Interpass Temp : °C(°F)		120(248)	240(464)

Mechanical Properties

Tensile Strength : MPa(ksi)	490(70)	545(79)	522(77)
Yield Strength : MPa(ksi)	400(58)	480(70)	451(65)
Elongation % in 2 inches	22	28	32
Avg. CV Impact Properties			
Joules @ 21°C (ft-lbf @ 70°F)	54(40)	177(130)	168(124)
		179 184 169(132 136 125)	166 171 168(122 126 124)

This product satisfies the requirements of AWS D1.8/D1.8M:2016, Annex D after exposure for 3 days at 80°F(26.7°C), 80% humidity. WA Alloy Co. Our quality system is certified in accordance with ISO9001.

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AWS D1.8:2016

Product : Premium 70C-6M
 Classification : E70C-6M
 Specification: AWS D1.8/D1.8M:2016
 Diameter: 1.6mm (0.062")
 Lot : M27B4B
 Date Tested : Feb. 22, 2024

This is to certify that the product was manufactured to meet the class T4 requirement of AWS 5.01 as required by clause 6.3.8.1 of AWS D1.8/D1.8M:2016

Test Condition	Requirements	Low Heat Input	High Heat Input
Heat Input : kJ/mm(kJ/in)		1.2(30)	3.3(84)
Electrode size : mm(in)		1.6 (.062")	1.6 (.062")
Shielding Gas :		Ar+20%CO2	Ar+20%CO2
Current(amps) :		280	220
Voltage(volts) :		26	24
WFS : cm(in)/min		855(337)	540(212)
Travel Speed : cm(in)/min		36(14)	13(5)
Polarity :		DCEP	DCEP
Welding position :		1G	3G
Pass / Layer :		14 / 8	7 / 7
Preheat Temp : °C(°F)		R.T.	150(302)
Interpass Temp : °C(°F)		120(248)	240(464)

Mechanical Properties

Tensile Strength : MPa(ksi)	490(70)	539(78)	529(77)
Yield Strength : MPa(ksi)	400(58)	469(68)	440(64)
Elongation % in 2 inches	22	29	33
Avg. CV Impact Properties			
Joules @ 21°C (ft-lbf @ 70°F)	54(40)	189(140) 197 183 188(145 135 139)	171(126) 158 178 176(117 131 130)

This product satisfies the requirements of AWS D1.8/D1.8M:2016, Annex D after exposure for 3 days at 80°F(26.7°C), 80% humidity. WA Alloy Co. Our quality system is certified in accordance with ISO9001.

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