

SPOOLARC 95 AWS /ASME SFA5.28: ER100S-1

Elite Series

FEATURES

Spoolarc 95 is Military grade high strength wire used to weld HY-80 steels. Applications for Spoolarc 95 include military tanks, ships and submarines.

TYPICAL MECHANICAL PROPERTIES

Yield Strength	95,000 ksi, 655 MPa
Tensile Strength	105,000 ksi, 725 MPa
Elongation in 2"	23%

CLASSIFICATIONS AND APPROVALS

- Certified by CWB to CSA W48
- MIL-E-23765/2; MIL-E-100S-1
- AWS/ASME SFA5.28: ER100S-1
- AWS/ASME SFA5.23:EM2

CHARPY V-NOTCH PROPERTIES

Testing Temperature 0°F (-18°C)

As Welded 75% Ar / 25% O₂

93 ft-lb, 126 J

Testing Temperature -60°F (-51°C)

As Welded 75% Ar / 25% O₂

65 ft-lb, 88 J

WELDING PROCESS

- GTAW (TIG)
- GMAW (MIG)

INDUSTRIES

- Heavy Fabrication
- Military Applications
- Shipbuilding
- Mining

WELD METAL ANALYSIS

C	0.07%
Mn	1.40%
Si	0.35%
P	0.008%
S	0.007%
Cr	0.20%
Ni	1.80%
Mo	0.35%

SPOOLARC 95

 continued

Elite Series

DEPOSITION TABLE - Spray Transfer Deposition Table

Diameter in (mm)	Amps	Deposition Rate lb/hr (kg/hr)	Efficiency%
1/16 (1.6)	400 A	13.0 (5.90)	99
	500 A	17.0 (7.71)	99
5/64 (2.0)	300 A	10.8 (4.90)	99
	400 A	14.5 (6.58)	99
	500 A	18.2 (8.26)	99
3/32 (2.4)	400 A	13.2 (5.99)	99
	500 A	17.0 (7.71)	99
	600 A	22.0 (9.98)	99
1/8 (3.2)	400 A	11.0 (4.99)	99
	500 A	14.5 (6.58)	99
	600 A	18.0 (8.16)	99
	700 A	21.2 (9.62)	99
5/32 (4.0)	500 A	12.5 (5.67)	99
	600 A	16.0 (7.26)	99
	700 A	19.5 (23.2)	99
	800 A	23.0 (0.43)	99
	900 A	26.0 (11.79)	99
3/16 (4.8)	600 A	13.9 (6.31)	99
	700 A	17.5 (7.94)	99
	800 A	21.0 (9.53)	99
	900 A	25.0 (11.34)	99
	1000 A	29.2 (3.25)	99
	1100 A	34.0 (15.42)	99

SPOOLARC 95 continued

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DEPOSITION TABLE - Shortarc Transfer Welding Parameters

Diameter in (mm)	Amps	Volts	Wire Feed Speed ipm (cm/min)	Deposition Rate lb/hr (kg/hr)
.030 (0.8)	60	14	150 (381)	1.7 (0.8)
	80	15	200 (508)	2.2 (1)
	100	15	250 (635)	2.8 (1.3)
	120	16	300 (762)	3.3 (1.5)
	140	16	350 (889)	3.9 (1.8)
	144	16	350 (914)	4 (1.8)
.035 (0.9)	90	15	180 (457)	2.7 (1.2)
	113	16	220 (559)	3.3 (1.5)
	137	18	260 (660)	4 (1.8)
	160	19	300 (762)	4.6 (2.1)
.045 (1.2)	130	17	125 (318)	3.1 (1.4)
	163	18	160 (406)	4 (1.8)
	200	19	200 (508)	5 (2.3)
.052 (1.3)	150	17	135 (343)	4.5 (2.1)
	173	18	160 (406)	5.4 (2.4)
	200	20	190 (483)	6.4 (2.9)

PART NUMBER / PRODUCT INFORMATION

Part Number	Description	UPC
2298F65	95 CU 035X35#SP	662303520410
2298F67	95 CU 045X35#SP	662303511043
229UF87	95 CU 045X550#OMP 4/PLT	662303668976
2298F47	95 CU 045x60#SP	662303671211
229UF67	95 CU 045X550#OMP	662303671648
229EFBD	95 CU 035X35#SP MIL	662303511128
229EFDD	95 CU 045X35#SP MIL	662303511142
229EFDS	95 CU 045X11#SP MIL	662303520151
229EFDY	95 CU 045X60#SP MIL	662303511159
229EFED	95 CU 1/16X35#SP MIL	662303511173
229EFEDEB	95 CU 1/16X35#SP MIL EB	662303085018
229EFHE	95 CU 1/8X65#CL MIL	662303668242