

DUAL SHIELD 7100 LC

AWS A5.20: E71T-1CDH8/T-1MDH8/T-9CDH8/T-9MDH8

FEATURES

Dual Shield 7100 LC provides outstanding operator appeal with its easily controlled arc, improved operation at lower current levels, minimal spatter and easily removed slag. Dual Shield 7100 LC can be used with CO₂ or 75% Ar – 25% CO₂ shielding, however pure CO₂ is recommended in applications where restraint is high.

CLASSIFICATIONS AND APPROVALS

- Seismic Certified “D”
- AWS A5.20: E71T-1CHD8/T-1MDH8/T-9CDH8/T-9MDH8
- ASME SFA 5.20
- CERTIFIED BY C.W.B.- CSA W48
- A.B.S.- 3SA,3YSA(H10)
- D.N.V.- III YMS(H10)
- L.R.- 3S,3YS(H10)

WELDING PROCESS

- FCAW (Flux Core)

INDUSTRIES

- Mobile Machinery
- Process
- Rail Road Car
- Shipbuilding
- Civil Construction
- General Fabrication
- Bridge Construction

TYPICAL MECHANICAL PROPERTIES

As Welded CO₂

Yield Strength	79 ksi, 545 MPa
Tensile Strength	89 ksi, 615 MPa
Reduction in Area	52%
Elongation in 2"	23%

As Welded using 75% Ar - 25% CO₂

Yield Strength	93 ksi, 640 MPa
Tensile Strength	96 ksi, 660 MPa
Reduction in Area	56%
Elongation in 2"	25%

CHARPY V-NOTCH PROPERTIES

Testing Temperature 0°F (-18°C)

As Welded CO₂ 68 ft-lb, 92 JAs Welded 75% Ar - 25% CO₂

50 ft-lb, 61 J

Testing Temperature -20°F (-29°C)

As Welded CO₂ 41 ft-lb, 56 JAs Welded 75% Ar - 25% CO₂

41 ft-lb, 56 J

WELD METAL ANALYSIS

CO₂

C	0.03%
Mn	1.4%
Si	0.5%
P	0.010%
S	0.010%

75% Ar / 25% CO₂

C	0.03%
Mn	1.6%
Si	0.6%
P	0.010%
S	0.010%

DUAL SHIELD 7100 LC continued

DEPOSITION TABLE

Diameter in (mm)	Amps	Volts	Wire Feed Speed ipm (cm/min)	Shielding Gas	Deposition Rate lb/hr (kg/hr)	Efficiency %
.045 (1.2)	145	24.5	200 (508)	CO ₂	3.6 (1.6)	81.2
	190	26	300 (762)	CO ₂	5.4 (2.5)	81.4
	235	27.5	400 (1016)	CO ₂	7.3 (3.3)	82.5
	265	29	500 (1270)	CO ₂	9.3 (4.2)	82.8
.052 (1.3)	145	25	150 (381)	CO ₂	3.4 (1.5)	74.3
	180	25.5	200 (508)	CO ₂	4.5 (2.0)	74.6
	235	27.5	300 (762)	CO ₂	7.0 (3.2)	78.2
	285	28.5	400 (1016)	CO ₂	9.8 (4.4)	81.3
	230	29.5	500 (1270)	CO ₂	12.2 (5.5)	82.3
	370	30.2	600 (1524)	CO ₂	14.7 (6.7)	82.7
0.062 (1.6)	195	24.5	150 (381)	CO ₂	4.5 (2.0)	73.7
	285	26	250 (635)	CO ₂	8.1 (3.7)	79.4
	320	28	300 (762)	CO ₂	9.7 (4.4)	79.9
	345	30	350 (889)	CO ₂	11.5 (5.2)	80.7
	385	32	400 (1016)	CO ₂	13.4 (6.1)	82.6
	445	32.5	500 (1270)	CO ₂	16.7 (7.6)	82.8

DUAL SHIELD 7100 LC continued

FULL RANGE WELDING PARAMETERS

Gas: 75/25 .045"				Gas: 75/25 .052"			
WFS ipm	Volts	Amps	Tip to Work in	WFS ipm	Volts	Amps	Tip to Work in
170-290	23-26	135-205	3/8-1/2	130-280	23-26	125-235	1/2-5/8
290-350	25-27	175-230	1/2-3/4	280-400	25-29	215-290	5/8-3/4
350-550	26-30	180-265	3/4-1	400-600	29-31	250-350	3/4-1

FULL RANGE WELDING PARAMETERS

Gas: 75/25 1/16"			
WFS ipm	Volts	Amps	Tip to Work in
135-265	25-28	165-270	5/8-3/4
265-400	27-30	245-345	3/4-1
400-500	28-32	290-415	1-1 ^{1/4}

PART NUMBER / PRODUCT INFORMATION

Part Number	Description	UPC
248000952	DS 7100 LC 045X33# AWS BK	662303048082
248001182	DS 7100 LC 045X33# SP	662303086152
248000937	DS 7100 LC 045X33#AWS	662303048075
248000895	DS 7100 LC 045X60#CL	662303059118
248001117	DS 7100 LC 045X600#OMP	662303078546
248001091	DS 7100 LC 052X15#PSP	662303076306
248001158	DS 7100 LC 052X33# PSP	662303086169
248000960	DS 7100 LC 052X33#AWS	662303048334
248001042	DS 7100 LC 052X60#CL	662303059125
248001166	DS 7100 LC 052X250# SOMP	662303086176
248001109	DS 7100 LC 1/16X15#PSP	662303076313
248001067	DS 7100 LC 1/16X33# PSP	662303086145
248000903	DS 7100 LC 1/16X33#AWS	662303046057
248000929	DS 7100 LC 1/16X60#CL	662303046392
248001174	DS 7100 LC 1/16X250# SOMP	662303086183
248001083	DS 7100 LC 1/16X600#OMP	662303076160