

CSF-91B3(L)

For 2.25%Cr-1.0%Mo Heat resistant steel

AWS	A5.29	E91T1-B3(L)C
KS	D 7121	YF2CM-C
JIS	Z3318	YF2CM-C

Applications

Welding of 2.25%Cr-1.0%Mo Steel used for fire power plant and high pressure boiler, pressure vessel, chemical and oil refining industries etc.

Characteristics

- (1) CSF-91B3(L) is a titania type flux cored wire and designed for all-position welding with CO₂ gas Shielding.
- (2) It provides the excellent usability with stable arc, less spattering, good bead appearance, better slag removal, and less quantity of welding fume comparable to solid wire.
- (3) It is suitable in welding of low alloy steel of Cr-Mo or carbon steel, high strength steel.
- (4) Used welding grade Ar+ 20~25%CO₂ gas.

Notes on usage

- (1) Need preheating and interpass temperature control for cold cracking prevention.
- (2) Weld by low heat input to become to secure good mechanical properties and crack-resistance of weld zone.

Typical chemical composition of weld metal (%)

(Shielding Gas : 100%CO₂)

	C	Mn	Si	P	S	Cr	Mo
CSF-91B3	0.06	0.58	0.64	0.020	0.010	2.30	1.17
CSF-91B3L	0.03	0.60	0.65	0.019	0.008	2.27	1.15

Typical mechanical properties of weld metal

(Shielding Gas : 100%CO₂)

	YP N/mm ² (MPa)	TS N/mm ² (MPa)	EL %	Heat Treatment
CSF-91B3L	685	817	17.5	As Weld
	580	667	20	690℃×1hr SR

Size & recommended current range (DC +)

Dia. mm (in)		1.2(0.045)	1.4(0.052)	1.6(0.062)
Amp.	F & H-F	180~340	200~360	200~400
	V-up	120~220	140~260	160~260
	V-down	120~240	140~260	160~280
	OH	120~220	140~260	160~260