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 CO_2 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%CO_2 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%CO_2)

	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%CO_2)

	YP N/mm²(MPa)	TS N/mm²(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