

CSF-81A1

For welding of 0.5%Mo Heat resistant steel

AWS A5.29 E81T1-A1C
KS D 7121 YFM-C
JIS Z3318 YFM-C

Applications

Welding of 0.5%Mo Steel used for high temperature and high pressure boiler, pressure vessel, chemical and oil refining industries etc.

Characteristics

- (1) CSF-81A1 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.

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	Mo
0.04	0.90	0.57	0.015	0.012	0.51

Typical mechanical properties of weld metal

(Shielding Gas : 100%CO₂)

YP N/mm ² (MPa)	TS N/mm ² (MPa)	EL %	IV (J)		Heat treatment
			RT	-10°C	
555	625	24.0	45	25	As Weld
540	608	26.5	30	20	620°C×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