

CSF-81W

For 590N/mm² class weather proof steel.

AWS A5.29 E81T1-W2C
KS D 7109 YFA-58W
JIS Z3320 YFA-58W

Applications

Butt, fillet welding of 590N/mm² weather proof steels for bridges, structures and rolling stock.

Characteristics

- (1) CSF-81W 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) When use welding grade Ar+20~25%CO₂ gas, it has a less spatter, stable arc and good bead appearance.

Characteristics

- (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	Cu	Ni	Cr
0.03	1.07	0.61	0.010	0.006	0.46	0.59	0.49

Typical mechanical properties of weld metal

(Shielding Gas : 100%CO₂)

YP N/mm ² (MPa)	TS N/mm ² (MPa)	EL %	IV (J)	
			-5°C	-30°C
546	624	27.0	51	34

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	120~300	140~320	160~320
	OH	120~220	140~260	160~260