

# CSF-91T

For welding of 620N/mm<sup>2</sup> class high tensile strength steel

AWS A5.29 E91T1-GC  
KS D 7104 YFW-C602R  
JIS Z3313 T622T1-1CA-N2-H10

## Applications

Butt, fillet welding of 620N/mm<sup>2</sup> high tensile strength steels of structure such as ships, bridges, buildings and storage tanks etc.

## Characteristics

- (1) CSF-91T is a titania type flux cored wire and designed for all-position welding by single pass & multi pass with CO<sub>2</sub> 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 provides a good welding efficiency thank to high deposition rate particularly.

## Notes on usage

- (1) The optimum flow of CO<sub>2</sub> for shielding is 20~25ℓ/min.
- (2) The distance between tip & base metal is to be 15~25mm.
- (3) Protect the weld with a screen to prevent blowholes caused by wind where the wind velocity is 2m/sec and more.
- (4) Thick heavy plate should be welded under proper preheating & interpass temperature.

## Typical chemical composition of weld metal (%)

(Shielding Gas : 100%CO<sub>2</sub>)

C	Mn	Si	P	S	Ni	Mo
0.06	1.35	0.37	0.011	0.010	0.98	0.15

## Typical mechanical properties of weld metal

(Shielding Gas : 100%CO<sub>2</sub>)

YP N/mm <sup>2</sup> (MPa)	TS N/mm <sup>2</sup> (MPa)	EL %	IV (J)	
			-20℃	-30℃
588	654	25.0	102	65

## 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

• Approval : DNV