

# CSF-500S

For Y.P500N/mm<sup>2</sup> class high Yield Strength steel  
and low temperature steel

AWS A5.29 E91T1-Ni2C  
JIS Z3313 T59J6T1-1CA-N3-H5

## Applications

Butt, fillet welding of Y.P500N/mm<sup>2</sup> class high strength steel and low temperature steel of structure such as ships, offshore and LPG carrier etc.

## Characteristics

- (1) CSF-500S 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 excellent impact value at low temperatures down to -60°C.
- (4) It provides excellent CTOD value at low temperatures down to -40°C.

## 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 20~25mm.
- (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
0.06	1.40	0.40	0.011	0.010	2.5

## 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)	
			-30°C	-60°C
610	675	25.0	130	90

## Size & recommended current range (DC +)

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

• Approval : ABS, DNV