

# CSF-316L(P)

For 18%Cr-12%Ni-2%Mo Stainless steel

AWS A5.22 E316LT0(1)-1/4  
KS D 3612 YF316LC  
JIS Z3323 TS316L-FB0(1)

## Applications

CSF-316L(P) is suitable for welding of low carbon 18%Cr-12%Ni-2%Mo stainless steel.

## Characteristics

- (1) CSF-316L(P) is flux cored wire and designed for Fillet & H-F(All-position) welding 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) Is containing Ferrite of a reasonable quantity and crack-resistance, intergranular corrosion resistance, mechanical properties of weld metal is superior.
- (4) Shield gas is 100%CO<sub>2</sub> or Ar+CO<sub>2</sub> gas.

## Notes on usage

- (1) The optimum flow of CO<sub>2</sub> for Shielding is 20~25ℓ/min.
- (2) Protect the weld with a screen to prevent blowholes caused by wind where the wind velocity is 2m/sec and more.
- (3) Keep the distance between tip & base metal at 15~25mm.

## Typical chemical composition of weld metal (%)

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

	C	Mn	Si	P	S	Cr	Ni	No	FN
CSF-316L	0.03	1.45	0.60	0.019	0.012	18.5	12.4	2.20	8
CSF-316LP	0.03	1.20	0.60	0.020	0.008	18.6	12.5	2.50	7
CSF-316LP(Cryogenic)	0.03	1.25	0.50	0.020	0.008	18.4	12.8	2.30	6

## 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)	
				0℃	-196℃
				CSF-316L	425
CSF-316LP	420	560	45.0	54	-
CSF-316LP(Cryogenic)	425	560	44.0	57	35

## Size & recommended current range (DC +)

Dia. mm (in)	Current(A)	Voltage(V)	Welding Speed(cm /min)
1.2(0.045)	150~300	24~33	20~60
1.6(0.062)	200~400	24~33	20~60

• Approval : CSF-316L : ABS, BV, DNV, GL, KR, LR, NK / CSF-316LP(for cryogenic) : ABS, BV, DNV, LR