

# CSF-309MoL(P)

For 22%Cr-12%Ni-2%Mo Stainless steel

AWS	A5.22	E309LMoT0(1)-1/4
KS	D 3612	YF309MoLC
JIS	Z3323	TS309LMo-FB0(1)

## Applications

CSF-309MoL(P) is suitable for welding of 22%Cr-12%Ni-2%Mo steel and heat resistant steel and dissimilar joint such as a stainless steel to carbon steel of low alloy steel. Under layer welding on cladded side groove cladded stainless steel or carbon steel where stainless steel weld metal is overlaid.

## Characteristics

- (1) CSF-309MoL(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	Mo	FN
CSF-309MoL	0.03	1.4	0.55	0.015	0.010	23.0	13.0	2.5	23
CSF-309MoLP	0.03	0.74	0.66	0.017	0.009	22.6	12.8	2.3	22

## 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°C
CSF-309MoL	560	680	33.0	32
CSF-309MoLP	535	695	34.0	30

## 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-309MoL : ABS, LR