

CSF-312(P)

For surfacing or dissimilar metal of high carbon, low alloy steel and stainless steel

AWS	A5.22	E312T0(1)-1/4
KS	D 3612	YF312C
JIS	Z3323	TS312-FB0(1)

Applications

Welding of 29%Cr-9%Ni cast steel, dissimilar metals such as carbon steel or low alloy steel to austenitic stainless steel. Welding of AISI 304 clad steel. Under laying built up of hard surfacing.

Characteristics

- (1) CSF-312 is flux cored wire and designed for fillet & H-F welding.
- (2) CSF-312P is flux cored wire and designed for all-position.
- (3) Shield gas is 100%CO₂ or 80%Ar+20%CO₂

Notes on usage

- (1) The optimum flow of CO₂ 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) Over 0.3%C steel may be welded under preheating temperature.

Typical chemical composition of weld metal(%)

(Shielding Gas : 100%CO₂)

	C	Mn	Si	P	S	Cr	Ni	F/N
CSF-312	0.12	1.20	0.70	0.020	0.003	29.00	9.30	60
CSF-312P	0.12	1.10	0.58	0.008	0.008	28.75	9.20	60

Typical mechanical properties of weld metal

(Shielding Gas : 100%CO₂)

	YP N/mm ² (MPa)	TS N/mm ² (MPa)	EL %
CSF-312	610	760	25.0
CSF-312P	600	755	25.5

Size & recommended current range (DC +)

	Current (A)	Voltage (V)	Speed (cm/min.)
Ø 1.2	150~300	24~33	20~60
Ø 1.6	200~400	24~33	20~60