

Applications

Welding of 22%Cr-12%Ni stainless steel and mild steel to stainless steel.

Characteristics on Usage

Bonded type-flux containing appropriate contents of alloying element, weld metal contains proper contents of ferrite phase. Excellent resistance to crack, mechanical property and corrosion. Excellent weldability such as stable arc and easy slag removal. Good bead appearance, high welding efficiency in welding thin plate up to ultra-thick plate.

Notes on Usage

- ① Dry the flux at 300~350° C (572~662° F) for 60 minutes before use.
- ② Avoid using high current to prevent harming of corrosion-resistibility in heat-affected zone, heat-input in welding should be kept as low as possible.
- ③ Welding in groove should be done in 2 passes to ease slag removal.

Approval

I Current

I Basicity Index

AC, DC +

2.0

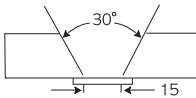
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	Cr	Ni
YS-309	0.05	0.91	1.40	22.6	12.5
YS-309L	0.03	0.93	1.40	22.5	12.8

Typical Mechanical Properties of All-Weld Metal

Wire	TS MPa(lbs/in ²)	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)
YS-309	580 (84,200)	36	-20 (-4)	70 (52)
YS-309L	570 (82,700)	38	-60 (-76)	40 (30)
			-20 (-4)	80 (59)

Typical Welding Conditions

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
YS-309 YS-309L	4.0	20		1~10	550	32 30	50	JIS Z3324