Applications

Welding of 18%Cr-12%Ni-2%Mo 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 1 hour 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
ABS, BV (YS-316L)	AC, DC +	2.0

Typical Chemical Composition of All-Weld Metal (%)

Wire	С	Si	Mn	Cr	Ni	Мо
YS-316	0.05	0.90	1.40	19.3	12.2	2.1
YS-316L	0.03	0.90	1.40	19.2	12.1	2.1

Typical Mechanical Properties of All-Weld Metal

Wire	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (℉)	CVN-Impact Value J (ft · lbs)
YS-316	580 (84,200)	40	-20 (-4)	80 (59)
YS-316L	550 (79,800)	38	-20 (-4)	70 (52)
	330 (73,000)		-60 (-76)	50 (37)

Typical Welding Conditions								
Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
YS-316 YS-316L	4.0	20	30°	1~10	550	32 30	50	JIS Z3324