Applications

Single-layer welding of shipbuildings.

Characteristics on Usage

As the penetration is deep, it is suitable for welding of thick plate in both side single-layer welding. It is suitable for single-pass-on-both-sides welding due to wide range of applicable welding conditions. Good bead appearance and excellent impact value of the weld metal. As the consumption of flux is low, it is very economical.

Notes on Usage

- ① Dry the flux at 300~350° C (572~662° F) for 60 minutes before use.
- (2) When the flux height is excessive, poor bead appearance may occur.
- ③ Use welding current and speed as low as possible at the first layer of groove to avoid cracking.

Appro	oval				l Cur	rent	I Basicity Index			
KR, AB	S, LR, B∖	/, DNV, G	L , NK		AC, DC +		1.	.5		
Туріс	Typical Chemical Composition of All-Weld Metal (%)									
Wire	С	Si	Mn	Р	S	BM	Th.(mm)			
	0.10	0.37	1.54	0.020	0.012	SS400	25			
H-14	0.14	0.41	1.43	0.018	0.008	EH36	20			
	0.11	0.29	1.52	0.018	0.009	DH36	25			

Typical Mechanical Properties of All-Weld Metal

Wire	YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Position of fracture	CVN- 0℃(32° F)	Impact Value -20℃(-4° F)	J (ft · lbs) -51℃(-60° F)	BM	Th. (mm)
	570 (82,800)	605 (87,900)	28.0	-	-	-	80 (59)	SS400	25
H-14	-	570 (82,800)	-	BM	-	50 (37)	-	EH36	20
	-	580 (84,200)	23.0	-	70 (52)	-	-	DH36	25

Typical Welding Conditions

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
H-14	4.0	25	30° 	1~13	550	30	40	AWS A5.17
H-14	4.8	20	1st 2nd	$\begin{array}{c} L(DC+)\\ 1st & T(AC)\\ 2nd & L(DC+)\\ T(AC)\end{array}$	1100 700 1200 700	37 42 37 42	100 100	Tandem SL
H-14	4.8	25	40° cw/ 	1	1150	35	20	FAB OSW (DC+)