KUANG TAI

KFW-308LF

Product Data Sheet — **Flux Cored Wire for Stainless Steel**

Specification

AWS A5.22 E308LT0-1/4

Applications

- Weld deposit is 19% Cr-9% Ni, which is suitable for welding 18% Cr-8% Ni stainless steel.
- Suitable for welding chemical apparatus, containers and plants.

Characteristics

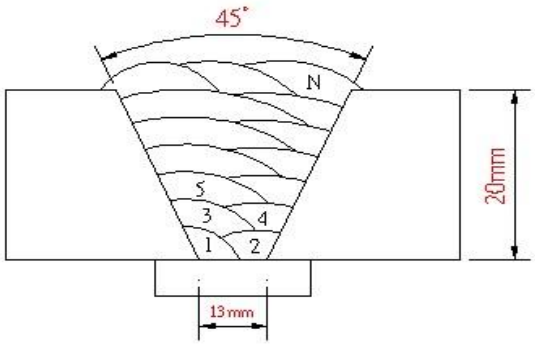
- It provides excellent weldability and crack resistance, due to proper ferrite contents in the weld metal.,
- Stable arc, good slag removal, easy control of weld puddle, low spatters, X-ray quality welds.
- Bright silvery bead appearance and good wettability of bead.
- Ideal for flat and fillet welding.

Note on Usage

- Distance between base metal and tip should be kept within the range of 15~25mm.
- Shielding gas flow rate should be kept within 20~25ℓ/min.

Mechanical Properties & Chemical Composition of All Weld Metal

Welding Conditions



[Joint Preparation & Layer Details]

Method by AWS Rules

Diameter(mm)	1.2mm
Shielding Gas	100% CO_2
Flow Rate (l/min)	20
Amp / Volt	200 / 32
Stick-Out (mm)	15-20
Interpass Temp (℃)	175±15
Polarity	DC(+)

● Mechanical Properties of the Weld Metal

Brand Name	Tensile Test Results			Charpy V-Notch Impact Value (Joules)		
	Y.S. (MPa)	T.S. (MPa)	EL. (%)	-30℃	-40℃	-60℃
KFW-308LF	353	582	40	-	-	-
E308LT0-1/4	-	520 min	30 min	-	-	-

● Chemical Analysis of the Weld Metal

Unit: wt%

Brand Name	C	Si	Mn	P	S	Cr	Ni
KFW-308LF	0.02	0.6	1.11	0.03	0.01	18.95	9.11
E308LT0-1/4	<0.04	<0.1	0.5-2.5	<0.04	<0.03	18.0-21.0	9.0-11.0

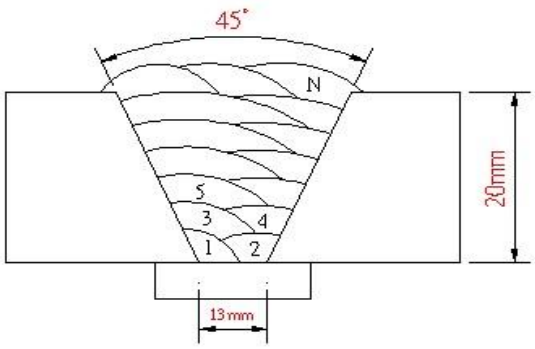
● Ferrite Number of the Weld Metal

F.N.= 8

** Ferrite number is calculated by WRC-1992*

Mechanical Properties & Chemical Composition of All Weld Metal

Welding Conditions



[Joint Preparation & Layer Details]

Method by AWS Rules

Diameter(mm)	1.2mm
Shielding Gas	80% Ar+ 20%CO_2
Flow Rate (l/min)	20
Amp / Volt	210 / 31
Stick-Out (mm)	15-20
Interpass Temp (℃)	175±15
Polarity	DC(+)

Mechanical Properties of the Weld Metal

Brand Name	Tensile Test Results			Charpy V-Notch Impact Value (Joules)		
	Y.S. (MPa)	T.S. (MPa)	EL. (%)	-30℃	-40℃	-60℃
KFW-308LF	406	627	41	-	-	-
E308LT0-1/4	-	520 min	30 min	-	-	-

Chemical Analysis of the Weld Metal

Unit: wt%

Brand Name	C	Si	Mn	P	S	Cr	Ni
KFW-308LF	0.02	0.7	1.2	0.03	0.01	19.20	9.13
E308LT0-1/4	<0.04	<0.1	0.5-2.5	<0.04	<0.03	18.0-21.0	9.0-11.0

Ferrite Number of the Weld Metal

F.N.= 9

** Ferrite number is calculated by WRC-1992*

Intergranular corrosion test

Brand Name	After bending	Result
KFW-308LF	No crack	OK

**Intergranular corrosion test is carried out by ASTM A262E*

Available Sizes and Suggested Operating Range

Welding Position	Wire Diameter		
	0.9mm	1.2mm	1.6mm
F&HF	70-170	100-250	200-350