

FOR LOW TEMPERATURE SERVICE STEEL

AWS E8018-C1

# K-8018C1

## Typical applications

Welding of 2.5%Ni steel and aluminium-killed steel used at low temperature , LPG tanker, LNG tanker, etc.

## Coating

Low hydrogen, iron powder type.

## Characteristics on Usage

- ① Excellent notch toughness of the deposited weld metal at low temperature.
- ② Stable arc in flat and horizontal fillet welding.
- ③ Weld metal of fine ripple mark without undercut can be obtained.
- ④ Redry the electrodes at 350~400°C for 60 minutes prior to use.

## Typical chemical composition of all-weld-metal (%)

C	Si	Mn	Ni
0.06	0.60	0.98	2.41

## Typical mechanical properties of all-weld-metal

Y · P N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	T · S N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	EI (%)	Charpy V-notch I (kgf·m):		PWHT
			(-50°C)	(-60°C)	
530 {54}	640 {65}	29	120 {12}	80 {8}	As welded 620°CX1hr. S-R
500 {51}	600 {61}	32	170 {17}	130 {13}	

## Sizes available and recommended currents (AC or DC ⊕)

Dia.	(mm)	2.6	3.2	4.0	5.0	6.0
Length	(mm)	350	350	400	400	450
Amp.	F	60~100	90~130	130~190	190~250	250~300
	V&OH	60~90	80~120	110~170	-	-

## Welding positions



Approved by  
ABS, DNV, LR