# **NB-55E × Y-D**

\*AWS A5.17 F7A8-EH14

# for Low Temperature Service Steel

## **APPLICATIONS**

Single-layer welding of aluminium-killed steel for low temperature service for offshore structures, ships and LPG storage tanks.

# **CHARACTERISTICS**

Excellent toughness is obtained in multi-layer welding with  $30\sim100 \mathrm{kJ/cm}$  heat input.

# **GUIDELINES FOR USAGE**

Flux should be used as fast as possible after taking out of the can. Flux should be redried at  $250\sim350$ °C for 60 minutes.

#### WELDING POSITION



### ■ TYPICAL CHEMICAL COMPOSITION OF WELD METAL (%)

C Si		Mn	P	S	
0.09	0.18	1.65	0.018	0.007	

#### ■ TYPICAL MECHANICAL PROPERTIES OF WELD METAL

	Tensile Test			Charpy 2 V-notch,		Plate	
Yield	Tensile	Elongation, %	J		Base	Thickness	Welding
Strength, MPa	Strength, MPa		−60°C	-40°C	Metal	mm	Method
460	560	33	170	200	EH36	32	X groove

#### ■ TYPICAL GROOVE GEOMETRY AND WELLDING CONDITIONS

Plate Thickness	Wire Dia	Groove Geometry	Pass	Current A	Voltage V	Speed cm/min	Note	
mm	mm					0112/111111		
25	(L) 4.8 (T) 6.4	\$\frac{19}{17}\$	1	(L) 1000 (T) 900	36 40	60	One pass both	
20			2	(L) 1100 (T) 850	36 40	55	sides	
32	(L) 4.8 (T) 6.4	112 110 110	1	(L) 1080 (T) 1000	36 40	45	One pass	
32			2	(L) 1250 (T) 1100	36 40	45	both sides	