

# KOBELCO

## TRUSTARC™

# DW-A81Ni1

### Rutile-based Flux Cored wire



### Code Data

**AWS A5.29 E81T1-Ni1MJ**  
**CWB/CSA E551T1-Ni1MJ-H8**

Shipping Approval ABS, DNV, LR

### Outstanding Features

- DW-A81Ni1 is formulated for 80ksi class high strength steel and applicable to low temperature service steel.
- High notch toughness of welds at low temperature down to -40°F even after PWHT.
- Excellent weldability can be obtained in all position with 75-80%Ar-Bal.CO<sub>2</sub>.
- All positional welding can be achieved with good bead appearance, negligible spatter losses and easy slag removal.

### Typical chemistry of weld metal and diffusible hydrogen content

C	Si	Mn	P	S	Ni	Diffusible hydrogen content (ml/100g)
0.05	0.32	1.26	0.006	0.006	0.95	4.4

Gas chromatography method (AWS A4.3)

### Typical mechanical property of weld metal

PWHT	0.2%P.S (psi)	T.S (psi)	Elongation (%)	Impact value (ft-lbs)	
				-60 °F	-40 °F
AW	75,000	84,400	29	105	113
SR	71,100	83,800	30	94	103

Test method: AWS A5.29, Welding parameter: 280A-30V (0.045")

PWHT condition: 1075°F × 2hr, Heating and cooling rate: 120°F/hr

### Wire size and parameter ranges

Dia. (in.)	Wire Feed Speed (ipm)	Current DC-EP (Amp.)	Arc Voltage (Volt)	Deposition rate (lbs/hr)
0.045	190 - 580	140 - 300	22 - 34	4.5 - 14.0

\*Arc voltage is measured at the wire feeder

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