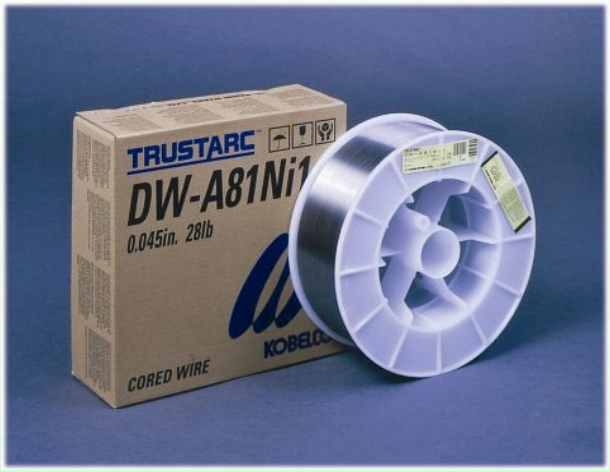
KOBELCO

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 -76°F even after PWHT.
- Produces weld metal with less than 1.0%Ni.
- Excellent weldability can be obtained in all position with 75-80%Ar-Bal.CO_2.
- 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)	
				-76 °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

CTOD test results of weld joint (As welded condition)

Test Conditions	Welding Position (Heat input)	Critical CTOD (mm)
B:50mm W:100mm Test Temp.: 14°F	Horizontal (23.4kJ/inch)	0.38, 0.38, 0.38
	Vertical up (47.2kJ/inch)	0.65, 0.76, 0.77

*According to BS7488-1991

KOBELCO WELDING OF AMERICA INC. Tel: 281-240-5600 Fax: 281-240-5625
http://www.kobelcowelding.com