

SC-81Ni2M

Classification

AWS AWS A5.29 / ASME SFA-5.29 E81Ti-Ni2M
JIS Z 3313 T55 6 Ti-1 M A-N5 H5
EN ISO 17632-A T46 6 2Ni P M21 2 H5

Welding Positions



Features

- Designed for welding with Ar+20~25%CO2 shielding gas
- Good impact value at low temperature

Polarity

DC+

Application Areas

- Shipbuilding
- Offshore structure

Shielding Gas

Ar+20~25% CO2

Approvals

BV	DNV	LR	CWB
✓	✓	✓	✓

Typical Chemical Composition of All-Weld Metal (wt%)

Shielding Gas	C	Si	Mn	P	S	Ni
Ar+20~25% CO2	0.05	0.24	1.15	0.010	0.010	2.25

Typical Mechanical Properties of All-Weld Metal

Shielding Gas	Yield Strength MPa(ksi)	Tensile Strength MPa(ksi)	Elongation (%)	Temperature °C (°F)	Impact Toughness J (ft·lbs)
Ar+20~25% CO2	580(84)	620(90)	25	-40(-40) -60(-75)	120(89) 90(66)

Diameter / Welding Parameters / Packaging

Wire Diameter mm(in)	Current (A)	Packaging
1.2 (0.045)	110~280	Spool 5kg (11lbs), 12.5kg (28lbs), 15kg (33lbs), 20kg (44lbs) Drum 100kg (221lbs), 200kg (441lbs), 250kg (551lbs)

SMW

GMW

GTW

FCW

Metal-cored Wire

SAW Wire

SAW Flux