

Supercored 81-K2MAG

Classification

AWS AWS A5.29 / ASME SFA-5.29 E81T1-K2M
JIS Z 3313 T55 6 T1-1 M A-N3
EN ISO 17632-A T50 6 1.5Ni 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

ABS	BV	DNV	LR	RS	CE	DB	TUV
✓	✓	✓	✓	✓	✓	✓	✓

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

Shielding Gas	C	Si	Mn	P	S	Ni
Ar+20~25% CO2	0.03	0.35	1.25	0.012	0.010	1.55

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	590(86)	610(88)	27	-30 (-20) -60 (-75)	110(81) 70(52)

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)
1.4 (0.052)	110~280	

SMW

GMW

GTW

FCW

Metal-cored Wire

SAW Wire

SAW Flux