

Applications

LNG and LPG storage plant, boilers of thermal power station.

Characteristics on Usage

- ① SM-82(ST-82) is a Ni-based MIG(TIG) wire for welding a wide range of Ni based alloys and high temperature alloys.
- ② Used where good corrosion-resistance and heat-resistance for the GMAW(GTAW) of high-alloyed steel, heat-resistant steel, and corrosion-resistant steel.
- ③ Use for welding 9%Ni steels to give good strength and toughness.
- ④ Requirements for preheat and PWHT will be dependent on the base material being welded. For most nickel-base materials, no preheat is required.

Shielding Gas

Ar, Ar + He

Typical Chemical Composition of Wire (%)

C	Si	Mn	P	S	Cr	Ni	Fe	Nb+Ta
0.04	0.20	3.20	0.006	0.001	20.0	73.0	1.00	2.50

Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in ²)	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)	Shielding Gas
660 (93,700)	35	-196 (-321)	80 (59)	70% Ar + 30% He

Packing

SM-82	Size(mm)	1.0	1.2	1.4	1.6
	Weight	Spool: 12.5kg			
ST-82	Size(mm)		2.0	2.4	3.2
	Weight	5kg×1,000mm			