

# SM-1N / ST-1N

Capable of producing weld deposits with 550 MPa (80 ksi) tensile strength

## Conformances

AWS A5.28/ ASME SFA5.28 ER80S-Ni1  
 ABS AWS 5.28 ER80S-Ni1  
 LR AWS 5.28 ER80S-Ni1 (ST-1N)  
 BV SA4Y40 (ST-1N)  
 CWB ER80S-Ni1 (ST-1N)

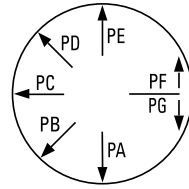
## Applications

- Oil & gas industry, offshore industry, Power plant, chemical industry

## Features

- Impact value in low temp. is good
- Bead appearance & weldability are excellent

## Welding Position



## Current

GMAW: DC + / GTAW: DC -

## Shielding Gas

Ar

## Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	12.5kg (28lbs)	15kg (33 lbs)	20kg (44lbs)	150kg (330lbs)	200kg (440lbs)	250kg (551lbs)
0.8 (0.033)						
0.9 (0.035)						
1.0 (0.040)						
1.2 (0.045)		√				
1.4 (0.052)						
1.6 (1/16)						

Diameter mm (in)	5kg*1000						
	1.0 (0.039)	1.2 (0.045)	1.6 (1/16)	2.0 (5/64)	2.4 (3/32)	2.6 (0.10)	3.2 (1/8)
			√	√	√	√	√

## Typical Chemical Composition of the Wire(%)

C	Si	Mn	P	S	Ni	Cu
0.088	0.62	1.15	0.011	0.010	0.93	0.08

## Typical Mechanical Properties of All-Weld Metal

	YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
As welded with 100% Ar	594 (86,000)	671 (97,300)	32.3	-45 (-49)	59 (43)
PWHT	568 (82,400)	645 (93,500)	34.0	-45 (-49)	108 (79)