

# SM-400 / ST-400

## Conformances

AWS A5.14/ ASME SFA5.14 ERNiCu-7  
 JIS Z3334 S Ni4060 (NiCu30Mn3Ti)  
 EN ISO 18274 S Ni 4060

## Applications

- Heat exchanger
- Piping and Vessels
- Salt purification

## Features

- No Preheat required, maximum interpass temperature 150°C and no PWHT required

## Welding Position

### Current

GMAW: DC+(Pulse)  
 GTAW: DC-

### Shielding Gas

Ar, Ar + He

### Diameter / Packaging

Diameter	MIG	TIG
mm (in)	12.5kg (27.8lbs)	5kg (11lbs)
1.0 (0.040)	✓	
1.2 (0.045)	✓	
1.4 (0.052)	✓	
1.6 (1/16)	✓	
2.0 (5/64)		✓
2.4 (3/32)		✓
3.2 (1/8)		✓

## Typical Chemical Composition of the Wire (%)

C	Si	Mn	P	S	Ni	Cu	Ti	Fe
0.04	0.20	3.5	0.005	0.001	64.0	28.5	2.2	0.9

## 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)
-	530 (77,000)	45.0	-	-

## Typical Welding Parameters

Diameter, Polarity Shielding Gas	Amp. (A)	Volt. (V)
	1.2mm (0.045 in) DC+	
Ar, Ar + He	150	29
	2.4mm (3/32 in) DC-	
Ar	110	12

SMW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX